



# 8/21/20 Morning Report with @CPSolvers



Case Presenter: Husam Alzayer (@husamjz) Case Discussants: Reza Manesh (@DxRxEdu) and Rabih Geha (@rabihmgeha)

<p><b>CC:</b> Abnormal chest x-ray (hydropneumothorax)</p> <p><b>HPI:</b> 30y F nurse, had normal health screen 2 months prior (normal X-ray).</p> <p>No constitutional symptoms, no respiratory symptoms, no trauma, no SOB, no chest pain.</p> <p>CXR showing hydropneumothorax on routine health screening</p>	<p><b>Vitals:</b> T: 37 HR: 88 BP: 111/74 RR: 16 SpO<sub>2</sub>: 99</p> <p><b>Exam:</b></p> <p><b>Gen:</b> Well, no distress</p> <p><b>HEENT:</b> Normal</p> <p><b>CV:</b> Normal</p> <p><b>Pulm:</b> Absent bs in right apex and base</p> <p><b>Abd:</b> Soft non tender</p> <p><b>Neuro:</b> Normal</p> <p><b>Extremities/Skin:</b> No edema, no lymphadenopathy</p>	<p><b>Problem Representation:</b></p> <p>30 yo F presenting without any symptoms, had CXR showing R hydropneumothorax on routine health screening with a positive PPD. Final Dx: pleural endometriosis</p>	
<p><b>PMH:</b> None</p> <p><b>Meds:</b> None</p>	<p><b>Fam Hx:</b> Husband</p> <p><b>Soc Hx:</b> From Africa</p> <p><b>Health-Related Behaviors:</b> No smoker, no drugs, Vaccinated with BCG (scar)</p> <p><b>Allergies:</b> none</p>	<p><b>Notable Labs &amp; Imaging:</b></p> <p><b>Hematology:</b> WBC:5.2 Neut 3.2 Lymph 1.6 Hgb: 11.2 MCV 74.3 Plt: 306</p> <p><b>Chemistry:</b> Na:142 K: 4.2 Cl:110 CO2: 25 Cr: 67 mmol Ca:Normal CRP 4.8 Urea: 4.8 D-Dimer: 126 AST:13 GGT: 27 Alk-P: T. Bili: less than 3 Albumin: HIV: negative, Hepatitis exam: negative, PPD: 10 mm after 48 h</p> <p>AFB smear (sputum): negative x3</p> <p>Pleural tap: bloody fluid, exudative by Light's criteria, PCR negative for tuberculosis, Ph 7.4</p> <p><b>Imaging:</b> CT chest: Large hydropneumothorax, 20% of right hemithorax, unilocular, pleural tags and nodule</p> <p>Biopsy: Benign endometrial glands</p> <p>Final Dx: Pleural endometriosis</p> <p>Course: Treated with OCP. She had recurrent pneumothorax and Toracocentesis</p>	<p><b>Teaching Points (Anna):</b></p> <ul style="list-style-type: none"> <li>● <b>Pneumothorax</b> <ul style="list-style-type: none"> <li>○ Trauma vs non-trauma related</li> <li>○ Non-trauma etiologies: Primary (risk factors: tall, thin, male, smoker) vs secondary</li> <li>○ Secondary causes: usually pulmonary pathology (obstructive or, cystic lung dz, ILD, infection, connective tissue dz) &gt;&gt; endometriosis (catamenial PTX), GI fistula</li> </ul> </li> <li>● <b>Hydropneumothorax</b> <ul style="list-style-type: none"> <li>○ Acute: trauma, thoracentesis</li> <li>○ Chronic: fistulization process (broncho-pleural, GI-pleural), necrotizing infection</li> </ul> </li> <li>● <b>Microcytic Anemia:</b> TAILS (thalassemia, ACD, IDA, lead, sideroblastic)</li> <li>● <b>Diagnostic Approach to TB (@TxID_Edu)</b> <ul style="list-style-type: none"> <li>○ Latent (dx: PPD, IGRA)</li> <li>○ Active (dx: AFB testing, MTB PCR, rarely using empiric RIPE treatment for dx)</li> </ul> </li> <li>● <b>Pleural Effusion</b> <ul style="list-style-type: none"> <li>○ Gross appearance: bloody (malignancy, TB, PE, RA), pus (bacterial infx), milky (chylous effusion)</li> <li>○ Light's criteria to determine if exudative (any 1 positive) or transudative: pleural:serum protein ratio &gt; 0.5, LDH ratio &gt; 0.6, LDH &gt; 2/3 UNL</li> <li>○ Exudative process: use inflammation mnemonic (IMADE) <ul style="list-style-type: none"> <li>■ <u>Primary:</u> Infection: Bacterial, mycobacterial (normal/high pH, normal glucose, Fungal, Parasites); Autoimmune: FMF, Still's Disease, SLE; Malignancy</li> <li>■ <u>Secondary:</u> gynecologic pathology (Meigs' syndrome, endometriosis) often R sided effusion, GI pathology (pancreatitis, esophageal rupture) often with L sided effusion</li> </ul> </li> </ul> </li> <li>● <b>Serosal Infections</b> <ul style="list-style-type: none"> <li>○ Granulomatous infx (TB, fungal)</li> <li>○ Pyogenic infections (Staph, bad Strep species)</li> <li>○ Vascular-leak-mediated (eg. Dengue)</li> </ul> </li> </ul>