SARCOIDOSIS AND TUBERCULOSIS - A DIAGNOSTIC AND MANAGEMENT CHALLENGE

Noureen Ali

Scientific adviser: Diana Calaras

Pneumology and Allergology Discipline, *Nicolae Testemițanu* University

Background. Because the clinical and histological aspects of sarcoidosis and tuberculosis overlap, diagnosing these two diseases can be extremely difficult. Their differentiation is complicated by the fact that both diseases present as granulomatous disorders that frequently affect the lungs and occasionally other organs. **Objective.** Reviewing and analyzing the diagnostic difficulties related to sarcoidosis and tuberculosis with an emphasis on clinical presentation, histology, biomarkers, and molecular diagnostics is the study's main goal. **Material and methods**: Bibliographic sources were used to synthesize research published between 2020 and 2023 in order to create the proposed aim. Histopathological examination, molecular testing (PCR for mycobacterial DNA), and serum biomarkers (IL-2R, ACE, KL-6, leptin, and ICAM-1) were all given special consideration. **Results.** Caseating granulomas are diagnostic of tuberculosis, and non-caseating granulomas are indicative of sarcoidosis, according to the review, which found significant overlap in the clinical and radiological characteristics of both disorders. Mycobacterial DNA was found in varying amounts in sarcoidosis patients according to molecular testing. Although the combination of leptin and ICAM-1 showed promise in differentiating, serum indicators lacked enough specificity. **Conclusion.** Significant difficulties arise from the diagnostic overlap between TB and sarcoidosis. A thorough strategy combining clinical, histological, and cutting-edge diagnostic methods is necessary for a correct diagnosis, even though molecular testing and novel biomarker combinations help to differentiate cases. **Keywords**: Sarcoidosis, Tuberculosis, Granulomatous disorder, Serum biomarkers, Caseating granuloma, ICAM-1

PULMONARY INVOLVEMENT IN ANKYLOSING SPONDYLITIS

Sabil Rani Abin Shajahan Vilayilazhikathu Abdulmajeed

Scientific adviser: Nelea Drăguță

Discipline of Clinical Syntheses *Nicolae Testemițanu* University

Background. Ankylosing spondylitis (AS) is chronic inflammatory disease, mostly affecting the axial skeleton and peripheral joints. Extra-articular manifestations: involvement of the eyes, lungs, heart, and kidneys are noted. Respiratory problems have been seen in up to 30% of AS patients. **Objective of the study.** To determine the impact of pulmonary involvement in AS. **Material and methods.** Through the PubMed, NCBI, NIH databases Rheum and Science Direct 50 publications were selected. **Result**. Pneumopathy in AS begins in the early stages of the disease and worsens over time. Clinical picture consists of progressive dyspnea, cough, sometimes hemoptysis sputum, marked fatigability. The most frequent pleuropulmonary symptoms are upper lobe fibrosis, mycetoma formation, and pleural thickening. The development of pulmonary apical fibrosis takes around 20 years, and advances gradually. Early pulmonary apical fibrocystic illness can be asymmetrical, but most instances have bilateral apical fibrobullous lesions. Many of cases worsen over time, resulting in nodule coalescence, cyst and cavity formation, fibrosis, and bronchiectasis. High-resolution computed tomography (HRCT) of the lungs shows that 40–90% of patients have a variety of pleuro-parenchymal symptoms, including ground glass attenuation (11.2%), bronchiectasis (10,8%), emphysema (18%), upper lobe fibrosis (7%), and unspecified interstitial abnormalities (33%). The higher lobe cysts and cavities, secondary fungal and mycobacterial infections, *Aspergillus fumigatus* was isolated. Fusion of the costovertebral joints, ankylosis of the thoracic spine/anterior chest wall involvement result in a restricted ventilatory impairment. **Conclusions.** Pulmonary parenchymal disease is typically asymptomatic and progressive in AS. Patients need regularly examinations even if their complaints have subsided. **Keywords**: Ankylosing spondylitis, lung involvement.