

# XXVI Congress of Medical Students of Unicamp, CoMAU, 2017

Organizing Committee of XXVI CoMAU.

CoMAU Meeting website  
<https://www.fcm.unicamp.br/eventos/comau/en>

From October 20 to 22, the XXVI Congress of Academic Physician of Unicamp (CoMAU) was held at the School of Medical Sciences (FCM) – University of Campinas. CoMAU is the largest scientific event of the University, organized and fully promoted by students. See photo album of the opening of XXVI CoMAU.

The opening ceremony took place on October 20th, at 3 pm, in the FCM auditorium, with a talk by the doctor Silvia Brandalise, from the Boldrini Children's Center. More than 80 researches were presented and concurrent with the Adolfo Lutz award, delivered at the end of the congress.

The subjects chosen by the students for the CoMAU edition were: the future of medicine, neurology, student health, taboos of medicine, theater, voice, emergencies, ultrasound, challenging surgeries, aging, neglected populations and sexuality.

"Every year the CoMAU establishes itself and legitimizes its importance within the academic environment of the University. Already in its 26th edition, in addition to maintaining its principles and motivations, we seek to provide congressmen with an innovative and inviting scientific event," said Maria Fernanda Chaim Correa, president of the organizing committee of XXVI CoMAU.

Ivan Felizardo Contrera Toro, director of the FCM, highlighted in his welcome speech, during an opening table, a satisfaction with an initiative of the students. "Multidisciplinary science needs a lot of knowledge. The great scientists are surrounded by people with other specialties and knowledge. When we are isolated in a single area of action, the possibility of doing good things is less," said Ivan.

Marcelo Knobel, rector of Unicamp, said it was a joy to participate in events organized by students and that events leave nothing to wish for more congresses. "This type of event is part of the formation of the human being and the citizen that we want to train at Unicamp. A diversity of themes is fundamental to the academic development of all," said Knobel.

An opening table composed by Egberto Ribeiro Turato, professor of the Department of Medical Psychology and Psychiatry and director of CoMAU; by Mariângela Ribeiro Resende, associate coordinator of the Medicine course and by Professor Edinês Guirardelo, representing the Nursing course.

## "The incessant search for innovation"

Silvia Brandalise, a professor at the Pediatric Department of FCM until 2012, coordinator and funder of the Boldrini Children's Center, told us a bit about her trajectory and how to search for innovation, care and quality assistance can change a child's life and write our destiny.

"The great strength that motivates me is an anguish of not knowing. It is important that the patient is not enough for healing. We have to make a smarter medicine, like the target therapy. This is a medicine for you," Brandalise advised during presentation.

The Blind Ballet Company closed the event. Watch the video at <https://www.facebook.com/CoMAUXXVI/videos/1135058586595489/>

## Awards Adolfo Lutz

On 22 October were announced by the XXVI CoMAU winning works. They competed for the XXVII Adolfo Lutz Prize in the categories of Basic Research, Surgery, Medical Clinic, Gynecology and Obstetrics, Pediatrics and Public Health. The winners competing for the Lopes de Faria Prize, awarded by the FCM Research Committee. A prize will be announced soon. The winning works were:

- Basic Research - "Analysis of the tissue expression of mutant isocitrate dehydrogenase and nicotinamide nucleotide transhydrogenase in high and low grade human gliomas"; Karla Saraiva da Silva, Fábio Rogério, Roger F. Castilho.
- Surgery - "Evaluation of diode laser applicability in normal pig larynx and trachea"; Christopher Kengo Nagao, Paulo Francisco Guerreiro Cardoso
- Medical Clinic - "Uncaria tomentosa action in the treatment of muscular dystrophy in mdx mice - murine model of Duchenne Muscular Dystrophy"; Lucas Prezotto Giordani, David Feder, Bruno Machado Bertassoli
- Gynecology and Obstetrics - "Biochemical, microbiological and clinical effects of Levonorgestrel-Releasing Intrauterine System (LNG-IUS) on vaginal and endocervical environment"; Coelho de Souza TC, Giraldo PC, Henrique GL, Garcia EAL, Discacciati MG, Amaral R, Machado RB, Monteiro IMU, Sanches JM.
- Pediatrics - "Neonatal intrahepatic cholestasis: a case series and proposed of algorithm for investigation"; Gabrielle Nakamura, Ana Carolina Mendes Silva, Maria Angela Bellomo Brandão, Adriana Maria Alves De Tommaso, Gabriel Hessel.
- Public Health - "Prevalence of STI / AIDS in prisoners in Campinas and associated factors"; Vanessa Cristina Fanger, Celene Aparecida Ferrari Audi.

Figure 1. Photographs from XXVI CoMAU





# Abstracts of the Congress of Medical Students of Unicamp – Brazil, CoMAU, 2017

## 01. Effects of the use of ozone in biomechanical properties, cortical bone structure and trabecular bones, and osteogenesis in bone failure produced in mice's tibia

Alexandre Aniceto Rodrigues, Pedro Alberto Ferreira Cavichioli, Pedro Henrique Oliveira Ribeiro, Pedro Henrique Ramos de Oliveira Lima, Samuel de Pádua, Flávia da Ré Guerra, Evelise Aline Soares

**Introduction:** There are many possibilities for indication of the therapeutic use of the ozone, already with good proved signals for some clinical situations, as tissue repair. **Goals:** The purpose of this research is to analyze the effect of ozone in the biomechanical of the cortical and trabecular bones. **Materials and procedures:** Trichotomy and longitudinal incision at the skin in the tibia's diaphysis was done in both sides, with a high-rotation pen, making a failure at the bone. The animals were divided into two groups: Control group (CT) and Ozone Group, in which was applied ozone in the concentration of 25 µg/ml, applying 1ml in each time, until the euthanasia of the animals. After the Euthanasia, the tibias were collected for histomorphological and morphometric analysis and mechanical trials of resistance. **Results:** The results of biomechanical properties (structural and material) showed significant interactions after the exposure to ozone. It was showed that had a drop in the bone resistance of the animals of the control group, observed into the drop in the maximum force that is necessary to break the bone when it was compared with the necessary amounts to break the bone of the animals of the ozone group and the morphometric analysis did not showed differences between both of the experimental groups. **Conclusion:** This study revealed that the use of ozone did not changed the morphologic of tibias and the group that used ozone exhibited more resistance in the mechanical test, because the force to break the tibia was higher in this group.

**Keywords:** ozone, tissue repair, cortical and trabecular bones.

## 02. Perception of the importance of vaccines and vaccine refusal in a school of medicine

Amanda Hayashida Mizuta, Victor Angelo Martins Montalli, Guilherme de Menezes Succi, Regina Célia de Menezes Succi.

**Objective:** Evaluate knowledge about vaccine hesitancy and its consequences among medical students and physicians. **Methods:** Cross-sectional study conducted through the application of questionnaires on vaccines, vaccine hesitancy and its repercussions on public and individual health. A sample of 92 subjects was selected from a private medical school: Group 1 (53 students from 1st to 4th degree) and Group 2 (39 physicians). Data collected were tabulated in the Excel Program and analyzed in the GraphPad Prism Program. Project approved by the Institutional Ethics Committee; research subjects signed a free and informed consent form. **Results:** Both groups considered the National Immunization Program reliable and recognized the importance of vaccines, but 64.2% of students and 38.5% of doctors are unaware of the number of vaccine-preventable infectious diseases in the basic immunization schedule; less than half of them were able to mention vaccines recently included. Most of the interviewees had a personal vaccine registry, but not all received the 2015 Influenza vaccine. Doctors and students knew people who refused vaccines and / or refused to vaccinate their children, respectively, 54.7% and 43.3% of the students and 59.0% and 41% of physicians. 48.7% of doctors have already attended patients who refused to receive vaccines. Possible appointed causes of vaccine refusal were: fear of adverse events, philosophical, religious reasons and lack of knowledge about the severity and frequency of the diseases. Ethical aspects of vaccine denial and legal possibilities of requiring vaccines for children are

not consensus. **Conclusions:** Medical students and doctors present doubts about the immunization schedule and vaccine hesitancy. Improving their knowledge about immunization is an important strategy for maintaining vaccine coverage and addressing ethically vaccine hesitancy.

**Keywords:** Immunization, Vaccine hesitancy, Vaccine acceptance, Ethics.

## 03. Evaluation of the efficacy of treatment of epileptic spasms in children attended at a Brazilian university hospital.

Amanda Kaori Ito, Maria Augusta Santos Montenegro, Ana Carolina Coan.

**Background:** Epileptic spasms correspond to an age-dependent epileptic encephalopathy that, if not properly treated, can bring important impairment to the life of these patients. The spasms usually begin around 3 to 8 months and disappear within 2 to 3 years old. These, when associated with dysrhythmia in the electroencephalogram (EEG) and with delay or involution of the neuropsychomotor development, characterize the West syndrome. Currently, pharmacological treatment for epileptic spasms remains unclear. There are a variety of antiepileptic drugs used and some alternative treatments (such as immunoglobulins, vitamin B6, ketogenic diet and surgery), but several lines of research point to a greater efficacy treatment with vigabatrin and hormonal treatment, such as ACTH and prednisolone. However, the effectiveness of treatment is also associated with the rapidity of its institution. Thus, according to availability and access to different therapies, this may have significant regional variations. The evolution of the disease to a good prognosis is directly related to an early and effective treatment of the spasms. **Objective:** The objective of the present study is to retrospectively analyze the responses of epileptic spasms to the use of different medications in a tertiary hospital in the city of Campinas – SP – Brazil. **Methods:** We performed a systematic review of the charts of patients with previous or current diagnosis of epileptic spasms followed at the child neurology service at the Hospital de Clínicas da UNICAMP. Data related to the antiepileptic drugs used, maximum doses, spasms control, spasm etiology, cognitive prognosis and evolution with another type of epilepsy were collected. The data was tabulated and the statistical analysis was performed with the SPSS 24.0 program. **Results:** Data were collected from 35 patients with a diagnosis of epileptic spasms. The mean age of the onset of spasms was 5.94 months (SD=4.22; Min=2; Max=19). 46% of patients were female and 54% male. Delayed neuropsychomotor development was observed in all patients and EEG hypsarrhythmia was present in 68.57% of them. For the first medication, vigabatrin was more effective compared to other drugs (Fisher's exact test, p=0.004), and 100% of the patients who used it in this situation had some control of the spasms. In relation to the medications most frequently used by each patient, the parameters of maximum dose, clinical improvement and presence of side effects were analyzed, showing that the highest rate of clinical improvement is related to vigabatrin. Regarding the evolution of the cases, 67.64% of the patients progressed to another type of epilepsy, while 11.76% maintained the spasms and 20.58% had a total resolution of the condition. Among the patients with complete resolution of spasms, 50% used vigabatrin as the last medication, while the rest of them used valproic acid, nitrazepam, topiramate and other drugs at a frequency of 12.5% each. **Conclusion:** Vigabatrin has a higher rate of clinical improvement when compared to other antiepileptic drugs, especially when it is the drug of choice for the first medication used by patients.

**Keywords:** infantile spasms, antiepileptic drugs, drugs resistance.

**04. Abortion: case survey, awareness and opinions from our fino women.**

Amanda Tomé de Assis, Gleidson Juliacci Patto, Thaís Louise Soares Patto.

Ethical, legal religious and cultural aspects of abortion, among others, have been long discussed. Despite prohibition, abortion has been performed underhand, hence being considered a public health issue, by which women die, in clandestine clinics. Thus, it is important to assess women's thoughts on this theme, i.e. circumstances under which it would be advisable to abort, or in which situation abortion should be legalized. This study aimed to identify the prevalence of performed abortion procedures, either spontaneously or by induction, and to assess the opinion of women from the city of Ouro Fino about the legalization of the procedure. This work received approval by the ethics committee of the Centro Universitário das Faculdades Associadas de Ensino –FAE/UNIFAE in May, 2017. It is a descriptive survey with field research, with questionnaires applied to 100 18 to 60-year-old women, who voluntarily agreed to collaborate. Those collaborators were granted anonymity. Statistical analyses were then performed by means of the Action Stat Pro software. It was observed that the majority of participants were in the 21 to 33-year-old range (33%), whereas the age range of the minority of participants was from 51 to 60 years (13%). As for education level, 39% of the participants had completed High School; as for marital status, 49% were married while 1% were widows. 83% had a family income of 1 to 3 minimum wages. Abortion had occurred with 19% of the interviewees, 17% from which were spontaneous, and 2% induced. As for the women's opinion about the significance of abortion, 70% classify it as a crime; as for the legalization of abortion, 13% of the interviewees are in favor of abortion, whereas 73% declared themselves as against it, and 14% have no formed opinion about the subject. One can state, with a trust rate of 95%, that there are statistical evidences that point out that the group of participants who declared themselves as being in favor of abortion is formed by women in a lower age range (younger) than the age range of those who are against abortion, and those who have no opinion about the subject.

**Keywords:** abortion, opinion, induced abortion, spontaneous abortion.

**05. Dermatorporosis and Osteoporosis: positive or negative correlation?**

Ana Izabel Nasser<sup>1</sup>, Lília R. S. Guadanhim<sup>1</sup>, Juliana L. M. Soares<sup>1</sup>, Cynthia Brandão<sup>1</sup>, Ediléia Bagatin<sup>1</sup>  
<sup>1</sup>UNIFESP

**Introduction:** Dermatorporosis (DP) refers to chronic cutaneous insufficiency and fragility syndrome, with skin atrophy, tears, senile purpura and pseudo-scars affecting over 30% of elderly population. Intrinsic aging and unprotected sun exposure are the main causes as well as corticosteroids long-term use. Osteoporosis (OP) is a systemic skeletal disease, with low bone density and microarchitectural changes that affects 22-33% of women over 65yo and increases the risk of fractures. Sun exposure is important for vitamin D synthesis, necessary for calcium absorption and bone health. Our aim was to investigate positive or negative correlation between dermatorporosis and osteoporosis. Both conditions share common risk factors such as age, hypoestrogenism and smoking. On the other hand, chronic sun exposure is considered deleterious to skin and protective to bones. Therefore, we hypothesize that there might be negative correlation between these conditions. **Material and Methods:** observational retrospective study approved by IRB. All participants signed informed consent form. Inclusion criteria: women over 60yo; phototypes II-IV (Fitzpatrick); primary osteoporosis/osteopenia diagnosed according to WHO criteria bone densitometry by DXA. Exclusion criteria: smoking; chronic use of topical or systemic corticosteroids, NSAIDs and anticoagulants (including aspirin); chronic renal failure; insulin-dependent diabetes; immunosuppression; chemotherapy; current Hormone Replacement Therapy (HRT); previous (<3mo) treatment of forearms with retinoids, AHAs, vitamin C and chemical peeling. All patients answered the DLQI-BR questionnaire. Anamnesis and clinical examination for presence or absence of dermatorporosis classified

according to Kayand & Saurat (2007) were performed. Participants who agreed underwent a 20 MHz frequency ultrasound on forearms to verify photodamage signs. **Results:** A total of 396 patients followed at Osteoporosis Unit - Endocrinology Department were enrolled from Sept2016 to Jan2017. Fifty-seven matched the selection criteria and 21 agreed to study conditions. This number was low mostly due to presence of multiple comorbidities, chronic use of medications and high prevalence of secondary OP (tertiary Hospital). As the sample size was small results are presented in descriptive form. The mean age was 70yo. The OP predisposing factors were: smoking (42.85%), insufficient dietary calcium intake (38.09%), sedentary lifestyle (28.57%), low sun-exposure (52.38%). Ten patients had history of HRT which was considered protective factor. Considering forearms clinical assessment, 71% of participants had stage I DP. Risk factors: 47.61% reported chronic sun-exposure (mainly related to working in rural areas), 52.38% never used sunscreen. The DLQI-Br showed average scores of 1.93 x 0.5 when comparing presence or absence of DP indicating little influence in QoL. Ultrasound analysis performed in six patients showed the subepidermal low echogenic band (SLEB), which is photoaging hallmark. Everyone presented this finding, including one with no clinical dermatorporosis. **Conclusion:** To the extent of the small sample size of this study it can be concluded that solar exposition did not seem to be the most important protective factor to bone mass in individuals with dermatorporosis, probably because of the multifactorial character of osteoporosis.

**Keywords:** dermatorporosis; osteoporosis; photoaging.

**06. Bartonella spp infection in blood donors and patients with different clinical manifestations**

Ana Paula Rosa dos Santos, Amanda Roberta de Almeida, Paulo Eduardo Neves Ferreira Velho.

*Bartonella* spp. are emerging and neglected bacteria. They are gram-negative, small, microaerophilic and fastidiously growing. The mammals are reservoirs and the main reservoir of *Bartonella henselae* is the cat, and the most well-known manifestation is cat scratch disease (DAG), which is acquired through biting, scratching and licking. This study evaluated projects developed by the Laboratory of Dermatological Research and Infection by *Bartonella*, analyzing the isolates of this bacterium in solid culture medium. This study evaluated the bacteria in individuals healthy and sick. Molecular and microbiological tests were performed in 4 different groups: 500 blood donors, 30 psoriasis carriers, 20 leprosy patients and 50 hepatitis carriers. The results showed the percentage of bacterial isolation in 1.2% of blood donors, 5% in patients with psoriasis, 15% in patients with leprosy and 4% in patients with liver disease. In view of the results found by the mapping of the projects, the need to further investigate the bartonellosis and the pathologies that correlate with the bacterium was evidenced.

**Keywords:** *Bartonella* spp., diagnosis, isolated solid culture.

**07. Comparative Analysis of Four Surgical Techniques in more than 700 Pancreas Transplantation at a Single Center.**

André Filipi Santos Sampaio, Tiago Genzini de Miranda, Alessandro Silvestre, Gabriela Tomaz Martinho, Nadia Mie Taira, Marcelo Perosa de Miranda

**Introduction:** There are several techniques for pancreas transplantation (PT) and controversies about the superiority of some of them. **Aim:** It is presented a comparative analysis of four different techniques of PT. **Methods and materials:** 727 PT performed between 1996 and 2016 were analyzed, being 395 simultaneous pancreas-kidney (SPK) and 332 solitary PT (Pancreas after kidney and Pancreas transplant alone). The techniques were distributed in Systemic-bladder (SB), Systemic-Enteric (SE), Portal-Enteric (PE) and Portal-Duodenal (PD). Among the SPK, 137 were SV, 176 SE, 44 PE and 38 PD; as to the solitary PT, 182 were SV, 32 SE, 47 PE e 71 PD. Statistical analysis was performed with significance for  $p < 0,05$ . **Results:** In the SPK, there was similarity regarding gender, donor and recipient age, use of donor with cerebrovascular disease in the four groups. The 1-year patient, pancreas and kidney survival were similar among

the four groups, as the technical and immunological failure of the pancreas graft. Although not statistically significantly, pancreatic survival increased from 71% in the SB technique to 84% in the PD technique, as did kidney survival from 78% in SB to 89% for PD. Among the solitary PT, there was similarity for gender, donor age and use of donors with cerebrovascular disease. The 1-year patient survival was similar among the techniques ranging from 93% in the SB to 97% in the PD while 1-year pancreas survival was similar between the techniques, despite the major technical failure in the SE group. **Conclusion:** The four techniques studied showed similarity in patient and graft survivals, but with tendency for better pancreatic and kidney graft survival in SPK with PD technique and better patient survival in solitary PT with the same technique.

