

Up

Close

A Look at Dermatological Diagnoses

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Panniculitis

Definition

Panniculitis refers to inflammation of the subcutaneous fat.

Etiology

By far, the most common type of panniculitis is erythema nodosum (Table 1). Although it may be idiopathic, strep infection is the most common cause in children, and medications (oral contraceptives, sulfonamides), sarcoidosis, and inflammatory bowel disease are often associated in adults.



Figure 1. Erythema and hyperpigmentation subcutaneous nodules on the lower leg.



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Physical Findings in Erythema Nodosum (EN)

Symmetrical tender warm erythematous nodules are found on the anterior shins, and ankles. Lesions measure 1 cm to 10 cm in diameter. Ulceration is not seen. Malaise and fever may be present.

Histology for EN

EN is a primarily septal panniculitis, rather than lobular panniculitis, with a dermal perivascular lymphocytic infiltrate. Miescher's radial granulomas are a histologic hallmark of EN.

Investigation for EN

Causative medications should be stopped. Chest X-ray is useful to eliminate sarcoidosis and mediastinal lymphoma. Complete blood count, sedimentation, hepatic enzymes, amylase should be considered; autoimmune, inflammatory bowel disease, neoplasia, and infectious etiology should be eliminated.

Treatment for EN

Bedrest and nonsteroidal anti-inflammatory medications control most cases. For more resistant cases potassium iodide 400 mg/day to 900 mg/day is useful.

Table 1

Types of Panniculitis

- Erythema nodosum
- Traumatic
- Nodular vasculitis (possible tuberculosis)
- Sclerosing panniculitis (lipodermatosclerosis secondary to venous insufficiency)
- Protease inhibitor (α 1-antitrysin) deficiency panniculitis
- Poststeroid panniculitis
- Cold panniculitis
- Pancreatic panniculitis
- Collagen vascular disease: lupus profundus, dermatomyositis, scleroderma
- Cytophagic histiocytic panniculitis
- Subcutaneous fat necrosis of the newborn
- Sclerema neonatorum