3. DIAGNOSIS AND TREATMENT: INSIGHTS ON A CLINICAL CASE OF VISCERAL SARCOIDOSIS

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Introduction. Sarcoidosis is a systemic disease involving formation of granulomas that can affect the lungs, skin or lymph nodes, and less commonly the eyes, heart, liver and brain, though any organ can be affected. The illness`s etiology is unclear and 50% of the patients are asymptomatic. Its annual incidence is 1-15 per 100.000 depending on the region. Although sarcoidosis in most cases has a benign evolution, the important part of the disease is represented by the fact that sometimes it can present negative evolution with the appearance of multiple organ failure and death.

Case statement. A 55 years old North African female patient showed up for investigation at the end of September 2023 for progressive deterioration of general state. She was complaining of asthenia, weight loss (>10 kg in 3 months), dyspnea during effort, intense headache and visual disturbance with sensitivity to light and painful eye . Further clinical examinations reveal painful red eye and mucocutaneous pallor .The initial examination tried to exclude as the cause of the current state both the antecedents of hypertension and iatrogenic hypothyroidism after thyroidectomy, the patient being known to have these disorders. The results show well-controlled blood pressure and effective hormone replacement with levothyroxine 125 mcg. intense and purple thickening of the abdominal scar from her C-section. The biological assessment found an important inflammatory syndrome with increased erythrocyte sedimentation rate at 100 mm/h, hyper alpha1-, beta2- and gamma-globulinemia. In addition to hypercalcemia at 144mg/l, she presented normal calciuria 105 mg/l, low parathyroid hormone < 0.4 pg/ml , high alkaline phosphatase 584 IU/L and high gamma-GT level 106 IU/L, normal blood count. Disturbed renal function with minimal renal insufficiency, urea 0.54 g/l, Creatinine 11.49 mg/l (normal range : 4.7-11 mg/l) (GFR/MDRD 49 ml/min) . There was no intradermal reaction to tuberculin. The thoraco-abdominal-pelvic CT scan shows a bilateral diffuse interstitial lung disease with pulmonary fibrosis, predominantly in the hilar and peribronchial areas associated with multiple hilar lymphadenopathies and heterogeneous micro- and macrocalcifications in the mediastinal tissue. Also, an important splenomegaly was discovered with pseudo-nodular rearrangement of the liver and abdominopelvic lymphadenopathies and calcified mesenteric nodules (the adenophaties were of eggshell aspect the most voluminous was : lower right paratracheal 17x26 mm, subcranial 21x26 mm, subaortic (aortopulmonary window) 19x21 mm and 16x27 mm). The cardiac ultrasound revealed cardiomegaly, left ventricular hypertrophy but preserved ejection fraction and no filling anomalies. The ECG showed left bundle branch block. The ophthalmologic results specify ocular hypertonia in the right eye at 34 mmHg, right pseudophakia and left eye cataract. Based on the clinical and paraclinical results the diagnosis of sarcoidosis was made with the following visceral involvement: Pulmonary lesions (stage III), cutaneous lesions (thickening of the abdominal scar). Splenomegaly. Ocular hypertonia. Pseudonodular liver. Multiple cervical, thoracic, abdominal and pelvic lymphadenopathies. Left ventricular hypertrophy and conduction disorders. The patient was put on corticosteroid therapy at a rate of 60 mg of prednisolone (treatment started on 11/11/2023). After 4 weeks of treatment the patient presented favorable clinical and biological evolution: improvement of the general condition, normalized ESR, improvement of the renal function, normal serum calcium level of 88 mg/l. A radiological evaluation will be done after 6 months of treatment.

Discussions. The diagnosis of sarcoidosis in this case was made following different criteria as the inflammatory syndrome, the hypercalcemia and the tuberculin/anergy skin test in addition to the CT scan (pulmonary involvement of stage 3) that confirmed the diagnosis and excluded the other probabilities of pathologies as tuberculosis (due to non-caseating granulomatous inflammation) or lymphoma (due to the favorable response to corticoids).

Conclusion. Sarcoidosis still poses diagnostic and therapeutic challenges because the disease often produces few signs and symptoms in its early stages. When symptoms do occur, they may mimic those of other disorders. Further research may be crucial to understand the mechanisms of this enigmatic disease, and for discovering an affordable, minimal invasive biomarker for early diagnosis.