**Keywords:** Pancreas transplantation. Technique. Patient survival rate. Graft survival.

**08. Clinical and epidemiological aspects of skin tumors: proposal of preventive and educational nursing actions.**  
Andreza de Fatima Ribeiro Bianco, Livia Keismanas de Ávila.

**Introduction:** Skin cancers can be of two types: non-melanoma and melanoma. Nonmelanoma cancer encompasses basal cell tumor and squamous cell cancer (epidermoid) (Costa, 2012). The basal cell tumor risk factor is directly related to sun exposure (90% of the lesions). Squamous cell skin cancer is a malignant tumor that results from cumulative sun exposure throughout life. The risk factors are: sun exposure; smoking; changes in the immune system; exposure to chemicals; among others (INCA, 2015). Therefore, this study intends to explain the clinical and epidemiological aspects related to the prevalence of this noncommunicable disease, in order to contribute to health promotion actions for diagnosed individuals, as well as health education to prevent disease in susceptible populations. **Objective:** To characterize the clinical and epidemiological aspects of skin tumors in patients treated in the last 3 months in a hospital in the city of São Paulo - propose educational actions to promote health and prevent disease in susceptible populations. **Method:** A retrospective, cross-sectional, analytical study performed at the Arnaldo Vieira de Carvalho Cancer Institute, with medical records of patients diagnosed with a skin tumor (basal cell, squamous cell or melanoma) treated between April 2016 and June 2016, by means of a form. **Results:** From the analysis of the results, we identified that, according to the literature, non-melanoma skin cancer has a higher incidence in white men (64.54%) (41.9%) (A.C. Camargo Cancer Center). When we observed the results, we noticed that only 9.3% of the patients completed high school and 6.2% were illiterate, we can infer that the years of education can be related to the access to information about the disease. When we observed the results regarding the type of occupation / occupation of the patients studied, we identified that 25.7% are occupations performed with greater sun exposure, such as driver, rocio, mason, truck driver, farmer, which occasionally is associated with other factors of risk factors that contribute to the development of skin cancer (AC Camargo Cancer Center). The information regarding the anatomical site of cancer appearance shows a significant number of patients (77.4%) with skin cancer in the head and neck and a greater frequency of squamous cell lesions (54.8%). This information reinforces the bibliographical findings in which about 90% of the cases of skin cancer in the anatomical site of head and neck are of squamous cell cancer (Alvarenga 2008). "NSCLC cases often do not lead to death, since the chance of metastases is rare, ranging in BCC of 0.028% and CPB in 0.5% to 3% of cases. However, when they reach areas of the face such as the periocular, nasal cavity and ear, they can cause dysfunction of the affected organ and produce deformities, requiring repairing plastic surgeries to reverse the damage caused "(Imanichi 2017), this citation confirms the results regarding physical impairment related to pathology / treatment in 41.9% of patients, such as: periauricular dehiscence; closing of the nasal orifice; loss of temporal bone, occipital, ear and mastoid; and nasal orifice occlusion. The highest incidence of skin cancer in people above the fifth decade of life is observed - 19.4% between 50 and 59 years; 38.7% between 60 and 69 years; 19.4% between 70 and 79 years; 16.1% between 80 and 89 years and 3.2% between 90 and 99 years - and, according to previous citation, in workers exposed to solar radiation for a long period of time. Based on the identification of conditions that occur more frequently among patients with skin cancer and considering the role of nursing in disease prevention and in promoting the health of

individuals, it is necessary to develop educational strategies in health that may contribute to the reduction of the prevalence and incidence of this disease in the population. With this in mind, the proposal of organization and development of support groups for patients who have suffered from skin cancer and who, due to their living and working conditions are more susceptible to the disease, should be guided by the health characteristics and diseases mentioned, contributing thus for the prevention of future lesions triggered mainly by sun exposure, as well as the promotion of healthy life habits / behaviors (Dalmolin 2011). We can also establish a possible relationship between sun exposure and the type of professional activity developed. From this, another proposal for nursing action, this time in primary care or at work, may be involved with contracting professionals / workers with occupations that are characterized by high sun exposure and thus propose the inclusion of equipment and / or materials that may reduce sun exposure as an individual protection measure (INCA). As the majority of the clinical classification was unique, we propose to prevent a delayed search for health services through informative leaflets with images of skin lesions and reference services for early detection exams. **Conclusion:** When looking at the clinical aspects such as the location of the lesion, the type of lesion, the treatment that these patients suffered, and the epidemiological aspects, such as the type of work performed, the predominant gender of these workers, and the age at which these injuries occurred, diagnosed, show us how important health prevention and promotion measures are, and based on the study and characteristics of the population affected, we propose educational measures to promote health, in order to promote a better population.

**Keywords:** Skin cancers; educational actions; health and prevent disease; susceptible populations.

**09. Wheezing in infants: prevalence of differential diagnosis and indiscriminate prescription of corticosteroids.**

Arthur Manzani Fernandes, Thaís Cristina Faria Pacheco, Ermeson Fellepe Rodrigues Ramos, Maria de Fátima de Campos Marciano.

Wheezing is a common respiratory symptom in childhood, especially in infants, and may be the result of several clinical conditions, affecting the quality of life of the child and its family, in addition to having a strong impact on public health. The objective of this study is to determine the prevalence of diagnosis associated with wheezing and the frequency of unnecessary prescription of inhaled or systemic corticosteroids in infants attended at the clinic from which the information was collected. A cross-sectional, quantitative and descriptive epidemiological study was performed, with data collected from 70 patients' records analyzed over a period of approximately four months. Between the wheezing infants, it has been related a higher prevalence of the post-viral bronchial hyperreactivity diagnosis (32,8%), followed by asthma (17,1%), cow's-milk protein allergy (15,7%), gastroesophageal reflux disease (12,9%), pulmonary tuberculosis (10%) and bronchopulmonary dysplasia (7,1%). Over 54,3% of the infants analyzed was currently using or had already used inhaled or systemic corticosteroids due to wheezing. Furthermore, the aforementioned casuistry shows that asthma diagnosis is hasty for any wheezing infant without detailed anamnesis, resulting in prescription of inadequate treatments. The study points to the diversity of differential diagnoses in wheezing infants.

**Keywords:** infant; wheezing; corticotherapy; pneumology.

**10. The quality of management of dysfunction in neurology of hc-unicamp: a retrospective study of the resident's activity in fonoaudiology.**

Bianca de Souza Felipe, Lúcia Figueiredo Mourão.

The present research intends to highlight the importance of a qualified professional, such as the speech-language pathologist, within the multidisciplinary team, to manage cases of dysphagia in a public hospital. **Objective:** to evaluate and compare the quality of management of dysphagia in Inpatient Clinic at HC-Unicamp's, during the period with and without the qualified professional, the

speech-language pathologist. Method: a retrospective cohort study will be performed. Data collection of the medical records of patients who attended the Neurology Inpatient clinic at HC-Unicamp between August and January 2013 (period without the speech language pathologist in a multidisciplinary team) and August to January 2014 (period with the speech language pathologist in a multidisciplinary team). Adults and elderly adults in Inpatient clinic referred for swallowing screening due to the complaint or diagnosis of some condition that presents a risk of oropharyngeal dysphagia will be included. Data Analysis: Clinical data will be collected from the medical records. Personal information will not be used and disclosed in the study, but it is important to characterize the case. The confidentiality and anonymity of the information extracted from the medical records will be maintained. Analysis of the medical records according to the patient's complaint will include: diagnosis of the disease (according to ICD), hospitalization, infection / pneumonia events (pre- or post-hospitalization), number of evaluations and speech-language pathology, time to evaluate deglutition, time of introduction of the feeding tube, time to reintroduce oral feeding, presence or not of bronchoaspiration and use of feeding tube. Subsequently, the analysis will compare the information between the years 2013 and 2014. Partial results: Due to the high incidence of dysphagia in neurological patients found in the study, the need and importance of the speech-language pathologist inserted in the multidisciplinary team of large hospitals, to act, prevent and treat cases of dysphagia, contributing to reduce risks of bronchoaspiration. In addition, the speech-language pathologist as a qualified professional to reduce the risks of aspiration pneumonia and the length of hospitalization of patients in the hospital, with consequent reduction of hospital costs.

11. **The matrix support experience in speech-language and hearings at the municipal health network of Campinas**  
Bruna Gabriela Mechi da Silva, Irani Rodrigues Maldonado.

Campos (2007) define matrix support as a work methodology that offers assistance, technical and pedagogical knowledge to the health center's reference team. It intends increase the possibilities of extended clinic and promote integration among health professionals providing a communication space that enable the health professionals sharing knowledges and building an interprofessional therapeutic project. This research shoot for comprehend how matrix support in speech therapist area occurs in Campinas city, verifying if all speech therapists works in same way, identifying the main proposal's benefits and disadvantages according to this professionals' vision. The speech therapist area in Campinas' municipal health secretariat began between 2004 and 2005. The study involved the 4 speech therapists that execute matrix support in 5 health districts in Campinas, they are allocated in specialties ambulatory (Policlinic II). Data was collected through a semi-structure questionnaire and an individual interview with speech therapists participants. Speech therapy matrix support in Campinas occurs in health districts and includes a diversity of actions, than each therapist embraces a different working process. Was observed that interviewed professionals believes that matrix support has been permitting a clear idea of speech therapist care, resulting in referrals adequacy and optimizing solving problems. According to data, matrix support also seems to contribute to qualified wait queue throughout orientations, but matrix supporters frequency in health centers still irregular, goings range from mensal to trimensal, and some of the health centers has never been attended. Questionnaire indicates that the main challenges are the distance between speech therapists and primary health, once in Campinas they aren't expected in this sector. Also the reduced professional number implies a large workload and demand that the same speech therapists implement matrix support and clinic therapy. Speech therapy matrix support in this town is a solution to organize speech therapy area. Campinas doesn't enjoy the use of a speech therapy area coordinator. Contribution in spreading speech therapists actions to others health professionals is significant, but still remain difficulties ahead, therefore speech therapists insufficiency in Campinas public health network still a problem to be solved.

**Keywords:** Speech therapy, public health, matrix support

12. **Study of factors associated with blood current infection in patients with chronic renal disease in hemodialysis.**  
Caio Saldanha Fernandes, Plinio Trabasso, Rodrigo Bueno de Oliveira.

**Introduction:** The bloodstream infection is one of the most common nosocomial infections of the chronic renal disease population in hemodialysis: it is the leading cause of hospital admission and the second most frequent cause of mortality. Central venous catheter as access is the most important risk factor, but others have already been identified, just as hypoalbuminemia and diabetes mellitus. The most frequent isolated microbial agent in blood cultures of these patients is *Staphylococcus aureus*. Objectives: We aim to describe the characteristics of the patients with complication of bloodstream infection under hemodialysis (HD) at the Integrated Center of Nephrology (CIN) of Hospital de Clinicas (HC), UNICAMP, Campinas, and to identify associated factors to infection in this population. We also aim to evaluate the relationship between colonization of the environment and the profile of microorganisms found in blood culture of patients with bloodstream infection. Methods: Retrospective case-control study, based on medical records analysis of two groups of patients, performed at CIN-HC-UNICAMP in the city of Campinas, Brazil. We performed the measurement of bacterial and fungal colonization in the environment where HD is performed using a BioSamp® MBS 1000D air sampler (Yotsubishi Corp, Japan). Results: 55 patients analyzed, 26 (47.2%) with bacteremia (Infection group) and 29 (52.8%) did not present the event (Control group). The presence of comorbidities such as DM and hepatopathy were more prevalent in the infection group, with 9 (66.6%) vs 6 (33.3%) with  $p = 0.03$  and 6 (100%) vs 0 (0%) with  $P = 0.006$ , respectively. The HD type of access also had a statistically significant difference between the 2 groups ( $p = 0.006$ ), due to the higher prevalence of long-term central venous catheter in the infection group: 17 (65%) versus 9 (31%) with  $p = 0.011$  and arteriovenous fistula in the control group: 18 (62%) versus 5 (19%). *Staphylococcus aureus* caused 11 of the 26 cases of bacteremia (42.3%). The result of the air samplers revealed fungal growth. Since we did not have any occurrence of fungal positive blood culture in the patients submitted to HD with the occurrence of bloodstream infection, we did not proceed with the analysis of the found. The values of hemoglobin (g / dl) and hematocrit (%) were lower in the Infection group ( $10 \pm 2$  vs.  $11.2 \pm 1.6$  in the control group,  $p = 0.015$ ) and ( $31.5 \pm 6.6$  vs.  $34.9 \pm 4.8$ ,  $p = 0.028$ ), respectively. Were also lower in the infection group the serum values of albumin (g / dl):  $3.4 \pm 0.6$  vs.  $3.8 \pm 0.5$ , iron (mcg / dl): 41 (12 to 74) vs. 57 (24 to 245) and calcium (mg / dl):  $8.9 \pm 0.5$  vs.  $9.3 \pm 0.7$ ; ( $P = 0.02$ ,  $p = 0.003$  and  $p = 0.043$ , respectively). As expected, higher values of C-reactive protein (CRP, in mg / dl) were found in the infection group:  $16.3$  (0.5 to 372) vs.  $2.3$  (0.1 to 28.8) ( $p = 0.006$ ), just like leukocytes ( $\times 10^3 / \text{mm}^3$ ):  $7.9 \pm 3.5$  vs.  $6.1 \pm 2.3$  ( $p = 0.035$ ). Conclusions: Most of the associated factors to bloodstream infection in HD patients at CIN (UNICAMP) found in this study are corroborated by several other studies and reveal necessary care for this population, just as preference for access by arteriovenous fistula over the central venous catheter, and correct management of diabetic patients, adequate nutrition and control of the albumin, iron, and hemoglobin levels of these patients, in order to reduce the incidence of infection and consequently hospitalization and mortality of these patients.

13. **Effects of the vibratory platform on balance and gait in patients with Parkinson's disease**  
Camila Cochia, Renata Silva de Souza, Thalita Carolina Giacomini, Heloíse Cazangi Borges

Parkinson's disease is a progressive disorder caused by decreased dopamine production, leading to various motor disabilities, mainly balance and gait deficits. Physiotherapy plays an important role in the rehabilitation of these individuals, through movement strategies that aim to improve functionality and safety. Recent studies have evaluated the effects of whole body vibration (WBV) on control of these symptoms as a way of providing afferent stimulus that compensate deficient basal ganglia. Objective: The aim of this study was to determine if the vibratory platform produces beneficial balance and gait outcomes for individuals with Parkinson's disease. Study Design: Systematic Review. Method: We searched 6 databases

(Lilacs, Medline, PEDro, Scielo, Cochrane, PubMed). The studies included in the review should be randomized or non-randomized clinical trials that evaluated the effects of WBV on the measures of balance and gait in individuals with PD on a vibratory platform in orthostatic position. The level of evidence of the articles was determined by the methodological quality analysis through the PEDro scale. Results: The research strategy resulted in 1267 randomized articles of physiotherapeutic interventions using vibration in PD. Six studies were included that fit the criteria, adding a total of 207 individuals. Conclusions: WBV therapy has shown beneficial results in relation to gait and balance in patients with Parkinson's disease, but the limitations of the studies do not allow to know for sure which parameters and intervention protocols are most adequate to guarantee greater effects in relation to conventional physiotherapy. Thus, we encourage studies of higher methodological quality to establish the clinical efficacy of WBV in balance and gait.

**Keywords:** Parkinson disease; whole body vibration; postural balance; gait; vibration platform

#### 14. Evaluation of diode laser applicability in normal pig larynx and trachea

Christopher Kengo Nagao, Paulo Francisco Guerreiro Cardoso

**Background/Objectives:** Laryngotracheal stenosis is a complication secondary to long-term orotracheal intubation, which may be treated with anterior and posterior laryngeal fissure, a major surgical procedure. Contact diode laser can be used to perform laryngeal fissure in pigs in order to develop an endoscopic alternative of these procedures, making them less invasive. The objective of this study is to assess the feasibility of contact diode laser use by determining depth and lateral thermal damage of the produced laryngotracheal incision. **Methods:** 28 Landrace pigs weighing 15-20 kg under general anesthesia and orotracheal intubation were submitted to tracheostomy and posterior endoluminal laryngeal fissure according to randomization: Control Group (n=4, section of the inner larynx and trachea with conventional scalpel); Electrocautery Group (n=12, section of the inner larynx and trachea, potencies of 10W, 15W, 20W and 25W); Diode Laser Group (n=12, section of the inner larynx and trachea, potencies of 10W, 15W, 20W and 25W). Laryngotracheal excision followed by preparation of histological sections (hematoxylin-eosin), which were evaluated using light microscopy at 50x and 100x power and digitalized for morphometric analysis (Image-Pro Plus, version 4.5). Variables were studied through comparison of means and the null hypothesis (equal group means) was rejected if  $p < 0.05$ . **Results:** Incision depth was greater in the Control Group ( $p=0.008$ ) and shallower in the Laser Group when compared to control group ( $p=0.007$ ). No significant difference was found in the comparison between potencies within groups Laser and Electrocautery ( $p=0.172$  and  $p=0.05$ , respectively), as well as in the comparison between these potencies with those in the Control group ( $p=0.072$  and  $p=0.052$ ). The incision area differed between the 3 groups ( $p = 0.02$ ). There was difference in the area of lateral thermal damage between the 3 groups ( $p=0.001$ ), with significant difference between Laser and Electrocautery groups ( $p=0.018$ ) and Electrocautery and Control groups ( $p=0.004$ ). Significant difference was found after comparisons between the potencies within the Electrocautery group, with and without the Control group ( $p=0.033$  and  $p=0.008$ , respectively). The same comparison did not present difference within the Laser group, with or without the Control group ( $p=0.313$  e  $p=0.147$ , respectively). **Conclusion:** The posterior laryngeal fissure with Diode Laser produced smaller incision areas when compared to conventional scalpel, but equivalent to the area produced with the electrocautery. The Diode Laser was superior to the Electrocautery by producing less lateral thermal damage. This fact favors the use of contact diode laser to perform laryngeal fissure.

