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ANSWER TO PHOTO OUIZ

A 38 year old man with fever and macolopapular rash

DIAGNOSIS:

Sarcoidosis

Sarcoidosis is a multisystemic granulomatosis disease of unknown etiology that affects individuals worldwide; mostly involve patients between 20 to 40 years old (1,2).

The respiratory system is the most commonly affected organ (approximately 90%). As many as 30-60% of the patients have no symptom at the time of presentation but others commonly present with respiratory symptoms such as dyspnea and cough. One third may have constitutional symptoms including fever, weight loss, malaise and fatigue (1).

The stage of pulmonary involvement is upon chest radiography. Stage 1 (50%) is defined by bilateral hilar lymphadenopathy. In stage 2 bilateral hilar adenopathy with parenchymal changes is seen. Stage 3 consists of only parenchymal disease without lymphadenopathy. Stage 1 tends to have acute or subacute presentation (2).

Sarcoidosis involves the skin in approximately 25% of patients. Papulomacolar eruption is the most common subacute skin presentation of this disease. Other common lesions are erythema nodosum, plaques, subcutaneous nodules, and lupus pernio. Erythema nodosum, comprising bilateral, tender red nodules on the anterior surface of the legs, is not specific for sarcoidosis but is common, particularly in acute sarcoidosis, in combination with systemic symptoms and polyarthralgia (1,2).

Other organs such as eye, musculoskeletal, and kidney may also be involved with sarcoidosis (1-3).

As there isn't any definite diagnostic test for sarcoidosis, compatible clinical and radiographic manifestations, histopathologic detection of noncaseating granuloma should be added. The pulmonary paranchymal, intrathoracic lymph node and skin nodules are the most common site of diagnostic biopsy (2,4).

Because sarcoidosis follows a variable natural history, with many patients experiencing spontaneous resolution, it is often difficult to decide whether and when to institute therapy. For pulmonary disease, intrathoracic nodal involvement is not an indication for treatment, but parenchymal lung disease is a potential indication, depending on its effects on pulmonary function and symptoms, rather than on the severity of radiographic involvement alone. Other indications for therapy include severe discomfort or inability to work as a result of fever, weakness, fatigue, arthralgia, neuropathy, disfiguring skin disease, upper airway disease, or hepatic insufficiency. Treatment of ocular, neurologic, myocardial, or renal sarcoidosis or hypercalcemia is indicated even when symptoms are slight, because severe loss of vision, fatal arrhythmias, or insidious renal damage may ensue (1,2). The usual therapy for sarcoidosis is prednisone, 1 mg/kg, for 4 to 6 weeks, followed by a slow taper over 2 to 3 months. High-dose bolus intravenous glucocorticoids are used occasionally but are probably not as effective as oral therapy. Inhaled glucocorticoids are not shown to be effective (1,5).

In this case, other systemic evaluations did not reveal any involvement. Flexible broncoscopy with transbronchial lung biopsy was performed and pathologic specimens showed multiple granulomatous inflammations composed of epitheloid histiocytes with scattered grant cell formation surrounded by lymphoplasma cells. Acid fast stain, culture and PCR of the lymph node biopsy for mycobacterium tuberculosis were negative.

With impression of sarcoidosis, our patient received prednisolone. After 2 months, his signs and symptoms regressed and his chest radiography showed no abnormalities.

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