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Arthritis–Dermatitis Syndromes

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Arthritis–Dermatitis Syndromes

Judith A. O'Donnell, MD, and Geetika Sood, MD

INTRODUCTION

The arthritis–dermatitis syndromes represent a unique subset of diseases for the rheumatologist. Patients with one of these syndromes present with acute illness, and infectious causes are the prime consideration. In addition to gathering the historical details, which becomes second nature for the rheumatologist, risk factors for infection should be sought as these provide significant clues to the ultimate etiology of disease. This manual reviews the clinical scenarios of arthritis–dermatitis syndromes and the laboratory testing for establishing the diagnosis.

CASE PATIENT I

INITIAL PRESENTATION AND HISTORY

A 27-year-old woman presents with complaints of pain in her hands, feet, and wrists. The pain initially began 3 weeks ago in her hands and wrists and has progressively worsened. All of the joints in both hands are involved. Over the past 4 days, she has noted similar pain in her ankles. The pain persists all day and is worse with movement. She does not experience morning stiffness. She has been feeling tired over the past few weeks and is sleeping more than usual. She feels warm, but she has not taken her temperature. She has had no chills. Upon further questioning, she reports an erythematous, non-pruritic rash involving her arms, legs, and trunk that appeared approximately 3 weeks ago and seems to fade and then recur.

The patient has no significant past medical history and does not take any medication. Her surgical history is significant for a cesarean section 6 years ago. She has no known drug allergies. Her family history is significant for a mother with rheumatoid arthritis and a father who died from heart disease 3 years ago. She does not smoke, drinks an occasional beer on weekends, and tried marijuana in college. She lives with her husband and daughter in a suburban home. They have one healthy dog. The patient is sexually active with her husband only and uses condoms regularly for contraception.

PHYSICAL EXAMINATION

On physical examination, the patient is afebrile and has a blood pressure of 96/60 mm Hg, a heart rate of 70 bpm, and normal respirations. Skin examination is significant for a faint maculopapular rash across the trunk, upper extremities, and thighs. Head, ear, eye, nose, and throat (HEENT) examination is unremarkable, with normal mucous membranes, good dentition, and no oral ulcers or lesions. Her neck is supple and without lymphadenopathy or thyromegaly. Cardiac examination reveals normal first and second heart sounds (S_1 and S_2) and no gallops or murmurs. Lungs are clear on auscultation. Abdominal examination shows normal bowel sounds, no tenderness, and no hepatosplenomegaly. Her extremity examination is significant for warmth, tenderness, and swelling bilaterally in the distal interphalangeal (DIP), proximal interphalangeal (PIP), and wrist joints. Her ankle joints are without warmth or effusion but are tender bilaterally and exhibit pain with range of motion.

- What is the differential diagnosis in this patient?

DISCUSSION

Differential Diagnosis

Arthralgia and arthritis in conjunction with rash are a common presentation in the internist's and rheumatologist's office setting, and may be caused by a wide range of diseases, including those of infectious or rheumatologic origin. **Table 1** lists many of the potential etiologies of these arthritis–dermatitis syndromes. Differentiating between these diseases in the clinical setting and making a definitive diagnosis can be challenging. Several historical and clinical clues can aid in narrowing the differential diagnosis in a patient such as the one presenting here (**Table 2**). For example, it is useful to classify the joint involvement as large or small, peripheral or axial, and symmetrical or asymmetrical. Additionally, the distribution, appearance, and type of rash can also aid in differentiating between certain diseases. Finally, obtaining a thorough history that includes travel, animal exposure, sexual practices, family history, immunizations, and drug use often may lead the clinician to the diagnosis.

This patient is a young woman presenting with a symmetrical, small joint polyarthritis, arthralgia, and a diffuse,