#### 15. Effect of Informational Material on the Opinion and Understanding of University Students on Organ Donation

Eduardo Riccetto, Ilka de Fátima Santana Ferreira Boin

Despite the substantial contribution of informative campaigns to the increase of organ donation rates in Brazil, the youth - which represents a significant portion of the total number of donors - is rarely a direct target of campaigns on awareness to organ donation. The effect of informational material on improving the attitude and understanding of young people regarding organ donation is not well determined, with few records on the current literature. Raising awareness of the youth to the subject is crucial, especially for those enrolled in universities, due to the fact that some may be destined to positions of prominence and influence on others' behaviors. **Objective:** To assess the influence of exposure to informational material on organ donation and the change in the tone of undergraduate students' answers to a standardized questionnaire on the subject, in relation to a control group. **Methods:** A prospective, randomized, comparative study, restricted to university undergraduate students from Unicamp and São Leopoldo Mandic Universities. A standardized questionnaire was sent via e-mail to 17,895 undergraduate students from both universities. The participants received a questionnaire with 20 multiple-choice questions that assessed the opinion and technical knowledge on the matter of organ donation. The experimental group received informative material in addition to the questionnaire. The control group received solely the questionnaire. The randomization was performed by the digital research platform SurveyMonkey®. Exploratory data analysis was performed through summary measures (mean, standard deviation, minimum, median, maximum, frequency and percentage). The groups were compared using the Mann-Whitney, Kruskal-Wallis, Qui-Square or Fisher's exact tests. The level of significance was 5%. **Results:** Nine hundred students submitted questionnaire responses, of which 360 were from the experimental group and 401 from the control group. The mean age of respondents in both study groups was 23 years. Among the 14 items compared in the questionnaire, 6 presented a change in the pattern of responses of the respondents to the questionnaire between the experimental group and controls ( $p < 0.05$ ). The respondents were mostly women, with relatives with higher education, Catholics and never had contact with a family member involved in the process of receiving or donating organs. In regards to the knowledge of the organ donation process, 4 out of 7 questions have shown a relation between the exposure to informative material and a greater number of correct answers to the posed situations ( $p < 0.05$ ). As for the opinion about organ donation, 2 of the 7 questions showed association, with responses more favorable to donation in the experimental group ( $p < 0.05$ ). **Conclusion:** The results displayed by the analysis of the large number of university students' responses to the questionnaire makes it possible to conclude that there is significant and beneficial effect on the exposure of undergraduate students to informative material on organ donation, with an improvement in both the opinion and the technical knowledge of young people in situations related to donation.

#### 16. Use of alcohol and drugs by adolescents and young adults' victims of sexual violence.

Gabriel Amaral Zenardi, Flávia Calanca da Silva, Maria Sylvania de Souza Vitale.

**Description:** Sexual violence is an alarming problem in Brazil and, in addition to prevention efforts, caring for victims is extremely important and should be done with great precision. It is known that among the possible negative consequences of sexual violence is the use and/or abuse of alcohol and drugs. This study seeks to analyze the use of alcohol and drugs by victims of sexual violence in order to verify if this population is more prone to the consumption of these substances. **Materials and Methods:** The instruments Questionnaire on Exposure to Traumatic Events (QUESI) and Alcohol Smoking and Substance Involvement Screening Test (ASSIST) were applied to 1056 students enrolled in a federal university of São Paulo to assess the presence of sexual violence at some point in life and use, abuse or dependence on alcohol and other drugs. **Results:** The results presented are partial. It was analyzed the instruments were answered by 130 students, 120 of whom were not victims of sexual violence and 10 of the students who had been sexually abused at some time in their lives, maintaining the proportion of 7.92% of victims of sexual violence, as found throughout the study

population. It was observed that there was a greater and significant consumption of marijuana, stimulants, inhalants, hallucinogenic drugs and opioids by the population victim of sexual violence when compared to those who did not suffer abuse. Conclusion: These results reinforce the importance of adopting strategies to prevent drug use and reduce harm to victims of sexual violence, in order to guarantee a more integral health and a more accurate reception of this population.

**Keywords:** sex offenses, sexual violence, adolescent, illicit drugs, abuse drugs.

**17. Use of male condoms in sexual relation among university students**

Gabriela de Andrade Rodrigues; Amanda Lino de Faria, Zsuzsanna Jármy Di Bella

**Introduction:** Condoms are the most popular contraceptive and method to avoid sexual transmitted diseases (STD), but many studies have shown that ones who are in stable relationships tends to abandon its use; however, many articles have focused on adolescents' behavior, a few have included university level students. **Material and Methods:** It is an observational, cross-sectional study that meant to analyze sexual active university students. The students received an online form, which was answered voluntarily and anonymously by the participants. It was analyzed the following data: first sexual intercourse age, condom use at this event, actual stable relationship, relationship time, awareness of STDs as a reason to use condom. **Results:** Actual condom use when compared with first sexual intercourse use have decreased in a half; adolescents use less condom at the first sexual intercourse when it happens before sixteen years; ones who are in stable relationships tend to decrease condom use, beyond that fact it was not associated with relationship time; half of participants have shown STD awareness as a reason of using condom. **Conclusion:** Although we presented partial data, the results were similar to the literature evidence, which provides support to establish a better epidemiological character, as well as identify risk factors of condom abandon. This information can be useful to create actions on vulnerable population, focusing on STD prevent.

**18. Neonatal intrahepatic cholestasis: a case series and proposed of algorithm for investigation**

Gabrielle Nakamura\*, Ana Carolina Mendes Silva, Maria Angela Bellomo Brandão, Adriana Maria Alves De Tommaso, Gabriel Hessel

**Background:** Neonatal intrahepatic cholestasis corresponds to 2/3 of cases of cholestasis in this age group and is caused by several diseases. The objective of this study was to identify the etiologies and clinical and laboratory predictors for each etiological subgroup. From the results, suggest a research algorithm. **Methods:** The study was observational, descriptive, analytical and cross-sectional in which the medical records of 113 patients were analyzed, with a mean age of 72 days at admission. The patients were divided into subgroups, according to their etiology, as follows: A) Infectious, B) Metabolic, C) Multifactorial, D) Ductopenic, E) Endocrinological, F) Miscellaneous and G) Idiopathic. Data from clinical and laboratory variables were collected. Logistic regression, chi-square test and Fisher's test were used. The level of significance was 5%. **Results:** The frequency of patients in each subgroup was as follows: A = 15/113, B = 9/113, C = 23/113, D = 4/113, E = 3/113, F = 12/113 and G = 47/113. Patients with microcephaly were more likely to belong to the subgroup with infectious cause and preterm infants had a higher risk of belonging to the multifactorial subgroup. Other clinical and laboratory data did not show significant differences between the subgroups. **Conclusions:** 1. The highest frequency of etiology was in the subgroup of idiopathic neonatal hepatitis, 2. The frequency of prematurity was higher in the multifactorial subgroup, 3. The frequency of microcephaly was higher in the subgroup of infectious etiology. 4. The investigation algorithm was established based on the variables prematurity and microcephaly and on the frequency of etiologies.

**Keywords:** Neonatal cholestasis, intrahepatic, jaundice, diagnosis, algorithm.

**19. Digital Histology Atlas**

Giovane Chati Gomes, Mariel Vendramel Neves, Newton Maciel Oliveira

**Introduction:** Histology is the Science that studies the tissues of the body, since your formation, structure, operation and how these tissues organizes themselves to build organs. **Materials and Methods:** Were analyzed all the laminary available in the Histology Laboratory and selected the best to be photographed with a specific camera attached to the microscope, along with an appropriate software for photo edition. The capture of the blades was made in the Biomaterials Laboratory from college, where the camera of the establishment propitious best quality photos and of better benefit to the student of medicine who wishes to improve your knowledge in histology. **Discussion:** We realized during this year of work, on the monitories of histology and on the divulgation of the Project for the first-year students, the great demand of students interested in the atlas due the difficulty of learning histology. This stimulated us even more to create an atlas of quality and of easy understanding. **Final Results:** The atlas was divided into eighteen chapters which were obtained on the total 154 photos, resulting in 151 pages, contemplating all the proposed systems and tissues. **Conclusion:** With the finalization of the "Atlas Digital de Histologia Básica", this knowledge will be able to be largely widespread between the students of all years of college since we will provide the archive in PDF on a virtual academic site.

**Keywords:** Histology; atlas; blades; students.

**20. Pediatric Nursing - The Impact of Hospitalization and the Use of Therapeutic Toys in Care**

Giovanna Carvalho Lopes; Sabrina Marin Cardelli; Aparecida Sílvia Mellin

Given the knowledge about the impact of hospitalization on children's lives, we sought to demonstrate the importance of humanized nursing care through the use of therapeutic toys as one of the means to promote the qualification of nursing care for hospitalized children and their families, focusing on the facilitating aspects of health professionals' action. The study was based on an integrative bibliographical review with searches carried out in a specialized database for human health. The main database used was the Virtual Health Library (VHL) of Bireme (Latin American and Caribbean Center on Health Sciences Information) with subsequent analysis of reports and other works published in Portuguese among 2008 and 2017. It was found that the use of therapeutic toy significantly decreased the consequences of hospitalization in the life of children and their families since the patients could understand their current health condition and collaborate in a better manner with the procedures performed by the nurses. The revision also found evidence that therapeutic toys facilitated the nurses work. Based on the evidence gathered, it is recommended to use the therapeutic toys in the daily routine of nursing care due to its numerous benefits for all involved, as well as there is a need to include the use of therapeutic toy for nursing care in undergraduate teaching institutions.

**Keywords:** Toy; Pediatric Nursing; Hospitalization

**21. Behavior analysis of metastatic cells of prostate DU-145 cultivated under various conditions of glucose**

Gisele de Lourdes Caetano, Nilva K C Furlan, Vitor A R Fernandes, Jefferson B Nery, Eder J Caldeira, Taize Machado Augusto.

**Introduction:** Prostate neoplasia is the second most common in men, mainly elderly, its main complication is metastasis that can mainly affect the brain, bones and lymph nodes; currently the incidence of cancer has increased due to new screening techniques. Considering the age group affected, the effect of other harmful

situations such as hyperglycemia (main characteristic of Diabetes Mellitus and frequent in this age group) can interfere positively on the metastatic cells and consequently worsen the patient's prognosis. **Material and methods:** DU-145 cells were seeded in 96 wells plate in several concentrations of glucose: (1) 2ug de glucose/1µL (control); 2) 10ug de glucose/1µL; 3) 22ug de glucose/1µL; 4) 32ug de glucose/1µL; 5) 44ug de glucose/1µL; 6) 88ug de glucose/1µL. Cell proliferation was assessed by MTT assay. **Results:** Results from the MTT assay showed increases in proliferation and cellular development in the range of concentrations used in the treatment of groups 1 to 4, with a concentration of 0.44 g of glucose / 1µL maximum viability. Increasing substrate concentration beyond the maximum demonstrated glucose toxicity on DU-145 cells. **Conclusion:** The simulation of hyperglycemia shows a positive interaction between glucose and metastatic prostate cancer cells DU-145 due to the availability of essential substrate for cell division and tumor success, although a toxic rate was observed, in which the negative effect of glucose cell proliferation capacity.

**22. Relation between self-evaluation of public speech and emotions emerging during visualization of its own performance**

Guilherme Naco Lima, Adriana Pereira da Silva Grilo, Ana Cláudia Puggina.

**Objectives:** (1) identify the participant's self-assessment of public speaking; (2) decoding the participant's emotions while viewing their own footage in a public presentation; (3) associate decoded emotions with the self-assessment of public speaking, and (4) assess whether the sociodemographic characteristics interfere with the self-assessment of public speaking. **Method:** Cross-sectional quantitative study with undergraduate medical students. Descriptive and inferential analyzes were performed. The probability of error adopted in the tests was p-value <0.05. Significance trend was considered for p-value <0.08. **Results:** The study sample consisted of 30 medical students with average age of 20.3 years ( $\pm$  1.6), half men and half women. Most students reported anxiety when speaking in public (n = 19, 63.3%). The signs of anxiety perceived by the participant during a public presentation were shaking hands (n = 10, 33.3%) and sweating (n = 10, 33.3%). The total score obtained was 37.8 ( $\pm$  5.9). There was a statistically significant and positive correlation between the Fear and Self Confidence domains. Female participants presented more anger during the visualization of the performance itself. The contempt was proportionately more evident in the students of the 2nd year of graduation. Men are more self-confident in visualizing their own performance. The most self-confident were also those who showed more happiness. **Conclusions:** The self-evaluation of the students studied was adequate and moderately high. The predominant emotion during performance viewing was the fake smile. Rage emotion has been associated with sex, contempt for the year of graduation, and joy with self-confidence. Sex interfered with self-confidence.

**23. Determination of risk factors associated with the Metabolic Syndrome in the urban public user population of Jundiáí**  
Heitor Castanharo Escañó, Clóvis Antonio Lopes Pinto.

**Introduction:** The Metabolic Syndrome is a complex disorder, which cause is related to obesity and associated with the development of several diseases. This study proposed the investigation of risk factors associated with the Metabolic Syndrome, according to the NCEP/ATP III into two groups in a public transport terminal of the city of Jundiáí - SP. **Methodology:** The observational, descriptive, qualitative cross-sectional type study had as intentional sample G1 = 100 people with abdominal circumference indicative of high cardiovascular risk and G2= 100 people with abdominal circumference not indicative of high risk cardiovascular disease. **RESULTS:** Using the statistical software R and a level of significance of 1%, a descriptive analysis was build up, measures summary were calculated, analysis of correspondence was done and a test of Association Qui-Square indicated that the G1 group has presented more elements that sign for a risk profile for the disease. **Discussion:** The G1 group showed a higher proportion of

elements that constitutes the Metabolic Syndrome as the obesity and high blood pressure given the probable pathophysiological correlation between the two variables. High rates of physical inactivity and economical composition of representative patients for SUS were found in both groups. **Conclusion:** Through this study, it is clear that large public spaces can be used as a procedure environment in the dissemination of educational campaigns, in the control of risk factors and in the prevention of diseases for public health. In this study the group G1 presents a higher proportion of elements that signal for the Metabolic Syndrome, possibly indicating a profile of higher risk for the disease in this group.

**24. Quantification of the levels of the cytokines il-1β, il-6 e il-8: case study**

Sisti, G.M.; Streicher, I.M.C; Ferreira, H.R.A.; Daniel, R, F; Bestetti, R.B.; Dellalibera-Joviliano, R.

Arboviruses are diseases of great incidence, transmitted by the Aedes mosquito, which became a major problem of public health. The central ones are dengue, zika and chikungunya, they can be manifested since simple charts until generate serious sequels yet not enough elucidated, especially in the edges of age ranges. By now, there is no specific antiviral treatment, reason why studies involving the inflammatory mechanisms have great value to the knowledge of these conditions and to improve public health. In this case study, we quantified the profile of the cytokines IL-1β, IL-6 and IL-8. The research was developed by the team of the Universidade de Ribeirão Preto in association with the Universidade de Pernambuco - UPE, and took place in the Unidade de Pronto Atendimento Luiz Atílio Losi (UPA) and in the Unidade Distrital de Saúde (UBDS) - Castelo Branco, Ribeirão Preto city, state of São Paulo. The individuals of research, after the diagnosis of arboviruses were invited to participate in the study in the moment of the consult, and the volunteers were informed about the free and solved term of consent, which they signed, been kept secrecy according to the ethic context. The dosage of the cytokines was determined using standardized immunoenzymatic methods. The results allow us to suggest the involvement of the cytokines IL-1β, IL-6 and IL-8 in the pathogenesis of dengue and others arboviruses. However, such increases were more significant for IL-1β and IL-8 to dengue and opposite arboviruses. The growth observed on the levels of IL-6 was significant only in the samples of patients with dengue.

**Keywords:** IL-1β, IL-6, IL-8; quantification.

**25. Normal curve establishment of bone parameters obtained in high performance peripheral quantitative computerized (HR-pQCT) tomography with analysis by the finite element method in healthy women.**

Henrique Fuller, Rosa Maria Rodrigues Pereira

In a cross-sectional cohort of 450 healthy women aged 20 to 85 years, data on the density, structure, and strength of the distal radius and tibia were obtained using high-resolution peripheral quantitative computed tomography (HR-pQCT) and were adjusted for age, weight, and height. Age-dependent patterns of change differed between the sites and between the trabecular and cortical compartments. In postmenopausal women, the trabecular bone remained relatively stable at the distal tibia, but the cortical compartment changed significantly. Cortical porosity exhibited a very weak correlation with stiffness. **Introduction:** The aim of this study is to provide information on age-related, weight-related, and height-related changes in the volumetric bone mineral density (vBMD), structure, and biomechanical parameters of the cortical and trabecular compartments in a healthy female population using HR-pQCT. **Methods:** For a cross-sectional Brazilian cohort of 450 women aged 20 to 85 years, age-related reference curves of the vBMD, structure, and biomechanical parameters of the distal radius (DR) and distal tibia (DT) were constructed and adjusted for weight and height, and comparisons between premenopausal and postmenopausal women were performed. **Results:** Reference curves were obtained for all parameters. At the DR, age-related changes varied from -8.68% (cortical thickness [Ct.Th]) to 26.7% (trabecular separation [Tb.Sp]). At the DT, the changes varied from -12.4% (Ct.Th) to 26.3% (Tb.Sp). Cortical porosity (Ct.Po) exhibited the

largest percent changes: 342.2% at the DR and 381.5% at the DT. In premenopausal women, Ct.Th remained constant; in postmenopausal women, structural trabecular parameters (trabecular number (Tb.N), trabecular thickness (Tb.Th), Tb.Sp) did not change, whereas cortical parameters and stiffness were significantly altered. Cortical vBMD showed the greatest absolute decrease at both sites, and the slopes were highly negative after menopause. Pearson correlations between stiffness (S) and HR-pCT parameters revealed a significant correlation between the densities and structures of the trabecular and cortical compartments. A weak correlation was observed between S and Ct.Po (DR  $r = -0.162$ , DT  $r = -0.273$ ;  $p < 0.05$ ). **Conclusion:** These data provide reference curves from healthy women and demonstrate that density and structural and biomechanical parameters differ between the radius and tibia and between the trabecular and cortical compartments. In postmenopausal women, the trabecular bone remained relatively stable at the tibia site, whereas the cortical compartment changed significantly.

