A rare case of tuberculous pyopneumothorax

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A divorced 37-year-old male from an urban enviroment with a history of known childhood tuberculosis (TB) complained of having the following symptoms over the past 3 months: anorexia, fatigue, exertional dyspnea, left-sided chest pain, excess sweating during the night, a persistent mild elevation of body temperature above normal, productive cough, and a reduction of total body mass by 9 kilograms. Upon admission, physical examination revealed tachycardia and an oxygen saturation of 81% while breathing room air. Lung auscultation was abnormal. Routine tests conducted revealed the following: an oropharyngeal swab test for SARS-CoV-2 by RT-PCR assay was negative; hemoglobin — 10.6 g/dL; hematocrit — 38.9%; red blood cell count — 5.98 10^{12}/L; white blood cell count — 18.78 10^{9}/L; neutrophils — 5.12 10^{9}/L; lymphocytes — 42%; HIV test — negative. Chest X-ray revealed an air fluid level in the left hemithorax and a minimum deviation of the mediastinum to the right side (Figure 1). Chest CT showed a left hydropneumothorax. Ultrasound-guided thoracentesis was implemented and 2 liters of pleural effusion were removed (Figure 2). Both sputum and pleural fluid samples were analyzed, and the results confirmed an exudative lymphocytic effusion with an ADA level of 58 U/L [1]. Ziehl-Neelsen staining revealed acid-fast bacilli, and culture of pleural pus on Lowenstein-Jensen medium displayed colonies that were non-pigmented, dry, rough, raised, and irregular with a wrinkled surface. The patient received a broad-spectrum antibiotic, an oral corticosteroid, and anti-TB treatment (regimen I) according to Romanian Guidelines. On 6-month follow-up evaluation, the patient had a good clinical response and no sequelae of pleural thickening. The combination of pneumothorax and pulmonary emphysema is a rather unusual occurrence [2], but certain underlying circumstances like TB may boost the risk of pleural diseases [3, 4]. If treatment fails, preoperative evaluation can be unavoidable [5].

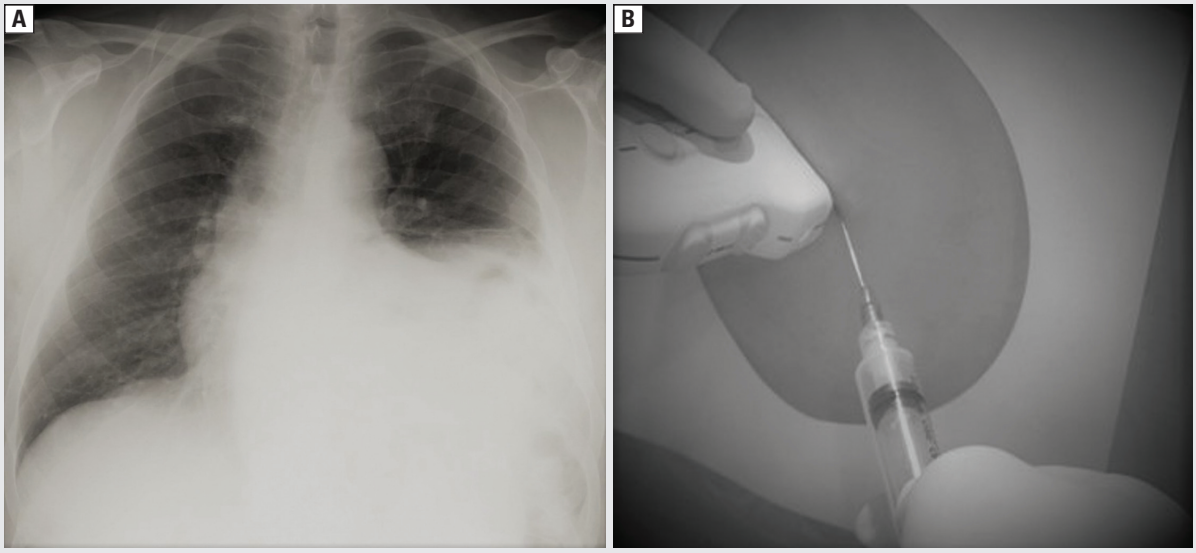

Figure 1. A. Chest X-ray; **B.** Ultrasound-guided thoracentesis

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Conflict of interest: None declared.

DOI: 10.5603/ARM.a2021.0100 | Received: 11.04.2021 | Copyright © 2021 PTChP | ISSN 2451–4934 | e-ISSN 2543–6031

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