Abstracts of the [Conference Title]

Poster Session

CASE REPORTS AND EXPERIENCE REPORTS

01. **EVALUATION OF PHYTOCHEMICAL PROFILE AND MUTAGENIC POTENCIAL OF ETHANOLIC EXTRACT THE LEAVES OF *Poincianella bracteosa* (Tul.) L.P. Queiroz IN MICE**

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INTRODUCTION: *Poincianella bracteosa* (Tul.) L.P. Queiroz. (Fabaceae), known as catingueira, is native to the Brazilian Caatinga and its leaves are used to treat diarrhea, hepatitis and anemia. However, there are still no reports on the mutagenic action of leaves and phytochemical studies are incipient. **OBJECTIVES**: To analyze the phytochemical profile and to evaluate the mutagenic potential of the ethanolic extract of leaves of *P. bracteosa* (EELPb) by means of the micronucleus test (MN) in peripheral blood of mice. **METHODS**: Leaves of *P. bracteosa* were collected in Teresina-PI and male Swiss mice (*Mus musculus*) were provided by Universidade Estadual do Piauí (UESPI). The study was approved by the Committee on Ethics in the Use of Animals (CEUA-UESPI 5117/16) with five groups (five animals per group). Leaves of P. bracteosa were dried (45°C) for five days, crushed, subjected to extraction in ethylic alcohol and rotaevaporated to obtain the ethanolic extract. The phytochemical profile was performed by the colorimetric test with different reagents to identify the main primary and/or secondary metabolites of the EELPb. A solution of 1% dimethylsulfoxide (DMSO and distilled water) by gavage and cyclophosphamide (100 mg/kg) intraperitoneally were administered to the mice as negative (NC) and positive (PC) controls, respectively. Three doses of EELPb (20, 40 and 80 mg/kg) were administered to the mice by gavage. After 24, 48 and 72 h, tail blood from each animal was collected for the preparation of two slides per animal. The slides were dried at room temperature, fixed in methanol (5 min), stained with Giemsa (15 min) and washed with distilled water. The presence of MN in each animal was determined by the count of 1000 normochromatic erythrocytes under an optical microscope (1000 x). Data were analyzed by Kruskal-Wallis non-parametric test and Student-Newman-Keuls a *posteriori* test ($p < 0.05$) in the BioEstat 5.3 program. **RESULTS**: Only saponins were identified and at all times and doses of the EELPb, the presence of MN in the blood cells of the mice was not significant when compared to the NC. **CONCLUSION**: The results of the present study indicate that, possibly, the saponins of the EELPb did not result in the mutagenic action (MN) at the concentrations tested. However, further studies are needed to evaluate the mode of action of saponins in DNA.

20. **The Role of Nursing in Management of Tension Pneumothorax at Kirkuk Teaching Hospital**

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BACKGROUND: Tension Pneumothorax (TP) is one of the main causes of avoidable mortality in Kirkuk, Iraq. A city with a high rate of traffic injuries and the particular difficulties of a terrain damaged by violence. Where nurses serve as the first vital line of defense during the "Golden Minutes" of stabilization, but the best life-saving measures are frequently hampered by systemic hurdles.

METHODS: A descriptive, quantitative cross-sectional census (N = 45) was conducted among the nursing workforce of the Emergency Unit. Procedural competency was measured using a validated 20-item instrument based on the ATLS 10th Edition guidelines. Data were analyzed using SPSS v.26.

RESULTS: We identified an energetic young workforce (mostly aged between 28–32) with a significant deficiency in BSN-prepared nurses (13.3%) six out of 45 nurses, and a 77.7% lack of specialized trauma training. A moderate level of practice was indicated by an overall grand mean score of 1.61. Notably, 55.5% of the staff had less than one month of experience in an emergency department. We identified a critical gap in training that we believe is dangerous for the unit, specifically a dangerous lack of awareness regarding the hazards of Bag-Valve-Mask (BVM) use in TP patients. And staffing ratios averaged 1:4, significantly exceeding international 1:1 safety benchmark for critical trauma. These deficits are exacerbated by a rigid physician-led hierarchy that suppresses nursing autonomy.

CONCLUSION: To fix the "Knowledge-Practice Gap" and lower preventable mortality in regional trauma centers like Kirkuk Teaching Hospital, we advocate for policy changes to support role differentiation for BSN nurses, make a mandatory systematic training, and start using sample standardized checklists in every trauma room.

Key Words: Pneumothorax, Emergency Nursing, Iraq.

Table. Frequency and mean scores of nursing practices in the management of tension pneumothorax at Kirkuk Teaching Hospital (N = 45).

Items	Always		Sometimes		Never		Mean score
	f	%	*f*	%	*f*	%	
I immediately check that the airway is clear of obstructions (blood or secretions) during initial assessment	29	64.4	10	22.2	6	13.3	1.48
I prepare suctioning equipment immediately if airway compromise is suspected	28	62.2	10	22.2	7	15.5	1.53
I administer high-flow oxygen (100% non-rebreather mask) immediately upon suspicion of Tension Pneumothorax	28	62.2	12	26.6	5	11.1	1.48
I use a Bag-Valve-Mask (BVM) with extreme caution, knowing that positive pressure can worsen the tension	15	33.3	20	44.4	10	22.2	1.88
I monitor the patient's level of consciousness to anticipate the need for intubation due to hypoxia	21	46.6	17	37.7	7	15.5	1.0
I monitor for increased Peak Inspiratory Pressure (PIP) in ventilated patients as an early sign of Tension Pneumothorax	19	42.2	20	44.4	6	13.3	1.71
inform the doctor immediately if there is a lack of clinical improvement after needle decompression	26	57.7	12	26.6	8	17.7	1.64
I assist the physician in identifying the 5th Intercostal Space (Anterior Axillary Line) for decompression	16	35.5	23	51.1	6	13.3	1.77
I ensure that the insertion is performed superior to the rib to avoid injury to the neurovascular bundle	17	37.7	19	42.2	9	20.0	1.82
I proactively prepare all chest tube insertion materials immediately after needle decompression is performed	26	57.7	12	26.6	7	15.5	1.57
I ensure a longer needle (7-8 cm) is available for obese patients to increase the chance of successful decompression	17	37.7	19	42.2	9	20	1.82
I monitor for immediate improvement in blood pressure and heart rate after the air pressure is relieved	24	53.3	15	33.3	6	13.3	1.6
I monitor the tidal fluctuation (oscillation) of the water level to ensure the chest tube is functioning properly	19	42.2	20	44.4	6	13.3	1.71
I ensure that two padded clamps and a bottle of sterile water are always ready at the bedside for emergency use	25	55.5	12	26.6	8	17.7	1.62
I inspect the sutures and occlusive dressings regularly to prevent air leakage around the tube site	24	53.3	14	31.1	7	15.5	1.62
I ensure the drainage system is managed without "Milking" or "Stripping" the tubes, per recent guidelines	20	44.4	16	35.5	9	20	1.75
I ensure that the chest tube is free from external pressure, kinking, or flexion	26	57.7	12	26.6	7	15.5	1.57
I maintain the patient in a semi-Fowler's position (head elevated) to aid air drainage and lung expansion	22	48.8	15	33.3	8	17.7	1.68
I educate the patient and family about the signs of pneumothorax recurrence before hospital discharge	21	46.6	18	40	6	13.3	1.66
I document all nursing assessments, vital signs, and the patient's response to the decompression procedure	33	73.3	8	17.7	4	8.8	1.35

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