**26. Nutritional status and feeding practices in infants between 9 and 12 months of age born with low birth weight**  
Ilgen Yamazaki, Fabíola Isabel Suano de Souza, Maria Wany Louzada Strufaldi.

Monitoring of low birth weight (LBW) children is extremely important due to the higher risk of morbidity and mortality in this group. The adequate growth and development of these infants are directly related to the quality of food in the first months of life. During the monitoring of the growth/development (childcare) of infants with LBW, some particularities are present, such as the possibility of staying in hospital for an extended period; complications related to low weight and/or prematurity such as jaundice, infection, respiratory failure; have lower chances of breastfeeding, early introduction and poorer quality of complementary feeding. In addition, the families of these children sometimes feel insecure and anxious, not knowing if it will grow properly. Generally, there is an attempt to compensate, to quickly recover what was not achieved or lost during intrauterine growth, increasing the risk of overproduction of nutrients and inadequate food in this group. In this context, we sought to describe the quality of feeding and the nutritional status of infants with LBW, in order to obtain results that can be compared with current dietary recommendations, based on a cross-sectional study, in which infants between 9 and 12 months of age, born with weight between 2000-2500g, in follow-up at the Low Weight Ambulatory at the Birth of the General and Community Pediatrics Discipline. The analysis of the data obtained through interview, questionnaire and nutritional and clinical condition evaluation provided results regarding frequency and time of exclusive/predominant and total breastfeeding; age of onset of complementary feeding; adherence to the practice of iron and vitamin D supplementation; and, possible associations between the nutritional condition and the quality of the food. Mean gestational age and birth weight were  $35.9 \pm 1.7$  weeks and  $2257 \pm 204$  grams, respectively. More than 90% of the infants were regularly receiving iron and vitamin D supplementation. Among the children evaluated, it was observed low stature in 2 (6.7%) and overweight / obesity in 6 (20.0%). Regarding eating habits, 10 (33.7%) and 23 (76.7%) had exclusive and total breastfeeding, respectively. Infant formula was the main complement used (93.3%); However, use of unmodified cow's milk was frequent 16 (53.3%) and early 7.3  $\pm$  2.5 months. On the intake of ultraprocessed foods, which should not be used in this age group, frequent daily (> 10%) consumption of biscuits, sugary drinks and instant noodles and weekly consumption of petit-suisse cheese were observed. We concluded that this study made it possible to identify major inadequacies in feeding practices in infants with LBW infants less than one year old, such as the early and often significant introduction of processed and ultraprocessed foods compared to official recommendations, as well as contributing to planning and implementation of intervention strategies, focusing on the prevention of nutritional deficiencies and chronic noncommunicable diseases in adult life.

**27. Effect of HPSE-1 expression on the proliferation and tubulization of human endothelial cell lineage (HUVEC)**

Isadora Aparecida Gheralde, Jefferson B, Victor A. R. Fernandes, Nilva K Cervigne, Taize M Augusto.

The prostate gland is target of several pathologies including prostatitis, benign and malignant prostatic neoplasia such as prostate cancer (PCa) that accounts large numbers of non-accidental deaths among men, especially with aging. For these reasons there many efforts in studies of the regulation, growth and prostate physiology mechanisms. Degradation of the basement membrane and other components of the extracellular matrix (ECM) are critical steps between the multiple cascade events driving metastasis, as well as promoting a properly environment for tumor development. The growth of prostate tumors, as well as others, depend on the growth of new blood vessels from pre-existing vessels (angiogenesis) to nourish the cancer cells. Cancers that stimulate the growth of new blood vessels are the most difficult to treat. Tumor cells degrade basement membrane components using a variety of enzymes such as heparanase-1 (HPSE-1) and matrix metalloproteinases (MMPs). HPSE-1 is an endoglycosidase that cleaves heparan sulfate chains and its overexpression is closely related to tumor processes, metastatic potential, tumor vascularity, and reduced postoperative survival in patients with cancer. In this sense, HUVEC cells (Human Umbilical Vein Endothelial Cells) were seeded in a 3D matrix (Matrigel®) for the promotion of in vitro formation of blood vessel-like structures. HUVEC cells were maintained in the presence of the conditioned medium of metastatic prostatic tumor cells DU145 with overexpression or stable inhibition of HPSE-1. Our preliminary results demonstrated that the culture medium of metastatic prostate tumor cells when overexpressing HPSE-1 were able to enhance the induction of capillary-like structures in vitro. Studies relating quantification of these structures and angiogenic factors as VEGF (Vascular Endothelial Growth Factor) are underway.

**Keywords:** prostate, DU145 cell lineage, HUVEC cell lineage, heparanase, cancer.

**28. Reintrolling of Patients Colonized by Methicillin Resistant Staphylococcus aureus: Impact of Quarantine Measures.**  
Isadora Gabas, Plínio Trabasso.

Staphylococcus aureus is a Gram-positive bacterium, associated to large variety of life-threatening infectious diseases, including health-care associated infections (HAI). In this setting, post-surgical skin and soft-tissue infections, often associated to prosthetic devices, are of great concern, since they are related to high morbidity and mortality. Furthermore, selective pressure resulting of antimicrobials misuse have led to great expansion of resistance of *S. aureus* to methicillin/oxacillin, which, in turn, significantly reduces therapeutic options for the pathogen. The aim of this present study was to assess the prevalence of *S. aureus* as etiologic agent of HAI, as well as the susceptibility profile to methicillin/oxacillin in patients cared for at Clinical Hospital of University of Campinas. The use of antimicrobials, especially oxacillin, vancomycin and first, second and fourth generation cephalosporins were also assessed. Finally, we assessed the impact of quarantine measures adopted during readmissions of patients colonized by *S. aureus*, mainly regarding precaution measures and hospital bed management. According to our research, of all patients hospitalized during the study period, 862 patients had positive culture for *S. aureus*. Twelve patients were excluded from the analysis because they had more than one admission. Thus, hospitalizations of 850 patients were analyzed; of these, 669 (78.7%) were of community origin, 140 (16.5%) came from other hospitals and 41 (4.8%) came from the Hospital itself. Patients from the community stayed longer (297 days) compared to those who came from other places. The most common reasons for hospitalization were infection in 239 (28.1%) patients, trauma in 185 (21.8%) and immunosuppressive disease in 156 (18.3%) patients. The main comorbidity found in the study was high blood pressure, in 341 patients. It was observed that patients from the community had more re-hospitalization (84.5%), and death occurred more frequently among patients with oro-tracheal intubation (17.5%).

29. **Life quality in women with deep endometriosis**  
Iuri de Paula Quagliato, Daniela Angerame Yela Gomes

**Introduction:** Endometriosis is characterized by the presence of functional endometrial – similar to the tissue located outside the uterine cavity, most commonly in the pelvic peritoneum, bowel, ovaries and rectovaginal septum, being the most common gynecologic pathology. It is classified in four stages; the latter is considered more severe due to pelvic involvement and / or other organs. Endometriosis stage IV affects organs such as the bladder and / or bowel causing severe symptomatology, consequently there is a negative impact in the quality of women life. Thus, the use of questionnaires that assess the quality of life are relevant to measure the impact of the disease and to evaluate the effectiveness of the treatment that is used. **Objective:** to describe the clinical and sociodemographic characteristics of women with deep infiltrating endometriosis and measure their quality of life after six months of medical treatment. **Subjects and Methods:** there will be a cross-sectional study of 60 women with deep infiltrating endometriosis accompanied by an Endometriosis Clinic. The diagnosis of endometriosis will be surgical or imaging tests. Two questionnaires will be applied, Endometriosis Health Profile Questionnaire (HPS-30) and Short-Form 36 (SF-36) to assesses the quality of life. **Data analysis:** frequency, mean and standard deviation of the variables will be calculated and, as a result, the possible associations between the findings will be sought, using appropriate statistical tests for the variables described. For the accomplishment of these procedures SAS version 9.2 will be used. **Conclusions:** The term “quality of life” must embrace these three main dimensions: mental health, physical function and social function. Both questionnaires that were used addressed those questions and apparently reported similar results. It is remarkable that the clinical treatment helps women to improve in some aspects, however it is not effective in providing an excellent quality of life, still resulting in a significant negative impact in the quality of life.

30. **Analysis of a multidisciplinary approach for the treatment of obesity in children.**  
Jéssica Beatriz Tur Bellinetti, Maria Ângela R. G. M. Antônio, Mariana Porto Zambom.

Childhood obesity is a frequent condition and is associated with an increased risk of other diseases. There is a lack of data on the best form of initial approach. **Goal:** 1. To analyze the evolution of children attended at the Child Obesity's Ambulatory of Hospital das Clínicas of Unicamp, where the first visit was performed in a group, and then compare with previous data from the same outpatient clinic with the first individual visit. 2. To determine clinical, anthropometric and laboratory variables associated with the group that decreased or maintained the BMI Z score. **Methods:** This cross-sectional study carried out a retrospective data collection of 243 patients attended at the Child Obesity's Ambulatory of Hospital das Clínicas of Unicamp, from February 2011 to December 2014, with a first visit in a multidisciplinary group. The information was compared to data obtained from previous work with 150 patients attended at the same outpatient clinic, from April 2005 to January 2011, with a first individual visit. Clinical analysis (age, sex, origin, age of onset of weight gain, presence of other diagnoses, weight gain triggering factor, other complaints, adherence to diet, physical activity and presence of acanthosis nigricans), anthropometric (weight, height and Z score of the BMI) and laboratorial (fasting glycemia, total cholesterol and fractions, triglycerides and glycemia / insulin ratio). Patients were divided into two groups: those who maintained or decreased their BMI Z score between the first and second visits (Group 1) and those who increased the BMI Z score (Group 2) over the same period. Among the groups, clinical, anthropometric and laboratory characteristics were analyzed. **Results:** The clinical, anthropometric and laboratory profile of the patients studied between 2011 and 2014 remained similar to that observed in the previous period. In the current study, 70.6% of the patients had a decrease or maintained the BMI Z score from the first to the second consultation (Group 1) and 29.4% had an increase in the BMI Z score (Group 2). The companion being the mother was positively related to the loss or maintenance of the BMI Z score of the children assessed. **Conclusions:** We conclude in our work that

the clinical, anthropometric and laboratory profiles of the patients have been maintained throughout the years of existence of the Ambulatory of Childhood Obesity of the Hospital das Clínicas of Unicamp. In addition, the introduction of the first group visit had positive results in relation to weight loss, and the children who had the mothers as companion had a greater decrease of the BMI Z score.

31. **Prevalence and risk factors associated with puerperal infection after operative vaginal delivery according to antibiotic prophylaxis**  
Josyanne Bittencourt Gomes, Fernanda Hochgreb de Freitas, Roseli Calil, Adriana Gomes Luz.

**Introduction:** The puerperium infection is responsible for one third of the maternal deaths in developed countries and is also responsible for a great economic and social cost, generating an increase in hospitalization, increased in the use of antibiotics, in the need of surgery that can compromise fertility and induce permanent side effects, separation between mother and son, also psychological effects. The sub-registration is very frequent due to early discharge from hospitals, increasing the occurrence of manifestations after the hospital discharge. Normally ambulatory treatment is realized although most of the times the treatment does not continue in the original health institution it began. The introduction of antibiotic prophylactics in obstetrics has shown a great impact on the reduction of puerperium infection in operative vaginal delivery. Therefore, it is important to know the real prevalence of puerperium infection in this health institution so that we can define conducts that are effective against possible future complications and the occurrence of new cases. **Objective:** To know the prevalence and risk factors of puerperium infection in a tertiary university Hospital after operative vaginal delivery with antibiotic prophylaxis. **Materials and methods:** A transversal retrospective study has been realized, in which were analyzed medical records of patients that have undergone operative vaginal delivery with or without antibiotic prophylaxis after the clamping of the umbilical cord, with endovenous Cefazolin between 2013 and 2015. The variables evaluated were: use of forceps, use of antibiotics, dosage, post-operative fever, post-operative scaring, vaginal secretion, search for medical assistance. **Results:** The prevalence of puerperium infection in operatory vaginal delivery is 4,15%. Of the women who undertook operatory vaginal delivery, 75% were under 20 years of age, 62% had an BMI of under 30, 65% women that were pregnant for the first time, 93% with gestational age of over 37 weeks, 90% used intrapartum antibiotics, 32% of the deliveries suffered some degree of laceration, 90% without associated comorbidities. The stepwise regression, verified that the puerperium infection was influenced by the laceration variable (P=0.005). The majority of women that developed puerperium infection presented symptoms like: fever, dehiscence of sutures, vaginal secretion with fetid odor and abdominal pain. It was verified that 95,8% of the women that did not develop puerperium infection had received the correct antibiotic prophylaxis and the inadequate administration was more prevalent with obese patients (P=0.005). **Discussion:** The risk factors for the development of puerperium infection in patients submitted to operatory vaginal delivery were researched, being them: age, BMI, gestational age, number of previous gestation, vaginal laceration, use of intrapartum antibiotic prophylaxis and associated comorbidities. The factors with most relevance to the occurrence of puerperium infection were: vaginal laceration and inadequate dosage of antibiotics for obese patients. The necessity of a higher attention to the dosage of antibiotic prophylaxis in obese patients was noted, where in these cases it should be augmented to become adequate. Literature shows that, vaginal lacerating is a common interoccurrence in operatory vaginal deliveries and part of the patients who undertook this procedure developed puerperium infection. The utilized method limited the research, since the patients in puerperium period did not always came back symptomatic to the same place they gave birth. Due to this reason, data loss may have occurred. **Conclusion:** The prevalence and risk factor are in accordance to recent literature, where 4,15% of the women developed puerperium infection in the presented study. The factors of greater impact were the vaginal laceration, with

prevalence of 6.4 times in those women, and the use inadequate doses of antibiotic prophylaxis in obese patients.

**32. Antibiotic consumption by adults: population-based cross-sectional study.**

Jéssica Quintão Pereira, Taís Freire Galvão.

**Objective:** The main objective of this population-based cross-sectional study is to evaluate the consumption of antibiotics and associated factors among adults over 18 years old from the Metropolitan Region of Manaus. **Methods:** Participants were selected through probabilistic sampling in three stages. Data were collected by interview, performed between May and August 2015, using an inquiry form about access and use of health inputs and service as well as socioeconomic information. The antibiotic consumption was reported to the last 15 days before interview. For statistical analysis, bivariate analysis was used to calculate the reasons of prevalence (PR) of antibiotic intake and 95% confidence interval (95% CI), followed by multivariate model adjusted by the Poisson regression with robust variance. **Results:** The study population was characterized by a slight predominance of woman (52.8%), adults among 25 and 34 years old (28.8%), individuals from economic class C (57.1%), complete high school (47.5%) and good health status (66.1%). The prevalence of antibiotic usage was 3.4% (95% CI: 2.8-4.0%). After adjusted analysis, the association was major between woman (PR=1.58; CI 95%: 1.11-2.24) and people with regular health status (RP=1.52; CI 95%: 1.08-2.15). Frequency of self-medication was 19.0%, with higher consumption of amoxicillin. The use of antibiotics was low and associated to woman and individuals with regular health status. One fifth of the amount of the antibiotics was consumed by self-medication, contrary to the current legislation in Brazil. **Conclusion:** Stronger inspection and investments in educational policies are necessary to the intensification of the rational use of these drugs.

**33. Analysis survival in young adults' patients with lung cancer**

Jéssica Silva Nicolau, Maria Aparecida Koike Folgueira, José Eluf Neto, Karina de Cássia Braga Ribeiro.

**Objective:** Lung carcinoma is uncommon in young adult subjects and there is no consensus about the behavior of the disease in this age group. Our objective was to analyze clinical and pathological characteristics and survival rates of young adult patients at diagnosis (<41 years) differ from those presented by older patients (> 40 years). **Patients and methods:** We analyzed data from the Foundation's Hospital Registry of Cancer Oncocentro of the State of São Paulo (FOSP) for the period 2000-2009, which included information from 21.285 patients diagnosed with lung cancer (ICD: C39). Young adults' patients were considered those under 41 years of age. Data relating to gender, date of diagnosis, histological type, clinical staging, date of last follow-up, status at last follow-up (live without disease, live with disease, live without specifications, die from cancer, die for other reasons, dead without specifications), date of death. For patients considered initially as a loss of follow-up, a query was made to CADSUS databases - System of Registration of SUS users; National Cadastre of deceased (CNF), Registration of Individuals - CPF - Federal Revenue Service; electoral situation in the Higher Electoral Court. After these 228 patients remained as follow-up loss (1.14%). For the analysis of patients' inpatient groups: Patients young adults (< 41years), adult patients (41-65years), and older patients (> 65years). Survival was estimated by Kaplan-Meier curve and analysis by log-rank tests. **Results:** Among 21.285 patients, the majority had a histological diagnosis of adenocarcinoma (38.5%) or squamous cell carcinoma (37.3%) and presented in advanced clinical staging (III / IV) (80.3%). Young adults were 542 patients (2.54%), and the histological type and prevalent in this group were adenocarcinoma (60.33%) vs 41,9% (adults) vs 31,4% (older patients). In the older group, the histological type of squamous cell carcinoma was the most prevalent (43,7%). Regarding clinical staging, young adults' patients presented more advanced / metastatic disease, CS IV (62,7%), vs 53,8% (adults) vs 46,3% (older patients). Overall survival was significantly higher in young adult patients than in older adults. **Conclusion:** In this group of patients, young adults had a higher survival rate to the elderly, even presenting

a higher prevalence of advanced disease than in the other groups. It is possible that this observance of the rights of young people presents a lower morbidity than the older patients.

**Keywords:** lung cancer, epidemiology, analysis survival, young adults.

**34. Analysis of the tissue expression of mutant isocitrate dehydrogenase 1 and nicotinamide nucleotide transhydrogenase in high and low grade human gliomas**

Karla Saraiva da Silva<sup>1</sup>, Fábio Rogério<sup>2</sup>, Roger F. Castilho<sup>3</sup>.  
Graduanda do Curso de Medicina<sup>1</sup>, Universidade Estadual de Campinas/UNICAMP, Departamentos de Anatomia Patológica<sup>2</sup>, e Patologia Clínica<sup>3</sup>.

