Necrobiosis lipoidica, also known as necrobiosis lipoidica diabeticorum (NLD), is a disease of unknown etiology that usually presents on the pretibial region with firm, violaceous papules that gradually enlarge into a characteristic yellowish-brown plaque. The eruption often has central atrophy and is surrounded by a raised, violaceous border. The lesions are often multiple and bilateral and ulceration occurs in as many as 30% of patients. Although the pretibial region is the most common location, the upper extremities, face, and scalp may also be affected with lesions of a more annular appearance. Patients often have decreased sensation to pinprick and fine touch, partial alopecia, and hypohidrosis in those locations.

Biopsy usually reveals epithelioid histiocytes, some multinucleated, arranged in a palisaded fashion through the dermis and extending into the subcutaneous fat. On higher magnification, altered collagen is seen surrounded by palisaded histiocytes.

Studies have reported that anywhere from 11% to 65% of patients with NLD have diabetes mellitus, usually type 1, with additional patients demonstrating abnormal glucose tolerance tests or a positive family history of glucose intolerance.1-3

There is no uniformly effective treatment. First line therapy often includes potent topical corticosteroids or intralesional corticosteroids (particularly at the rim to halt progression). Short courses of systemic corticosteroids have been found to be effective; however, this can be detrimental to the serum glucose levels.4 Other agents reported to have had some success include topical tacrolimus and tretinoin, stanozolol, pentoxifylline, niacinamide, systemic cyclosporine, phototherapy, and mycophenolate mofetil. Surgical intervention for ulcerated lesions refractory to medical treatment may be necessary, but often require excision down to the fascia or periosteum followed by grafting.

References