AWARD FOR BEST CASE REPORT PRESENTATION AT THE WCMSR BASED ON JUDGE SCORES, 1st PLACE:

26. **A RARE CASE OF CANDIDA PARAPSILOSIS EMPYEMA THORACIS**

Arielle E. Solomon[1].

[1] First-year Medical Student. Louisiana State University Health Sciences Center, New Orleans, USA

https://www.youtube.com/watch?v=vlsNiqV1-28&t=26978s

BACKGROUND: This case report describes a patient with pleural empyema that grew Candida parapsilosis, an unexpected finding, especially in an immunocompetent individual with no prior surgery or trauma to the area. Candida empyema is a rare infection associated with mortality rates as high as 61.9%. **METHODS**: A 63-year-old male with a past medical history of pulmonary emboli was in his usual state of health when he developed worsening left-sided chest pain over 3 days, with associated shortness of breath and productive cough that was blood-tinged on occasion. Extensive imaging and a diagnostic thoracentesis confirmed an expanding left-sided parapneumonic effusion that was drained and found to grow Streptococcus anginosis and Candida parapsilosis. During his hospitalization, the patient also demonstrated increased alkaline phosphatase levels without abdominal pain or elevation in AST, ALT, or bilirubin, prompting further diagnostic imaging. Ultrasound of the abdomen showed a large, heterogeneous liver; follow-up CT scan, which was done without contrast due to worsening acute kidney injury, did not rule out liver masses. The patient's clinical condition began to significantly improve following drainage of the pleural effusion and removal of the chest tube. After his kidney function returned to baseline, the patient was discharged with the remainder of his 18-day courses of amoxicillin-clavulanate and fluconazole, with a contrasted CT of the abdomen scheduled in the outpatient setting. **CONCLUSION**: This is an unusual case of fungal empyema, a severe manifestation of invasive candidiasis with a poor prognosis. Given the paucity of studies on Candida empyema, there is no definitive treatment for this deadly infection. A 2021 retrospective study of 81 patients with Candida empyema at two academic centers posited that optimal management included pleural drainage and fluconazole treatment. The same study found that 20% of Candida empyema originated from intra-abdominal sources. As for the patient in this case report, there remains the possibility that upcoming outpatient contrasted CT imaging of the abdomen will reveal the source of his infection.

Key words: Thoracic empyema; Infectious Disease; Medicine (Source: MeSH-NLM).