Gliomas are common primary brain tumors. Astrocytomas are gliomas derived from astrocytes and their pathophysiology involves genetic and metabolic changes. Mutations in the isocitrate dehydrogenase isoform 1 gene (IDH-1) have been recently described and are associated with functional changes. The most common mutation (R132H) leads to gain of function, through which the mutant IDH-1 synthesizes the oncogenic metabolite D-2-hydroxyglutarate, and decrease of the enzymatic ability to regenerate the antioxidant NADPH. Moreover, nicotinamide nucleotide transhydrogenase (NNT), located in the inner mitochondrial membrane, also prevents oxidative stress by producing NADPH. In the present study, expressions of NNT and mutant IDH-1 (R132H) were immunohistochemically evaluated in sections of low- (n = 6) and high-grade (n = 20) astrocytomas from patients submitted to surgical treatment in a university hospital. We obtained a mean percentage of NNT positive cells of 25.9% ± 3.09 for low grade astrocytomas and 31.5% ± 3.55 for high grade. As for IDH-1, we obtained a mean percentage of positive cells for the R132H mutant form of 25.94% ± 6.0 in low grade gliomas and 31.66% ± 1.62 in glioblastomas. Neither qualitative nor semi-quantitative differences were observed in the tissue distribution of both enzymes. These findings are original and do not support the hypothesis that R132H IDH-1 alters NNT expression in astrocytomas. FAPESP: 11/50400-0, PIBIC/CNPQ: 135609/2016-0.

**Keywords:** glioma, nicotinamide nucleotide transhydrogenase, immunohistochemistry.

**35. Analysis of the relationship between gait and balance in transtibial amputees**

Fernanda Ferrari, Gabriela Jaccamo, Laísa Arruda, Amilton latecola, Heloize Cazangi Borges, Natália Duarte Pereira

The human gait is a form of locomotion where the body is erect and in movement, being one of the most complex human movements, but that presents unique efficiency and functionality. Several factors influence gait, such as balance. Balance is the maintenance of the center of gravity on the basis of support, and can be static or dynamic. The relationship between gait and balance would be that locomotion is a succession of imbalances controlled by the body. However, in some cases, both gait and balance may be affected, such as in amputated proteases. Thus, the objective of this work is to evaluate the relationship between balance and temporal and angular space data of patients with amputated proteases.

**Keywords:** March; Balance; Protected; Amputation.

**36. Index of male homicides in the Metropolitan Region of São Paulo in the last 30 years.**

Larissa Ghermandi de Almeida, Ricardo Cordeiro

Homicides are a serious social problem in Brazil and, more specifically, in the São Paulo Metropolitan Region (SPMR), and affect the population strata unequally. Between 2012-2014, the absolute number of male homicides was 158,350 (rate of 53.02 / 100 thousand inhabitants) while that of female was 14 323 (rate of 4.69 / 100 thousand inhabitants) <sup>1</sup> Apart from the difference in gender, the economic difference was also significant: low-income individuals were more affected than the most favored classes. In the international context, it was verified in 2012 that Brazil had the 3rd

highest homicide rate in South America. The homicides thus have presented alarming indexes at national level and in the context of the masculine public being important its study in the RMSP. This study covered the 39 cities of the Metropolitan Region of São Paulo. The period studied was between January 1, 1979 and December 31, 2013. The category of homicides used in this study comprises the group of basic causes of death resulting from homicides, injuries inflicted by the police and injuries of ignored intention. The databased used was IBGE and Seade Foundation. The results graphics show an abrupt reduction of the incidence of male homicides in the SPMR in the last 15 years, with the ages from 14 to 30 being the most affected by the deaths, and also the one that showed the highest rate reduction. The peak of incidence in the late 1990s coincides with the hegemonic consolidation of the First Capital Command (the most important Brazil criminal faction) and also with the renewal of public security discourses. There are, then, two explanations for the behavior of the abrupt fall of the curve. The first would derive from the "equality" law of the First Command, in which deaths among criminals only occur before the endorsement and judgement of the organization. The second would come from investments in public security.

**Keywords:** homicides, male, Metropolitan Region of São Paulo.

37. **Craving or fissuring from the perspective of alcohol, cocaine, marijuana and nicotine addicts under treatment**  
Laura Mello Kawano, Renata da Cruz Soares de Azevedo

Craving or fissure is defined as a state of motivation oriented to the consumption of drugs and represents an important element of the withdrawal syndrome, which affects individuals dependent on psychoactive substances (PAS). This intense desire, difficult to control and an important relapse facilitator, has been studied in the attempt to better elucidate the phenomenon for greater success in the treatment of dependents. The objective of this qualitative-quantitative study was to evaluate users of nicotine, alcohol, marijuana, cocaine and / or crack treatment in HC / UNICAMP, to understand, from the perspective of addicted patients, their perception about the emergence, consequences and coping of craving on its board. Socio-demographic questionnaire, consumption history, semi-structured interview and evaluation scales of nicotine cravings, alcohol, marijuana and cocaine were used in a group of 25 patients, divided into 5 groups with 5 patients each, according to The drug of choice: group M (marijuana), N (nicotine) group C (cocaine), group A (alcohol) and CK group (crack). The analysis of the data showed that the participants were mostly men, unmarried, between 19 and 54 years (mean of 38.3 years), with complete secondary education and history of polydrug use of PAS associated with a high frequency of use of the substance of preference. Differences were observed between PASs in the sensation of fissure, being the most intense among crack dependents, followed by cocaine and marijuana. The fissure has been described as "a will beyond the limit" by substance, associated with a "loss of control". Craving was perceived by emotional and physical manifestations such as mood swings, irritability, nervousness, anxiety, restlessness, obsessive thinking by substance, headache, restlessness and tremors. The most cited triggers were negative emotions, environmental cues and social networking. Most of the patients saw in pleasurable activities a means to resist the use, besides the search of aid of the social network and use of medications. The self-perception of the fissure, the recognition of its triggers and of forms of coping, are fundamental for aid in the treatment. The perception of the user should be valued as a central element in the therapeutic process.

38. **Profile of patients in a referral emergency unit: possible overcrowding markers**  
Laís Rodrigues de Oliveira, Thais Rafael Guimarães, Ana Paula Boaventura.

Due to the diversity of patients assisted at emergency units it is essential for the nurse to know the characteristics of the population, how to classify the unit's overcrowding degree, and how to identify the main factors that are influenced by it, leading to a good quality care with efficient management of patient flow. This study aimed to

characterize the profile of patients admitted in a referenced emergency unit of a university hospital, and to analyze the quantitative indicative variables of overcrowding. This is a quantitative, cross-sectional study. We included all patients who remained hospitalized for 6 hours or more, between the years of 2014 and 2016. The total number of admissions evaluated was 62,971. There was a predominance of males, with a mean age of 46.9 to 49.6 years, being most of the attendances classified as of low severity. The average occupancy rate was greater than 100%, and there was an increase in the permanence and mortality rates. The profile of this unit was traced, and by looking at it we can perceive changes in the pattern of care during the three years analyzed here (2014-2016). In addition, we can conclude that the emergency unit in question is, indeed, overcrowded, because of its high occupancy rate and length of stay. Further research is necessary to better understand the degree of overcrowding, as well as which other variables can be analyzed to assess this issue.

**Keywords:** Emergency; Overcrowding; Emergency nursing.

39. **Ileal pouch of ulcerative colitis and familial adenomatous polyposis patients exhibit impaired autophagy**  
Leandro Minatel Vidal de Negreiros, Nielce Maria de Paiva, Livia Bitencourt Pascoal, Mariana Portovedo, Andressa Coope, Maria de Lourdes Setsuko Ayrizono, Claudio Saddy Rodrigues Coy, Marciane Milanski, Raquel Franco Leal.

Ulcerative colitis (UC) is a chronic intestinal inflammation that can affect the large intestine and rectum. Its etiology is not completely established. Familial adenomatous polyposis (FAP) is an autosomal dominant disease which affects young individuals and is associated with the formation of multiple polyps in the large intestine and rectum, which invariably implies a greater risk of cancer. Both diseases, despite being different, may require the same surgical procedure. The ileal pouch-anal anastomosis (IPAA) is the elective procedure of choice in the surgical management of refractory UC, and FAP with many polyps in the rectum. The main complication after this procedure is the pouch inflammation (pouchitis) that can affect up to 45 percent of patients who are submitted to IPAA for UC, and only five percent of the FAP patients who undergo the same procedure. Defects in autophagy have been reported in inflammatory bowel diseases. However, there are no studies on the IP. Autophagy is an evolutionarily conserved catabolic pathway that consists of selective degradation of cellular components and a homeostatic mechanism that protects cells exposed to stress situations (toxins, starvation). Thus, we evaluated molecules involved in the autophagy pathways in ileal pouch mucosa of UC and FAP patients, even in the absence of clinical, endoscopic and histological inflammation, in order to understand if there is underlying modulation in these pathways that can predispose them to future alterations. Sixteen patients with IP in "J" shape, asymptomatic and with endoscopically normal IP were evaluated. The control group consisted of eight patients with normal colonoscopy. The expression of ULK1, BECN1, ATG16L1, ATG5, MAP1LC3A, BAX, BCL2 transcripts were analyzed by qPCR and Beclin-1, LC3 II, p62 and HSC-70 protein levels by immunoblotting and Inflammatory Bowel Disease Research Laboratory (Faculty of Medical Sciences) and was approved by the Ethical Committee of University of Campinas. There was a significant decrease in the transcriptional levels of ATG5, MAP1LC3A and BAX in the FAP group ( $p < 0.05$ ). There was also a decrease in the protein level of Beclin-1 in the UC and FAP groups compared to the control group ( $p < 0.05$ ). Although the LC3II levels by immunoblot were higher in the UC group, total LC3 and LC3/p62 co-localization were lower in the immunofluorescence analysis in the UC and FAP groups compared to the control group ( $p < 0.05$ ). Corroborating these results, there was an increase of p62 by immunoblot in the UC group, compared to controls ( $p < 0.05$ ). Therefore, we verified decreased of macroautophagy markers in the ileal pouch mucosa of both, UC and FAP, but the mechanisms to explain may be distinct, analyzing data already published. In FAP, decreased autophagy may be related to impaired apoptosis, otherwise in UC, may be mainly due to increased TLR activation. Therefore, autophagy is relevant to the cell survive since the accumulation of unfolded and abnormal proteins leads to activation of pro-inflammatory pathways. Those evidences of

impaired autophagy may explain the prone to inflammation in the ileal pouch mucosa, mainly in UC. This subject deserves further studies and detailed mechanisms, which can help to find out new targets to ameliorate inflammation in the ileal pouch and even in UC. These findings indicated an impaired macroautophagy mechanism in the IP, which may explain the inflammation predisposition, mainly in the IP mucosa of UC patients.

**Keywords:** Autophagy, ulcerative colitis, inflammatory bowel disease, familial adenomatous polyposis, ileal pouch anal-anastomosis.

**40. Sexual and Reproductive Education for Adolescents: experience in peer education.**  
Leandro Pedro Goloni Bertollo, Rebecca Ranzani Martins, José Ricardo Carvalho de Mesquita Ayres

The Sexual and Reproductive Education Project is a university extension initiative created by medical students that seeks to address, in an interactive and innovative way, topics of great relevance to the adolescent public generally neglected or worked poorly in Brazilian schools, such as HIV/AIDS, abortion, gender and sexual orientation. Workshops and a final playful competition were elaborated. The medical students' volunteers were previously trained, presenting them the theoretical content and preparing them for a horizontal and participatory approach towards high school students from a public school. To evaluate the intervention's impact on the adolescents, a qualitative analysis was performed, with field diaries, and a quantitative one, with application of questionnaires. These evaluation tools showed significant student learning about the subjects and stressed the need for adjustments to the project. We also carried out an analysis of the impact of the project on the undergraduate students involved with questionnaires. In self-evaluation, there was an increase in the theoretical knowledge of the volunteers, gain in confidence and in the ability to argue against prejudiced positions. These results point to the need to continue to improve Brazilian sexual education, presenting the *peer education* method and university extension as an effective path.

**Keywords:** sexual education; gender; sexual orientation; HIV; abortion

**41. Epilepsy: religiosity / spirituality and epilepsy**  
Leticia Muniz de Vargas, Glória Maria Tedrus

Epilepsy is a chronic neurological condition characterized by recurrent epileptic seizures, caused by excessive neuronal activity in the brain, usually self-limited. The relationship between religiosity and epilepsy is scarce, and the relationships between religious beliefs and practices and the clinical aspects of epilepsy are still poorly understood. Some studies suggest that patients with epilepsy, particularly those with temporal lobe epilepsy and hippocampal sclerosis, may present with increased religiousness. Religiosity and spirituality are related, but they are distinct. Spirituality is linked to the purpose of life, and a belief system that focuses on intangible elements, transmits vitality and meaning to life events. Despite the growing interest in the implications of religiosity and spirituality in health, the mechanisms by which religiosity and spirituality work in health and disease contexts are not well understood. Studies suggest that religious and spiritual involvement are associated with better health and quality of life, such as the adoption of healthy behaviors, pointing to a complex and bidirectional direction.

**42. Association of tumor microbient in the progression of skin melanoma: assessment of the role of collagen**  
Lucas Almeida Cavalcante, Jose Vassalo

In melanoma, collagen has been described as a potential new prognostic biomarker. In this way, our purpose was to evaluate the quantity, uniformity and organization of peri- and intratumoral collagen, and to correlate these parameters with clinicopathological features. For this purpose, a total of 22 specimens of cutaneous

melanoma were submitted to second-harmonic generation microscopy and image evaluation. Our results suggest that the collagen fiber parameters, mainly organization, are potential candidates to determine with higher precision the border between neoplasia and nonneoplastic dermis.

**43. Early diagnosis of skin tumors by teledermatology**  
Lucas Choi Marchesano, Elimar Elias Gomes, Thiago Celestino Chulam.

**Introduction:** According to the Instituto Nacional do Cancer, 175,760 new cases of non-melanoma skin tumors and 5,670 new cases of melanoma were estimated in 2016. In contrast, the Conselho Federal de Medicina registered in 2013 only 5,930 dermatologists for a population of 198 million inhabitants in the same period. However, with the benefits generated by technology in the telecommunication areas, it was possible to improve the health system of several countries. Therefore, with the development of Telemedicine, some studies have demonstrated an early and effective care in the treatment of skin diseases by general practitioners. **Objective:** This study aims to evaluate the efficiency of the insertion of teledermatology in the detection of skin malignant neoplasms in a screening and early diagnosis program, and to evaluate the importance of clinical information and dermatoscopy in the diagnostic decision. **Materials and methods:** The researcher took 5 photos of an iPhone 6s from the lesions of the patients who went through the screening program. The photos were sent separately in 4 different phases to three dermatologists. In the first phase, the 3 doctors evaluated the distant photos. In the second phase, they evaluated the distant photos plus the clinical information of the patient. In the third phase, only the dermatoscopic photos and in the fourth phase, evaluated all the photos plus the clinical information. At the end of each phase, each physician gave a major diagnostic hypothesis, classified the lesion into malignant, benign or suspected and indicated the biopsy which in turn were compared to the assessments of the dermatologist on the day of the consultation, allowing to verify the degree of agreement between the face-to-face consultation and the teledermatology evaluation. **Results:** Between February and May 2017, 72 patients were included in the study and 81 lesions were evaluated. The Kappa method was used to analyze the results. In the biopsy indication, there were concordances with the face-to-face consultation of 86.84% for observer A, 88.46% for observer B and 90.91% for observer C. In the classification of the lesion, there was a concordance of 75% for observer A, 73.08% for B and 75.32% for C. In the diagnostic hypothesis, there was an agreement of 68.42% for A, 62.82% for B and 63.64% for C. **Conclusion:** Considering the high rates of intra-observer agreement, it is suggested that teledermatology can be an important screening tool for skin cancer.

**44. First aid for children: development of an application for training**

Lucas Felix Calandrim<sup>1</sup>, Adriana Breves dos Santos<sup>1</sup>, Thaís Guimarães<sup>1</sup>, Gabriel Otero<sup>1</sup>, Cleuza Aparecida Vedovato<sup>1</sup>, Ana Paula Boaventura<sup>1</sup>.

<sup>1</sup> University of Campinas (UNICAMP), Brazil, Campinas, São Paulo (SP).

The World Health Organization recommended the program entitled "Kids save lives" emphasizing that it is taught to school children practicing first aid. This project has an objective to develop a free mobile app about first aid, for iOS (iPhone/iPad) and Android, to capacitate children of six years old and up in how to initially assist emergency victims. The methodology used to define the themes was the *Scrum*, that is a fast methodology where projects are divided in cycles with encounters called *Sprints*, that represents a *Time box* in which a group of activities should be executed, aiming to spread knowledge regards what was done at the day before, identify impediments, and prioritize the work of the day that begins. The pictures, along with theoretical content, were drawn using *Corel Draw*® and imported to *Ionic*, a *framework* that aims to create mobile applications with logic *JavaScript* language and *html/css* visual. The app was then created for Android Studio and Xcode, so it could be available at the Google Play and Apple Store, respectively. The app is free and it is called "First Aid" in Brazilian

Portuguese (“Primeiros Socorros”). It has clear and objective language, and it contributes as an interactive tool for training school kids in urgencies and emergencies. The application content encompasses the main emergency situations, and it gives basic instructions in how to proceed in case of each one of them. At the end of each scenario, there is a *quiz* that aims to give the user *feedback* about what they have learned in that section. This app was made by a professional with experience in software development, alongside with a *web designer*, in a way that, together, they projected the usability and *layout* of the app. The app stays installed at the phone, and when the user makes an action it connects to a database used by the administrative panel, so it can search and take information bidirectionally. The study demonstrated that 6301 sessions were started using this application, 6100 (97%) in Brazil, 1400 (51.1%) users were female and the average daily total engagement was 3 hours and 7 minutes. It was also identified that in most of the situations there was a significant proportion of correct answers to the Question and Answer Quiz by users. It is concluded that the study reached its objectives, demonstrating that the use of an application as a learning tool through e-learning, enables the citizens to have access to basic first aid skills essential to save lives and minimize possible sequelae due to trauma and accidents. It is also suggested that new studies with the theme of e-learning be conducted to better use this. The development of apps is a global trend, including in the health area. Along with that, the education of children in emergencies and first aid is also a global recommendation, and a practice that we should implement in our schools.

