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Title: Hiding in Plain Sight; Dermatologic Manifestation of a Systemic Disease

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Abstract:

Introduction: Systemic diseases manifest numerous ways. One disease that can affect numerous organ systems is sarcoidosis. Although it is associated with pulmonary disease, dermatologic manifestations also occur and can be helpful in supporting or identifying the diagnosis. Up to 98% of cases of sarcoidosis have lung involvement, but only approximately a third of cases involve the skin.^{1,2}

Case Description: A 22 year-old Caucasian male presented to the emergency department for evaluation of progressive skin lesions that were pustular in nature. He had first noted these approximately 2 months prior to presentation. Previous workup was unrevealing and patient was given course of antibiotics. Despite taking the antibiotics, the lesions persisted and he developed additional skin lesions. There was concern for immunosuppressive state due to social factors. However, HIV and immunoglobulin testing was negative. Imaging of the chest demonstrated diffuse bilateral reticular nodular lesions with mediastinal and hilar adenopathy.

The patient was admitted to the hospital and started on antibiotics. Infectious disease and pulmonary medicine were consulted. Patient underwent extensive infectious workup which was unrevealing. He underwent biopsy of skin lesions and pulmonary nodules/lymph nodes. These demonstrated non-caseating granulomas. The clinical history couple with the histopathology from biopsies and elevated ACE level indicated the diagnosis of sarcoidosis with dermatological manifestations. Due to the presence of and nonhealing nature of the skin lesions, the patient was subsequently started on a course of prednisone with ongoing outpatient follow-up.

Discussion: This case highlights an uncommon manifestation of a systemic disease. Sarcoidosis is often associated with pulmonary disease, however, it can affect all organ systems. Dermatologic manifestations can be one of the first concerns of a patient. Thorough history to exclude other disease processes. If pulmonary symptoms or abnormalities on radiographs exist, biopsy of either skin or pulmonary lesions can be sought to obtain diagnosis. Once a diagnosis is made, treatment—usually with systemic glucocorticoids—can be initiated assuming patients are symptomatic. Further monitoring with pulmonary function testing and ophthalmologic examinations should also be sought after establishing the diagnosis of sarcoidosis.

References:

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