**Keywords:** First aid, smartphones, school health, e-learning.

45. ***Uncaria tomentosa* action in the treatment of muscular dystrophy in mdx mice - murine model of Duchenne Muscular Dystrophy**

Lucas Prezotto Giordani, David Feder, Bruno Machado Bertassoli

**Background:** *Uncaria tomentosa* (Willd. Ex Roem. & Schult.) DC. (Rubiaceae) is a medicinal plant with scientifically studied anti-viral, anti-mutagenic, anti-inflammatory and antioxidant properties. Duchenne Muscular Dystrophy (DMD) is a serious disease caused by mutations in the dystrophin gene. This deficiency leads to instability of the sarcolemma, inflammation, muscle degeneration and fibrosis. Consequently, skeletal muscle strength decreases progressively, limiting patients to performing simple daily activities and breathing without noninvasive, late-stage support. **Objective:** Considering the dystrophic characteristics and the potential application of *Uncaria tomentosa*, the objective of this study was to evaluate how the oral administration of this extract can act on muscle strength and morphology in mdx mice, the experimental animal model of DMD. **Methods:** Male mdx mice at 6 weeks of age were subjected to 6 weeks of oral administration of 200 mg/kg *Uncaria tomentosa* extract. The general histopathology was analyzed with hematoxylin/eosin. The ability of mice to support limb tension to oppose gravitational force was measured and serum creatine phosphokinase (CPK) was collected. Data were analyzed by one- or two-way ANOVA. **Results:** Morphologically, treated and untreated animals had internalized nuclei, increased endomysial connective tissue and variation in fiber diameter. In the treated animals, rounded nuclei and fibers were observed. In the tibialis anterior muscle there was no statistical difference in the quantification of central nuclei, whereas in the diaphragm there was a higher result in the treated animals. Fiber hypertrophy was observed in treated animals. Body weight did not change over the weeks. The untreated animals had higher muscle strength after 6 weeks compared to treated animals. A higher CPK value was also observed in post-treatment animals. **Conclusion:** So far, what we have been able to define is that *Uncaria tomentosa* has been tried as anti-inflammatory, antiproliferative and anticarcinogenic, with good isolated results, but that in the context of dystrophic muscles, the analyzed histology, biochemistry, and evaluation of strength were clearly worse. Further studies are necessary in the area to complement the potentials of this plant, which for the mdx model, however, was detrimental.

**Keywords:** *Uncaria tomentosa*; mdx mice; Duchenne Muscular Dystrophy.

46. **Evaluation of knowledge and adherence to uterine colon cancer trace in jundiá**

Luisa Haddad Franco; Sautchuk, LP; Freitas, OJ; Ozon, DNC; Antunes Jr, A; Gollop, TR; Ana Carolina Marchesini de Camargo.

**Introduction:** Cervical cancer (CC) is caused by Human Papilloma Virus (HPV) persistent infection. Despite the implementation of screening program, the increase in diagnosis of precursor lesions and advances of treatment, mortality rates remain stable. This failure is attributed to flaws in screening program. **Objectives:** This study aims to assess women's knowledge about the CC screening, the association between HPV infection and CC, the reasons that would lead to non-adherence to screening program and availability the HPV vaccine. **Methods:** 300 women aged between 18 and 77 years, who were in the University Hospital for any reason, were interviewed. **Results:** 67.9% of the included women were between 25 and 64 years old, age considered the target group for screening. Association between HPV infection and CC was recognized by 62.1% of interviewed women and 92.2% of them knew that pap smear provides CC and its precursor lesions detection. Only 1.1% knew that cytology can be done every 3 years and 2.6% thought that pap smear should only be made with the presence of genital symptoms. Most patients had taken at least 1 cytology and subjected to the examination annually (78.8 and 85.6% respectively). Among women who rarely perform the screening test, 36.4% found it unnecessary because they had a normal prior exam; 22.7% do so because they are embarrassed and 18.2% because they feel pain. **Conclusion:** Most women know the relationship between HPV infection and CC, but a few of them know the correct periodicity of pap smear. The reasons given for non-adherence to screening were the feeling of pain or embarrassment during the Pap smear, and having a normal prior exam. Most of the women interviewed would like to be vaccinated against HPV.

**Keywords:** HPV, cervical cancer, screening, pap smear, HPV vaccine.

47. **Effects of the program of education and prevention of automobilism accidents in young people of public education of campinas: retrospective analysis of year 2017.**

Marcos Pereira de Santana Santos, José Gonzaga Teixeira de Camargo, Ariane Caetano Hardy.

**Objective:** To analyze the results obtained during the Program P.A.R.T.Y. (Prevention of Trauma Risk Related to Alcohol Use in Youth), which develops socio-educational activities with high school students and public-school teachers in the metropolitan region of Campinas, in relation to actions to prevent traffic accidents in 2017. **Method:** a visit to two public schools in Campinas, a visit to the surgical and orthopedic ward and the emergency room of the Hospital and Maternity Hospital Celso Pierro, lectures on risk factors and accident prevention and systematization of data through pre-tests And post-tests. **Results:** 94 high school students participated. About 18.09% (16) were older than 18 years and 35.10% (33) were males. After the project, 93.62% of the students stated that the lectures suited to prevent them from getting involved in a trauma. **Conclusion:** the project succeeded in its objective of training young people to identify the risk factors for motor vehicle accidents and to choose safe attitudes in traffic.

**Keywords:** Social vulnerability; students; high school; traffic accidents; alcohol.

48. **Action of polyodium leucotomos extract in skin cancer cell lines.**

Mariana Ayaka Yamashita, Taize M Augusto, Nilva K Cervigne Furlan.

Skin cancer is a disease with high incidence in Brazil and worldwide. In Brazil, it has become the most common neoplasm in recent years, with its main triggering factor exposure to ultraviolet radiation (UVR) coming from the sun. Recently, the phytotherapy, Polyodium Leucotomos (PL), was introduced in the market for the treatment of inflammatory changes and other skin diseases such as vitiligo,

psoriasis and skin damage caused by UV radiation. This plant has some properties with anti-inflammatory, brain stimulation, photo-protective, healing, antioxidant, immune-modulating and preventing photo-aging actions. Recently, it has been speculated PL's putative antitumor activity, since it could protect the cellular DNA damage caused by UV radiation associated with cancer. In the present study we will assess the modulation of the proliferative process, migration, and invasion of skin cancer cell lineages by the treatment of the *Polypodium Leucotomos*. The results of this study would be of utmost importance for the clarification of the beneficial action of this extract, as well as the possibility of a new tool for prevention and/or treatment of skin cancer.

**Keywords:** melanoma, phytotherapeutic, *Polypodium Leucotomos*, antitumor effect.

49. **Nutritional status and body composition in the immediate postpartum period.**

Mariana Garbuio Castello Branco, Ana Carolina Godoy-Miranda, Fernanda Garanhan de Castro Surita.

**Introduction:** The postpartum period is associated with the development of overweight and obesity and several women have difficulty to lose the excessive weight acquired during pregnancy. The aim of this study was to evaluate nutritional status and body composition during immediate puerperium. **Method:** A cross-sectional study approved by Unicamp's Research Ethics Committee. Women aged 18 years or older, single gestation, gestational age at birth  $\geq 37$  weeks and who knew the pre-gestational BMI or had the weight recorded up to the 16th week of gestation were evaluated between first to third day of the puerperium. Nutritional status and body composition were accessed through body mass index (BMI), electrical bioimpedance analysis (BIA), measurement of abdominal and hip circumference, skinfolds and sagittal abdominal distance. A questionnaire about sociodemographic and obstetric data was applied to those women after delivery. Weight retention, breastfeeding and physical exercise were also evaluated as well as women's knowledge of healthy habits during pregnancy. **Results:** 93 women were included. Average age was  $28.1 \pm 5.4$ , average schooling  $11.8 \pm 3.9$  years, 58.3% non-white, 90.1% married, 78.3% multiparous and mean gestational age at the first prenatal visit was  $12.2 \pm 7.2$  weeks. The average weight at the first prenatal visit was  $70.7 \pm 15.4$  kg and at the last visit was  $79.8 \pm 14.0$  kg. The pre-gestational BMI average was  $26.2 \pm 7.2$  and the mean BMI at puerperium was  $30.4 \pm 5.8$ . In the pre-gestational period, according to BMI, 4.4% were considered underweight, 38.5% were eutrophic, 29.6% were overweight and 27.5% were obese. Moreover, according to BMI in the immediate postpartum period, 1.1% were underweight, 16.3% were eutrophic, 33.7% were overweight and 48.9% were obese. The difference between pre-gestational and immediate puerperium weight was  $10.0 \pm 5.5$  kg. The mean waist-hip ratio was  $0.9 \pm 0.1$ , highest and lowest sagittal waist, were, respectively,  $22.5 \pm 6.2$  cm and  $19.8 \pm 6.4$  cm. A mean percentage of of  $29.4 \pm 7.9$  body fat was found according BIA, compatible to obesity. Skinfold measures of subscapular, suprailiac and triceps regions were in mean above normal and only bicipital remained normal. **Conclusion:** Half of women started gestation overweight or obese and at the immediately postpartum the majority had criteria for obesity (according to BIA, BMI, waist-hip ratio and skinfold measures). Appropriate strategies, with the introduction of healthy habits in pregnancy and also in the puerperium (adequate diet and physical exercise), may be the key to avoid excessive gestational weight gain and to prevent the risk to develop future diseases associated to obesity such as metabolic syndrome, hypertension and diabetes.

**Keywords:** body composition, nutritional status, puerperium, obesity, weight loss

50. **First aid training to educators of the public school**  
Marangon, M. G.; Rosse, J. V.; Simões Neto, J

**Objective:** The aim of this study was to prepare the educational personnel of public school at Campinas city area to be trained in the attendance and delivery of the basic life support in medical emergencies, on PCR situations, airway obstructions, and convulsions.

**Methods:** the training was done with 64 educators on the public system, during the 8h period, divided in 4h of theory class and 4h of practic training. **Results:** After an initial and final test performed, scores were obtained, using a written test, with a mean value of 5.8 before and 7.94 after the training. **Conclusion:** After comparing the evaluations, one can consider that the participants of the course have gained a significant (statistic relevant) knowhow of the approach and care in medical emergencies

**Keywords:** First aid; Emergency; Teaching.

51. **Study of the effectiveness of a new non-invasive urodynamic assessment method**

Marianne Yang Yu, Carlos Arturo Levi D'Ancona

The lower urinary tract symptoms are very common among men over 40 years old. One of its' main causes is the benign prostatic hyperplasia which causes bladder outlet obstruction. Nowadays, the pressure-flow study is considered the gold standard for the diagnosis of bladder outlet obstruction. However, this method is expensive, time consuming and invasive. A multidisciplinary team from UNICAMP has developed a new minimally invasive method: the urethral connector. The results from this exam were classified in: obstructed, nonobstructed and doubt, according to a modified nomogram. Later on, these categorized groups were compared to its' respective results in the IPSS and ICIQ-OAB questionnaires. The statistical analysis was made using the Kruskal-Wallis non-parametric test and the Fisher's exact test. There was no significant difference between the IPSS medians of the "nonobstructed" and "obstructed" groups. The present study did not show any evidence of the urethral connector' efficacy in the diagnosis of bladder outlet obstruction. It is necessary to correct this study's limitations by using other methods of comparison besides the IPSS in order to evaluate more adequately the efficacy of this non-invasive urodynamic method.

**Keywords:** noninvasive urodynamics; urethral connector; infravesical obstruction; benign prostatic hyperplasia; pressure-flow study.

52. **IgA Deficiency in pediatric patients with Type I Diabetes and association with autoimmune thyroiditis**

Marília Dibbern\*, Adriana Gut Lopes Riccetto

Immunoglobulin A deficiency is defined as decreased or absence of IgA (below  $7\text{mg/dL}$ ), with normal serum levels of other immunoglobulins, in patients of 4 years of age or older. Most patients are clinically asymptomatic; symptomatic may have respiratory and gastrointestinal tract infections, allergic disorders and autoimmune disorders. Researches, evaluating IgA Deficiency in diabetic patients, have founded an average of 0,4 to 5,3% - in Brazil, IgA Deficiency rate is 1:965 (0,10%) in general population; this rate is compatible with researches from other countries (1:600 /0,17% to 1:700/0,14%). The strong association between autoimmunity and immune deficiencies seems controversial; this is due to immune system's regulation failure. Therefore, our analysis aimed to diagnose autoimmune thyroiditis and IgA Deficiency, as well as comprehend this phenomenon. 86 patients with type I diabetes were analyzed for the presence of Immunoglobulin A Deficiency and autoimmune thyroiditis; serum levels of immunoglobulins IgA, IgM, IgG were evaluated, and each one's chart for analysis of sex, age on diagnosis of Type I Diabetes, age at first medical consultation, time of disease, time of medical follow-up, age at data gathering, glycated hemoglobin, complications, autoimmune comorbidities, focusing thyroid disorders. It was observed that 19, 8% presented clinical or laboratorial disruptions related to thyroiditis, and no patient with Selective IgA Deficiency, neither connection between thyroid disease and serum levels of immunoglobulins below 10th percentile. However, evaluating serum immunoglobulins in these patients may demonstrate immune system disruption, and demand follow-up, after all the association between deficiency and autoimmunity would come with bigger susceptibility to

infections. The enlargement of the sample and its horizontal follow-up would be ideal to improve the understanding of the matter.

**Keywords:** diabetes, immunological deficiency, autoimmunity

53. **Evaluation of the cytokine effects of Th1 (IFN-gamma), Th2 (IL-4), Th17 (IL-17A) and Th22 (IL-22) responses on neutrophil effector functions against the dimorphic fungus *Paracoccidioides brasiliensis*.**

Michele Naomy Gusikuda Murayama, Mariana Mansano Gomide e Ana Lúcia Bergamasco Galastri, Ronei Luciano Mamoni

Paracoccidioidomycosis (PCM), caused by dimorphic fungi *P. brasiliensis* and *P. lutzi*, can be classified in chronic form and acute form. The immune response of susceptibility or resistance to paracoccidioidomycosis is largely regulated by a balance between the type of adaptive response presented by individuals. The aim of this project is to evaluate the effect of IFN- $\gamma$ , IL-4, IL-17 and IL-22 on the fungicidal capacity of neutrophils as well as changes in the production of reactive oxygen intermediates and cytokines (IL-6, TNF- $\alpha$ , IL-1 and IL-10) by these cells. Neutrophils were obtained from 10 healthy subjects and separated, then, treated with IFN- $\gamma$ , IL-17, IL-4 and IL-22, stimulated by Pb18 strains of the *P. brasiliensis* fungus and evaluated by ELISA to quantify the production of IL-1 $\beta$ , TNF- $\gamma$ , IL-6 and IL-10, coculture to evaluate the fungicidal action and flow cytometry to determine H<sub>2</sub>O<sub>2</sub> production. Neutrophils treated with IFN- $\gamma$  increased IL-1 $\beta$ , IL-6 and H<sub>2</sub>O<sub>2</sub> production and fungicidal capacity, but decreased the production of IL-4 and IL-10. Thus, IFN- $\gamma$  production could contribute to the infection resistance by increasing both the inflammatory activity and the fungicidal capacity of neutrophils. On the other hand, IL-17 treatment provided a "paradoxical situation", contributing to containment of the disease but also to its permanence. And IL-4 favored the production of IL-10 and H<sub>2</sub>O<sub>2</sub> and decreased fungicidal capacity.

**Keywords:** Paracoccidioidomycosis, cytokinin, neutrophil, INF- $\gamma$ , IL-4, IL-17 and IL-22.

54. **10-minute targeted geriatric assessment as a predictor of hospitalization in older adult**

Natália Pereira dos Santos Souza; Stéphanie de Souza Costa Viana; Wilson Jacob Filho

**Introduction:** The Comprehensive Geriatric Assessment (CGA) assists in the identification of the most vulnerable elderly patients and presents excellent performance in the early identification of risks for future adverse events. However, the factor time limits its use at the interface locations between acute hospital care and a community. **Objectives:** Evaluate the performance of 10-minute Targeted Geriatric Assessment (TaGA-10), in the prediction of hospitalization in a year of acute care in older adults. **Materials and Methods:** Prospective cohort study with 534 elderlies admitted to a Geriatric Day Hospital due to acute or chronic decompensated disease. At admission, the TaGA-10 was applied with data from social support, health system use, falls, medications in use, nutrition, cognition, depression, functionality, self-perceived health and gait speed. The elderly were classified into three categories of risk according to a global risk index calculated by the media of the items administered in the TaGA-10. There was a monthly telephone follow-up for one year to identify hospitalization. Regressions of Cox in hierarchical strategy evaluated an addition of TaGA-10 to a model containing demographic and multimorbidities variables improved the predictive power for hospitalization. **Discuss:** The importance of CGA in elderly patients and to be able to evaluate the domains that represent the multiplicity of problems present for them, because this information's impact of manner important in the acute problem and influence of manner direct in the clinical evolution. The results demonstrate that older patients classified as having a higher risk in TaGA-10 have a greater chance of hospitalization during the 12-month follow-up than the low-risk elderly. With this, an TaGA-10 is a usable instrument in overloaded environments that need more agility. **Results:** A total of 534 elderly with mean age (standard deviation) of 80 ( $\pm$  8) years, 63% female and 64% white were included. According to the TaGA-10, 23% of the elderly were considered low risk, 50% medium risk and 27% high risk. In one year, there was an

incidence of hospitalization of 40%, being higher in those with worse performance in the TaGA-10. The addition TaGA-10 to the model with demographic and multimorbidity data significantly improved the prediction of risk for hospitalization (Wald  $\chi^2$  = 22;  $p$  < 0.001). Participants classified as medium (hazard ratio [HR] 2.64, 95% CI 1.70-4.11) and high risk (HR 3.05, 95% CI 1.88-4.95) had an independent association with hospital admission. **Conclusion:** The results indicate evidence of the prognostic utility of TaGA-10 for the pre-treatment of hospitalization in one year when applied in the elderly in acute care attended in a GDH. The instrument was able to stratify the elderly with acute condition into distinct risk categories for hospitalization in one year. Future work studies evaluate the applicability of the TaGA-10 in the design of the care to be offered to the patients.

**Keywords:** geriatric assessment, prognosis, geriatric day hospital

55. **Paroxysmal nocturnal hemoglobinúria.**

Nayara Amanda Reencober, Letícia Pereira dos Santos, Letícia Mendonça Costa, Maria Laura Coltri, Marina Bonagurio Julio, Vanessa Romeiro.

**Introduction:** Paroxysmal nocturnal hemoglobinuria (PNH) is an acquired hematopoiesis defined by intravascular hemolysis with episodes of hemoglobinuria and potentially fatal venous thrombosis. It presents a prevalence of 1.59 cases per 100,000 people and an annual incidence of 0.13 per 100,000 people. **Description of cases:** R.A.C., female, 35 years, complaining of dyspnea on medium exertion and fatigue six months ago, in addition to petechiae and ecchymosis in the lower limbs, marked increase in menstrual flow, bicytopenia, renal function, normal hepatic function and DHL. J.F.S., male, 51 years old with history of anemia, hematochezia and hematuria two years ago, pancytopenia, DHL, negative direct COOMBS, increased ferritin. **Discussion:** Non-malignant clonal expansion of one or more hematopoietic stem cells that acquired somatic mutations in the class A (PIG-A) gene results in the blockade of glycosyl-phosphatidylinositol (GPI) synthesis responsible for anchoring molecules of such as CD55 and CD59, which have the important role of controlling the activation of the complement cascade. Thus, hemolysis on PNH results from increased susceptibility of clonal erythrocytes to complement. Often, there is association of PNH with syndromes of medullary insufficiency, such as aplastic anemia (AA) and myelodysplastic syndromes. In case 1 we have a patient whose main manifestation was medullary failure, aggravated by AA. There was no hemolytic component and the treatment of choice would be the treatment of AA, with immunosuppressive, which was tried, however, without success. The allogeneic hematopoietic stem cell transplantation (HSCT), in this case, is dependent on a compatible donor in the marrow bank. The patient had access to treatment with Eculizumab, a humanized monoclonal antibody that blocks the activation of the terminal complement at the C<sub>5</sub> level and prevents the formation of C<sub>5</sub>a and the C<sub>5</sub>-9 membrane attack complex. It is asymptomatic and with good response. In case 2, we see a patient with clinical hemolysis without evidence of medullary failure, who in less than a year had a severe thrombotic complication with bilateral PET. In this case, in which the hemolytic component is more evident, the treatment of choice becomes Eculizumab, since the TCTHa does not have a good response. However, the patient remains without specific treatment of the disease due to the difficulty in accessing the drug. **Conclusion:** PNH is a rare disease with a variable clinical course that can be confused with other pathologies. In addition, the high rate of morbidity and mortality associated with thrombosis, precise diagnosis of the disease and early initiation of treatment are crucial for better patient survival

**Keywords:** Hemoglobinuria; Intravascular hemolysis; Thrombosis, Eculizumab; Aplastic Anemia.

56. **Survey of giardiasis cases in the supported population by the laboratory of clinical analysis of mogi mirim-sp in the year of 2016.**

Nádia Mara Filomeno Soares; Gleidson Juliacci Patto; Thaís Louise Soares Patto.

The parasitosis are a huge problem to the public health therefore it is so important to know about them. Giardiasis is a disease caused

by one protozoan that affects, in large majority, children which can cause a physical and mental impairment at this age. This study had as principal objective to present data about the incidence of *Giardia lamblia* in the attended population of a particular laboratory in the city of Mogi Mirim-SP and correlate the age of the patients. It is a transversal study with patients/clients data collected who realized feces parasitological examinations in 2016. It was collected only the patients' data, without identification, from the laboratory archive. The laboratory uses the method of spontaneous sedimentation of Hoffman, Pons e Janner and receives examinations of Mogi Mirim, Engenheiro Coelho, Estiva Gerbi e Holambra - SP. After the laboratory analysis the results were released into the system where the data was collected to the analysis. The studied variables were: age, gender, health insurance and hometown. The project was approved by the Ethics Committee of the Maria Imaculada Mogi Guaçu- SP College. The present study counted with a total of 5690 feces examinations realized by the method of spontaneous sedimentation being of those found 99 positive results to Giardiasis. It can be observed that the months with the highest positive incidences were March with 20 positive cases (20,2%) followed by April, with 15 positive cases (15,2%). Children were the most parasite infected individuals, presenting a percent of 58% of the cases in the founded results of 0 to 5 years and the male sex presented larger percent of giardiasis positive cases (60,6%). Holambra city presented bigger quantity of positive cases to giardiasis (52,5%) in relation to the patient's origin and in relation to the Health Insurance type, where 59% uses the Sistema Único de Saúde (SUS). It can be affirmed with 95% trust, that it does not exist statistic difference between the medium and median of the ages among the examinations that presented positive results considering the groups formed by men and women.

**Keywords:** Giardiasis, parasitological examinations, spontaneous sedimentation.

57. **Impact of CPR and emergency situation first aid care training in knowledge of lay people**  
Paolla Rávda Alves de Macedo, Daniel Zaidan dos Santos, Thiago Rodrigues Araujo Calderan, Gustavo Pereira Fraga

**Introduction:** Lay people training on recognizing cardiopulmonary arrest situations is necessary to reduce mortality in these emergency conditions when it comes to pre-hospital assistance, by providing first aid (Cardiopulmonary Resuscitation – CRP techniques) until professional help can take control of the assistance. **Objectives:** Analyze and compare the answers of the surveys applied by UNICAMP Trauma League before and after the First Aid Care and CPR Techniques training course for lay people in 2015 and 2016. **Methods:** UNICAMP Trauma League, which consists of medical students supervised by their teachers, offered a both theoretical and practical CPR training course to lay people in 2015 and 2016, during a university event destined to high school students. By aiming to evaluate the comprehension and retention of the information provided during the 30-minute training course, the attendees answered a nine question survey before and after the course, whose answers were evaluated and compared to the hits rate according to a statistical analysis. The questions in the survey aimed to assess if the participants had the knowledge of the first measures taken in an accident site, who to contact for help in emergency situations, how to help choking victims and vomiting trauma victims. Lastly, the survey assessed if the participants could identify a respiratory arrest, and if they knew the correct CPR compressions frequency. **Results:** In 2015, there were 1570 participants, while 1370 people attended the course 2016, with an age average of 17,4 years old. To analyze 2015's answers we used chi-square test, which allowed us to identify an increase in correct answers rate in 8 of 9 questions (the questions concerned what were the first measures taken in an accident site, what should be done next, who to call in these emergency situations, the obligation to provide first aid care when witnessing a run-over accident, how to identify a cardiopulmonary arrest, what to do when in the presence of a choking victim and how were the CPR compression-breath cycles structured). In 2016, the pre and post-tests of each attendee were paired, which, by means of McNemar and Wilcoxon tests, enabled us to assess de efficacy of the training course on raising the hits rate and the average improvement of the participants after the course. There

was an increase in 7 of 9 questions with a p value of <.0001. By the year of 2016, only 10,66% of the participants had the previous conception of the correct CPR compressions frequency. After the training, this number rose to 82,48%. The average score before the training, in a scale of 0 to 10, was 5,79, while after the event it went up to 8,09 (p value <.00001), statistically proving that the training was efficient on raising the knowledge about the topics covered on the course. **Conclusion:** CPR and Emergency Situation First Aid Care Training provides lay people an efficient knowledge acquisition about this subject, therefore short courses are a useful tool to reduce mortality of emergency situations while victims wait for professional pre-hospital assistance help.

**Keywords:** first aid care training, CPR, Lay people training

58. **Association between the body mass index, parity, age and menopausal status to the results of transobturator sling surgery in the treatment of Stress Urinary Incontinence.**  
Paula da Silva Feitosa, Nicolle Henriques Barreto Colaço, Ana Carolina Marchesini de Camargo.

**Introduction:** The urinary incontinence (UI) is a high prevalent disease amongst middle aged and senile women, constituting a social stigma and causing a negative impact in the quality of life, and its treatment is often a surgical procedure. Several risk factors have already been associated to the occurrence of UI, obesity, age, menopause and parity; but little is known about the influence of these risk factors in the surgical treatment. **Objective:** this research aims to verify the association between risk factors to the occurrence of SUI with the results of surgical treatment with the transobturator sub-urethral sling. **Patients and Methods:** it was performed a retrospective analysis with 57 patients who underwent surgery carried by the Pelvic Floor Surgery Team Service of Jundiaí Medical School (FMJ). Demographics data of the sample were compiled, the body mass index (BMI) was calculated and the patients were divided according to the response to the surgical treatment. **Results:** 77,2% of the sample showed a cure or an improvement after the surgical treatment, 75,4% of the women were postmenopausal females and 73,7% denied to have been smoking recently or in former times. The average age was 61, the average number of births was 4,0 and the average BMI was 28,6Kg/m<sup>2</sup> and 50,9% of the sample were classified as pre-obese. The BMI, the menopausal status, the age, smoking and keeping the sexual activity were not associated factors to the surgical results. However the parity equal to or higher than 5 was associated to the worse post-surgical results (p=0,004). **Conclusion:** among the risk factors associated to the occurrence of SUI only the parity equal to or higher than 5 had a negative influence in the improvement rates after the transobturator sub-urethral sling surgery.

**Keywords:** Urinary incontinence, obesity, parity, menopause, sling sub-urethral

59. **Analysis of tea consumption of blackberry leaves on morphology and bone biomechanics in ovariectomized rats**  
Pedro Alberto Ferreira Cavichioli, Bruno Ferrari, Pedro Henrique Ramos de Oliveira Lima, Evelise Aline Soares

**Introduction:** The effects of the leaf of *Morus nigra* L. comes from reports of popular therapy in humans, which point to its effectiveness in treatment of signs and symptoms of menopause, and even it uses in trade as a medicine, or even advocate its use in the form of an infusion. However, there are few researches related to the benefits of using the leaf of *Morus nigra* L. **Objectives:** To evaluate the effects of black mulberry leaf tea on morphology and bone biomechanics in ovariectomized rats. **Methods and procedures:** An experimental study conducted with Wistar rats divided into four experimental groups, in the presence or absence of ovaries (n=8 animals per group), under treatment with filtered water ad libitum or black mulberry leaf tea. At the end of 60 days of treatment, the right femurs were collected and submitted to morphological and biomechanical analysis. This study was approved on advice of number 31A / 2014 CEP UNIFENAS. **Results:** Tea consumption of black mulberry leaves revealed effects on bone morphological properties and decreased bone resistance in

ovariectomized rats. **Conclusion:** This study revealed that tea consumption of *Morus Nigra* L. leaves results in a decrease on morphological and biomechanical properties of the femurs corresponding to ovariectomized rats, which reflects in the increase of risks for bone fractures. On the other hand, in rats with present ovaries, the risk was reduced when compared to absence of tea consumption. In view of these results, it is fundamental that the use of black mulberry be investigated in clinical researches, in order to prove popular belief about its potential climacteric effects. In addition, it is suggested that hormonal estrogen and serial calcium dosage should be performed in experimental studies involving bone morphology and biomechanics, as these are our limitations.

**60. Evaluation of esophagogastric anastomosis by the manual technique in a suture plan for patients with advanced recycled megaesophago and idiopathic origin submitted to esofagocardioplasty**

Priscilla Cláudia Arado Venâncio, José Luis Braga de Aquino

The choice of the best surgical treatment option for patients with achalasia relapsed after previous treatment is very controversial, ranging from conservative procedures to more complex operations. This study aims to observe more selectively, using the technique of esophagocardioplasty with partial gastrectomy, with manual suture technic in patients with idiopathic achalasia advanced degree and recurrence of symptoms after having been subjected to cardiomyotomy with fundoplication. 5 patients with advanced degree of idiopathic megaesophagus, not carriers of Chagas disease and clinical conditions being submitted to esophagocardioplasty were selected. Postoperatively, one patient had pulmonary infection with good evolution. In two patients there was a esophagogastric anastomotic fistula with good evolution. In all there was a significant improvement in swallowing, with return of normal function in four of them.

**61. Cefalic perimeter in brazilian children with down syndrome from zero to 24 months of age.**

Raísa do Val Roso, Fábio Bertapelli, Gil Guerra

**Background:** There are few studies evaluating the head circumference in children with Down syndrome (DS), being the most used a study developed with North American children. **Objective:** To develop a head circumference reference data for Brazilian children with DS from zero to 24 months of age of both sexes. **Methods:** The following data were collected from the medical records of 450 children with DS from zero to 24 months of age: gender, age (months), head circumference (cm), gestational age (<math>< 37</math> weeks), birth weight (<math>< 2,500</math> g), exclusive breastfeeding (<math>< 6</math> months) and cardiopathy (yes or no). The 3, 10, 25, 50, 75, 90 and 97 percentiles were calculated by sex and age. The LMS smoothing technique was used to design the curves. The influence of the other variables on head circumference measurement was verified by multiple regression analysis. **Results:** Only 195 (43.3%) of the medical records contained measures of head circumference, in a total of 1,106 measurements (537 in boys and 569 in girls). There were no differences in head circumference measures between the sexes. In the total group (both sexes), birth weight ( $p = 0.001$ ), gestational age ( $p = 0.001$ ) and exclusive breastfeeding ( $p = 0.042$ ) were significant ( $R^2 = 0.04$ ). **Conclusions:** The head circumference measurement is not routinely performed in the medical care of DS children up to 24 months of age, there are no differences between the sexes. Birth weight, gestational age and exclusive breastfeeding have a small influence in head circumference measurement.

**Keywords:** Down syndrome, cephalic perimeter, sex, curve

**62. Biobank of placenta in the tertiary center for women's health care: a requirement in times of zika virus and fundamental for scientific advances and translational research**

Rodolfo Rosa Japcanga, José Paulo S. Guida, Maria Laura Costa do Nascimento

The storage of placental tissue, with systematic collection, could increase the possibility of translational research in the area. One complication that has attracted attention worldwide is the epidemic by zika virus (ZIKV) and association with microcephaly and fetal malformations. Transplacental transmission mechanisms are still unknown and the collection of these placentas is a necessity, in order to collaborate with the clinical investigation and diagnosis of suspected cases and also to enable studies aimed at understanding the pathophysiology of the disease. Another priority in obstetrics, with the central role of the placenta and etiology still unclear is preeclampsia, a disease that affects up to 10% of all pregnancies, being one of the main causes of maternal morbidity and mortality in Brazil. In order to make it possible to investigate the pathophysiology of these conditions and in the future of other diseases, the creation of a placental biobank in CAISM represents an important step.

**Keywords:** Placenta, Biobank, ZIKV, Preeclampsia

**63. Evaluation of a noninvasive method for researching portal hypertension in children**

Rodrigo Francisco da Silva Souza, Gabriel Hessel, Joaquim Murray Bustorff-Silva

**Introduction:** Portal hypertension (PH) is characterized by a persistent increase in portosystemic pressure and it has, in children, extrahepatic portal vein obstruction (EHPVO) as its major cause, by several etiologies. In this condition, it occurs a considerable resistance against the blood flow to the liver, leading to various effects, with upper gastrointestinal bleeding being the most acute and dreaded complication of the condition. Currently, the evaluation of the portal system pressure can only be done by direct measurement, using the femoral or internal jugular vein catheterization, being an invasive method and restricted to some services, with low efficiency in the monitoring of treatments, due to its discomforts. Despite the limitations of the available methods and the importance of pressure measurement in the portal system for surgical planning and postoperative follow-up, no references to non-invasive methods have been found that are accurate and accessible enough to be widely used. **Objective:** To evaluate if there is a relation between the diameter of the splenic vein and the diameter of the femoral artery and vein in children without PH and if this ratio would be different from the one observed in children who has the diagnosis of PH confirmed by the presence of esophageal varices or ultrasonographic evidence. **Methods:** A cross-sectional observational study was performed using charts and ultrasound data obtained from 30 children that were attended by the Pediatric Service of the Clinical Hospital of the State University of Campinas (UNICAMP), divided into two groups (PH and control). The diameter of the splenic vein, as well as the femoral artery and vein, were measured in both groups for comparative analysis within them posteriorly. **Data analysis:** GraphPad Prism® software was used to perform simple linear regression analysis to obtain correlation coefficients among the data measured in the two groups. Statistical test of unpaired samples with a significance level of 5% was also used to verify if there was a statistically significant difference between the coefficients obtained from them. **Results:** No association was found between the diameters of the splenic and femoral vein, but with a positive linear correlation within the diameters of the splenic vein and the femoral artery in the PH group. There was also a statistically significant difference when we compared the ratio between the diameters of the splenic vein and both femoral vessels from the groups, validating the method for identifying children with and without the diagnosis of portal hypertension.

**Keywords:** Portal hypertension, Children, Ultrasound

**64. Hearing perception of the elderly in basic attention**

Rosiane Aparecida da Silva, Helenice Yemi Nakamura.

Though the middle life hope has been lifted up, the old population is alongside a social life participativa and cooperative, inclusive for the impossibility of understanding of the oral language. The quantity of old

ones that it declares to have some difficulty to hear according to the last Census in 2010 exceeds 21,6 % (9. 717. 328 individuals). One of the implications of this population increase, in this age group, will be a possible increase of the presbiacusia, which is the loss of audition associated to the aging. The old thing with hearing loss can lose informations and deal with consequences psicossociais, like the isolation. The work has as I aim to know the perception that the old ones have on his audition. The old users of the basic attention of the city of Campinas-SP answered the questions of the part that treats hearing questions contained in the Project "Saúde, Bem-Estar e Envelhecimento (SABE)". The sample counted on 30 men, 19 women and 11 men, the age average was of 72,8 % between 61 to 85 years. There were directly related to the perception of hearing with complaints of dizziness and falls. Some hearing complaints such as the need for people to repeat what they say or speak louder, the need to raise the volume of electronic devices, in addition to the reports of abandon interests and activities by difficulty hearing were also reported by the participants. 1-With the development of the project on drive it was possible to give visibility to the auditory issues in the elderly. 2. The audiologist worried about hearing from seniors can identify signs of a loss and sooner forward the individual to the network of care for hearing rehabilitation. 3. Often the elderly don't understand signs of a possible hearing loss before charges arise from disrupting everyday tasks like talking on the phone and talk in public. 4. The elderly often abandons society living situations by difficulty in communication.

**Keywords:** Aging; Hearing; Health promotion.

**65. White Substance Integrity in Children with Focal Cortical Dysplasia**

Sabrina Vechini Gouvêa, Enrico Ghizoni, Brunno Machado de Campos, Simone Appenzeller, Fernando Cendes, Ana Carolina Coan.

**Rationale:** We aimed to evaluate the integrity of white matter tracts (WMTs) in children with pharmacoresistant epilepsy secondary to focal cortical dysplasia (FCD). More specifically, we investigated alterations in tracts with complex patterns of development and maturation across lifespan. **Methods:** We analyzed diffusion tensor imaging acquired in a 3Tesla MRI of 14 patients and 29 age and sex-matched controls. Were selected 7 WMTs to cover all lobes of the brain: cortical spinal tract (CST), corpus callosum (CC), cingulum, fornix, uncinate fasciculus (UF), inferior longitudinal fasciculus (ILF) and inferior fronto-occipital fasciculus (IFOF). Images were analyzed using the software ExploreDTI to obtain average fractional anisotropy (FA), axial (AD), radial (RD) and mean (MD) diffusivities. Statistical analysis was performed with SPSS 24. **Results:** Compared with controls, patients with FCD presented increase of MD and RD in genu of CC (Two sample T-test, MD:  $p < 0.001$ ; RD:  $p = 0.03$ ) and increase of FA ( $p = 0.011$ ) and MD ( $p = 0.046$ ) in splenium of CC, a decrease of MD ( $p = 0.009$ ), AD ( $p < 0.001$ ) and RD ( $p = 0.02$ ) in CST ipsilateral to the FCD. Peripheral WMT presented an increase of MD ( $p = 0.011$ ), AD ( $p = 0.007$ ) and RD ( $p = 0.016$ ) in IFO contralateral, and a decrease of FA ( $p = 0.001$ ) and RD ( $p = 0.043$ ) in ILF ipsilateral. **Conclusion:** Children with epilepsy and FCD have a widespread pattern of abnormalities in WMTs. These differ between all the tracts analyzed. Due to their complex patterns of development and maturation, our findings suggest that abnormalities of WMTs in children with FCD can be secondary to impairment of normal neurodevelopment.

**Keywords:** Diffusion tensor imaging, Tractography, Neuroimaging

**66. Assessment of final height in girls with precocious puberty treated**

Sabrina Vieira Sanchez, Daniela Angerame Yela Gomes

**Objective:** evaluated the stature gain of girls diagnosed early central precocious puberty, after the treatment with GnRH analogue, in comparison with the predicted height calculated after the Bayley Pinneau method. **Methods:** Retrospective study with 17 girls diagnosed with central precocious puberty and treated with GnRH analogue in the last 5 years, in the University of Campinas (Unicamp). Those girls were treated for 3 years and accompanied for 4 years. The analyzed variables were final height, predicted

height in the beginning of the treatment, predicted height in the end of the treatment, predicted height after the parents height, age of the beginning of the symptoms, age in the beginning of the treatment, height in the beginning of the treatment, height in the end of the treatment, bone age, and treatment duration. For the statistical analysis, were used descriptive measures and the paired t test, with statistical significance of 5%. **Results:** The girls average age was  $7,9 \pm 1,52$  years, being that the younger age was 4 years and 6 months and the older one was 11 years. The symptomatology started on average age of  $5,84 \pm 1,38$  years. The average bone age before treatment was  $11,25 \pm 2,56$  years, and in the end of the treatment it was  $13,75 \pm 1,66$  years ( $p = 0,0015$ ). There wasn't any significant advance of the bone age ( $p = 0,7949$ ). The average height of the girls before treatment was  $1,33 \pm 0,14$ m, and after that it was  $1,46 \pm 0,09$ m ( $p < 0,0001$ ). **Conclusion:** the girls had a significant gain of height with the treatment with GnRH analogue.

**Keywords:** Early puberty, final height, target height, GnRH.

**67. Sleep Disorders and Drug-Responsive Epilepsy: the Influence of Depressive and Anxiety Symptoms**

Sara Terrim, Alvaro Pentagna, Kette Dualibi Ramos Valente

Sleep disorders and poor sleep quality have been described as a consequence of epilepsy. It is known that patients with epilepsy have poor sleep quality and circadian changes in relation to the general population. It is also known that multiple factors related to epilepsy contribute to such disorders, such as the occurrence of seizures and the use of antiepileptic drugs. However, there are few studies that systematically analyze sleep diseases and circadianism in patients with easy-to-control epilepsy using drug monotherapy, as well as the possible influence of comorbidities, such as depressive and anxiety disorders, frequent in these patients. This study aims to: (i) study the quality of sleep and circadian rhythm in patients with drug-responsive epilepsy compared to healthy controls and (ii) verify the possible influence of depressive and anxious symptoms as independent factors for sleep and circadian rhythm in these patients. This is a cross-sectional and controlled study that analyzed a group of patients with drug-responsive epilepsy in comparison with controls, regarding sleep quality (Pittsburgh Sleep Quality Index - PSQI), daytime sleepiness (Epworth Sleepiness Scale), circadian rhythm (Morningness-Eveningness Questionnaire - MEQ), anxiety indexes (State-Trait Anxiety Inventory - IDATE) and presence of depressive symptoms (Beck Depression Inventory II). Scores at all scales were analyzed and compared between groups through descriptive and inferential statistics. These data had normal distribution and were analyzed with ANOVA test for numerical variables and chi-square test for categorical variables. Statistical significance was set at 0.05. Seventy-one subjects (36 patients with drug-sensitive epilepsy and 35 controls, matched by sex and age) were included in the study. The groups did not show differences among themselves in relation to sleep quality, daytime sleepiness and circadian rhythm: PSQI ( $R^2 = 0.3487$ ;  $p = 0.762$ ); MEQ ( $R^2 = 0.1236$ ,  $p = 0.272$ ) and ESS ( $R^2 = 0.2892$ ,  $p = 0.932$ ). The higher severity of depressive symptoms was related to poorer sleep quality ( $p = 0.061$ ), but no relationship was found between depressive symptoms and daytime sleepiness ( $p = 0.242$ ) or circadian rhythm patterns ( $p = 0.716$ ). The presence and severity of anxiety symptoms were not related to sleep quality ( $p = 0.815$ ), daytime sleepiness ( $p = 0.149$ ) and circadian rhythm ( $p = 0.516$ ). Conclusions obtained here are supportive to the hypothesis that sleep disorders in patients with epilepsy are more associated with presence of comorbidities, predominantly depressive symptoms, than with epilepsy itself.

**Keywords:** Epilepsy, sleep disorders, circadian rhythm, depressive symptoms

**68. Epidemiological, clinical and evolutionary profile of toxic exposures to drugs in children and adolescents attended at the Hospital Reference Center**

Tatiana Soares de Carvalho, Emilio Carlos Elias Baracat

**Introduction:** Drug intoxications in children are common events, representing significant numbers of records in toxicological information centers. **Objective:** To describe the epidemiological profile and clinical repercussions of children and adolescents with drug

intoxication seen at a hospital referenced center. **Method:** This is a descriptive, cross-sectional and retrospective study conducted on an Intoxication Center at an University Hospital in the inner state of Sao Paulo. The data was collected from a database where the hospital stores information from charts of patients, up to 18 years old, with drug intoxications, assisted in person or by telephone during 2014. For statistical analysis, we used the SAS System for Windows (Statistical Analysis System), 9.4 university edition. The level of significance used for this study was 5%. **Results:** The pediatric population most involved with toxic exposures was infants, corresponding to 37.91% of the records. The main substance involved in the exposures was Clonazepam (6.41%). The main circumstance was accidental, reported in 55.34% of the cases. 85.71% of the cases presented a classification of mild severity. **Conclusion:** it was possible to trace the epidemiological profile of children exposed to drugs, and to describe the clinical repercussions of these events. The findings of the present study reinforce the need for a prevention public policy aiming to ameliorate this type of accident, including specific approaches to each age group.

**Keywords:** Poisoning, medicines, children.

69. **Biochemical, microbiological and clinical effects of Levonorgestrel-Releasing Intrauterine System (LNG-IUS) on vaginal and endocervical environment.**  
Coelho de Souza TC, Giraldo PC, Henrique GL, Garcia EAL, Discacciati MG, Amaral R, Machado RB, Monteiro IMU, Sanches JM.

**Background:** This study was conducted to evaluate vaginal and endocervical environment in women using Levonorgestrel-Releasing Intrauterine System (LNG-IUS). **Introduction:** LNG-IUS has been used since the early 1990s and is considered one of the most effective methods of contraception. Data regarding the impact of the system on cervicovaginal epithelium and women's susceptibility to genital infection are controversial. Cellular dysplasia, local inflammation, changes in pH and in microbiology and ectopy of the cervix are effects that need better investigation when associated with LNG-IUS. Due to the scarce literature on vaginal and endocervical microenvironment alterations after LNG-IUS insertion, this study aims to evaluate possible biochemical, microbiological and clinical changes after 2 months of LNG-IUS use. **Methods:** This study enrolled 60 women who had a LNG-IUS inserted in the Family Planning Clinic of CAISM-UNICAMP. Before insertion and after two months, women were submitted to a specular examination to evaluate: vaginal and cervical pH, microbiology and inflammation by Gram-stained bacterioscopy, cellular dysplasia by Pap-smears. Clinical aspects such as vaginal discharge, cervical mucus and ectopy of the cervix were observed by colposcopy. **Results:** An increase in cervical pH ( $p=0,02$ ) was observed, as well as a decrease in vaginal discharge ( $p=0,01$ ), an increase in vaginal cytotoxicity ( $p=0,04$ ) and an increase in the quantity of neutrophils in the endocervix ( $p<0,0001$ ). Non-statistically significant changes were observed regarding vaginal pH, amount of neutrophils in the vagina, aspect of vaginal discharge, predominance of vaginal squamous cells, presence of bacterial vaginosis, type of vaginal flora, aspect of cervical mucus and cervical ectopy. **Conclusion:** It can be concluded that LNG-IUS promotes reactional changes in vaginal and endocervical microenvironment such as: increase in cervical pH, decrease in vaginal discharge, increase in vaginal cytotoxicity and an endocervical inflammatory response. Inferences about the susceptibility to upper genital infections still have to be better evaluated.

**Keywords:** LNG-IUS, intrauterine contraceptive device, ectopy of the cervix, cervical pH, cervical mucus, vaginal pH, vaginal discharge.

70. **Evaluation of the quality of life, anxiety and depression of asthmatic patients identified by the phenotypic profile through the molecular biology of the immune system**  
Tiago Ferreira Costa, Ana Luisa Godoy Fernandes

Asthma is an inflammatory disease characterized by the presence of clinical symptoms that include reversibility of airflow limitation, airway hyperresponsiveness and the presence of inflammatory cells,

these characteristics leading to recurrent bronchoconstriction in patients suffering from this disease. The treatment is based on medical and non-medicated management, with objective to control the disease. Each phenotype responds to treatment in a different way characterizing the complexity of asthma with respect to interactions between genes and the environment. Phenotyping of asthma is important for the preparation of studies on its pathophysiology, prediction of prognosis, selection of patients in clinical trials and choices of personalized therapies. Recent studies have identified new molecular markers in plasma and sputum, as well as demonstrating the different responses to targeted and conventional therapies. Thus, the objectives of this study are to characterize the inflammatory profile of adult asthma patients accompanied at the asthma clinic of the Discipline of Pulmonology of Hospital São Paulo, through phenotyping with clinical questionnaires, control and quality of life evaluation, spirometric measurements and tests in vivo and in vitro related to the immunobiological and functional aspects of the patients. Specifically, these partial analyses will study the relationship between the inflammatory profile and variables of quality of life, anxiety and depression. Therefore, 100 patients will answer QoL and HAD questionnaires to compare with the inflammatory profile data. Our hypothesis is that different phenotypes cause different impacts on quality of life and psycho-social behavior.

**Keywords:** asthma; bronchodilator; inhaled corticoid; inflammation; quality of life

71. **Comparative study of the use of right and left kidney in living donor kidney transplantation analysis of 320 cases**  
Tiago Genzini de Miranda, Raphael Federicci Haddad, Alessandro Silvestre, Gabriela Tomaz Martinho, Nadia Mie Taira, Marcelo Perosa

**Introduction:** More than 95% of living donor kidney transplantations (LDKT) performed worldwide, the donor's left kidney (LK) is preferred because of technical barriers and the smaller extension of the right kidney (RK) vein. **Objective:** The intention was to compare the use of RK and LK in LDKT. **Methods:** In the present study, we analyzed our experience with the laterality of kidneys used for LDKT in the period between 2012 to 2017. Demographic variables and perioperative parameters of the RK and LK groups were compared, with a level of statistical significance of 0.05. Preoperative anatomical or renal parenchyma data were studied to elucidate the cause of RK use. **Results:** There were 320 LDKT in this period, 262 out of which using LK and 58 (18.1%) of RK. The main reasons for choosing RK were: multiple arteries in LK in 45 (77.5%) and lower volume or minor pathological findings in RK such as lithiasis, aneurysm, pelvic dilation in 8 (13.8%). Distribution as to gender, age, BMI > 30, use of unrelated donor, laparoscopic or opened nephrectomy, and kidney with more than 1 artery was similar between RK and LK groups. The distribution of gender, age, BMI > 30, Diabetes as baseline disease, preemptive Tx, the use of Double J and need of post-TX dialysis was also similar between recipients of the 2 groups. One-year patient survival was 98.8% x 98.3% ( $p=0.71$ ) in the LK and RK groups, respectively and 1-year graft survival was 96.5% vs. 94.8% ( $p=0.52$ ). The incidence of intraoperative donor complications in the LK and RK groups was respectively 3.0% x 5.1% ( $p=0.42$ ) and 2.3% x 6.9% ( $p=0.06$ ) in recipients; the rate of donor postoperative complications for LK and RK groups was 1.5% x 1.7% ( $p=0.91$ ) and in recipients, 14.5% x 12.0% ( $p=0.62$ ), respectively. **Discussion:** Most surgeons do not perform the right nephrectomy because of the shorter length of renal vein and the higher incidence of complications. **Conclusion:** Our team has used RK in the LDKT more frequently than the literature and achieved the same results as those obtained with LK.

**Keywords:** Kidney transplantation; Living donor; Laterality; Outcomes.

72. **Prevalence of STI / AIDS in prisoners in Campinas and associated factors.**  
Vanessa Cristina Fanger, Celene Aparecida Ferrari Audi

Prisons are a privileged place for contact between millions of people, most of the time out of the common health care system based at the community. For those individuals, mostly young people, prison can

be an opportunity for early diagnosis, health education, disease management, counseling and access to treatment which they couldn't be receiving before. However, most prisoners return to their communities with physical and psychiatric morbidities without treatment and sometimes even worse. **Goal:** Evaluate the prevalence of HIV/AIDS on the interns and the associated factors in a female prison at São Paulo's countryside. **Method:** This research is a descriptive analysis of the prevalence of HIV/AIDS at the interns. A transversal research done between the period of August 2012 and July 2013, as a part of bigger project, named "Full Time Attention to the Health of Imprisoned Women in a Prison at São Paulo's Countryside". This research involves 1.013 interns, which were at the institution and accepted to take be of it at the time the research was run. Descriptive analysis was run showing absolute and the percentage frequencies for the set of variables in order to check the associated factors linked to STI/AIDS, logic regression was used. **Results:** Average age was of 30,8 (standard deviation = 9,3) years. Most women were between 20 and 39 years old (77,3%); single (65,0%), non-white (51,4%), catholic (42,6%), had less than 3 years of schooling (61,4%). Been a victim of physical violence before getting 15 has a 65% higher chance of showing an STI/HIV (OR 1,65% IC 95% 1,24-2,19) as referring urinary infection (OR 1,64 IC 1,25-2,15) non-white skin color (OR 1,38 IC 95%: 1,06-1,78), having low schooling, which means, having less than 3 years studying (OR 1,36 IC 95% 1,04-1,77). **Conclusion:** Between the gender demands they deserve attention to infections from the HIV virus and all other ISTs that are prevalent injuries at the imprisoned population, damaging the quality of life and comorbidities. The main factors related to HIV and others STI infections are social vulnerability, low schooling, being black and violence. Health care measures as health promotion, early diagnosis and disease prevention are needed and capable to be applied at imprisonment situation and easily accessed by the population. The health professional that act at those institutions must be trained to develop and prioritize those actions inside a prison.

**Keywords:** Women's penitentiary, STD, AIDS.

#### 73. Microvascular thrombosis in sepsis and septic shock: an autopsy study

Vanessa M Tani\*, Guilherme Rossi Assis de Mendonça, Thamiere Branco da Silva, Fabio Rogerio, Erich V De Paula.

Sepsis represents one of the greatest challenges to medical practice, and different target-specific therapies have already failed to control this condition. One of the paradigms classically associated with the pathophysiology of sepsis is that the activation of coagulation observed in these patients would be a mechanism of tissue injury, through the formation of microthrombi and, therefore, tissue ischemia. Based on this paradigm, large phase 3 studies were performed using anticoagulants in patients with sepsis, with no success.

In order to evaluate the prevalence of microthrombosis in patients whose cause of death was septic shock, we performed an autopsy study with 51 patients with septic shock and 10 controls whose death was due to neither infectious or neoplastic conditions in

search of microthrombosis in the kidneys and lungs. Reports were analyzed individually by one of the investigators, which compiled all autopsy findings in lungs and kidneys. Of note, all reports included a specific description of these organs. The autopsy reports were reviewed, and the frequency of microthrombosis was recorded. Clinical and demographic data were recorded. A sample of positive results was confirmed by reviewing the paraffin blocks from the HC-Unicamp archive. Microvascular thrombosis were observed in only 3 patients, with no association with age or duration of sepsis. In conclusion, microvascular thrombi in the kidneys and lungs were not a prevalent finding in patients who died of sepsis or septic shock in our retrospective study. Our findings add to other evidence suggesting that the concept that activation of coagulation in sepsis results in the formation of microthrombi, leading to ischemia and tissue injury should be reviewed.

**Keywords:** sepsis, septic shock, microvascular thrombosis.

#### 74. Analysis of the contribution of pelvic ultrasonography to the investigation of infants with disorders of sex differentiation Victória Santana Rafael, Andréa Trevas Maciel-Guerra

**Introduction:** In the approach of a patient with some type of disorder of sex development (DSD), it is important to reach a precise etiologic diagnosis as soon as possible, in order to minimize future psychosocial damage. Ultrasonography (US) is one of the tools used in the investigation and one of its objectives is the detection of the presence or absence of Müller's derivatives. A recent study revealed low sensitivity and specificity of the US in the detection of uterus in patients with DSD. If in fact this imaging test is of low reliability, its performance may delay the referral for investigation or even lead to inadequate registration in the male or female genders. **Objectives:** The aim of this study was to verify the reliability of the results of pelvic ultrasonography of infants investigated by genital ambiguity. **Materials and methods:** A retrospective study was carried out with an analysis of the medical records of infants with genital ambiguity treated at the outpatient clinic of the Multidisciplinary Sex Determination and Differentiation Study Group (GIEDDS – Unicamp) from January 2006 to December 2015. **Results and discussion:** We selected 32 patients who had performed pelvic US before the initial care; 13 of these patients were subsequently submitted to intraoperative cystoscopy or laparoscopy in the Hospital das Clínicas of Unicamp (n = 7), or were submitted to a new ultrasonography (n = 2), or had a final diagnosis that could safely infer the presence or absence of uterus (n = 4). Of the 11 cases in which the initial US had detected uterus, there was one false positive; the two cases in which it had not been detected were false negatives. The sensitivity was estimated at 83% and the specificity was zero. **Conclusions:** Despite the small sample size due to the rarity of these conditions and the fact that only a few of the selected patients had to undergo the standard reference test, it is concluded that the results of pelvic US in infants should be viewed with caution during the investigation of patients with DSD and the definition of their gender of rearing.

**Keywords:** genital ambiguity; ultrasonography; sexual differentiation.