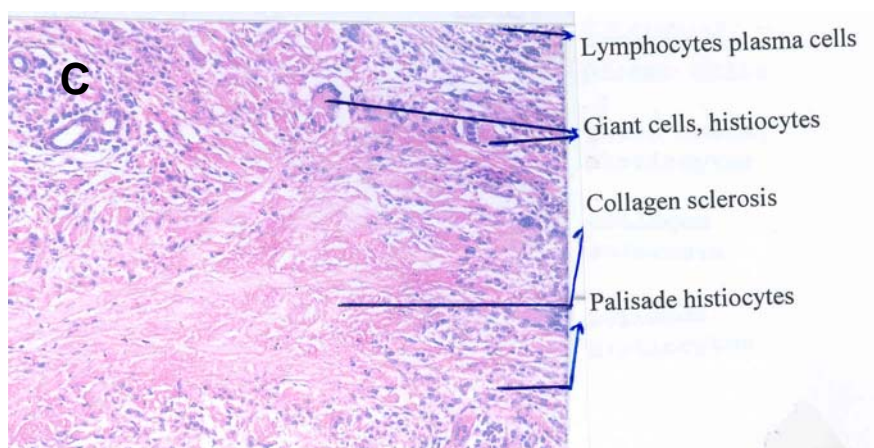
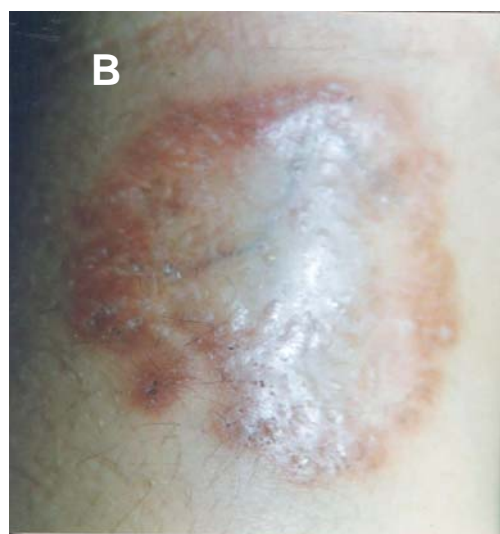


## PHOTOCLINIC



**A** 7-year-old male Caucasian-Iranian child with a 2 ½ year history of type I diabetes, continued use of human insulin (NPH, 10 IU/day in the first 1 ½ years and 15 IU/day in the last year), and a positive family history of diabetes mellitus (in several family members) presented with multiple persistently tender plaques which had persisted for at least a year before presentation. There were 4 plaques on the anterior lower legs, 3 on both thighs, and 4 on both forearms. On the right pretibial skin, there were two 12 x 7 cm and 9.5 x 4.3 cm plaques. On the left leg, two 11 x 9.5 cm and 6.8 x 4.6 cm white ovaloid plaques could be found with atrophic telangiectatic centers. They extended from just below the knees to the ankles. No one was ulcerated. The remaining plaques were small, between 3.4 x 2.4 cm and 4.6 x 4.3 cm.

Some of these lesions were at the sites of previous trauma while, for others, there was no history of trauma (Figures A, B, and C). Histological report of the skin biopsy showed palisading histiocytes intermixed with rare plasma cells, foreign body giant cells, and prominent collagen sclerosis, which were surrounded by granulomatous and inflammatory cells. While the patient was receiving human insulin (NPH, 10 – 15 IU/day), a topical corticosteroid ointment (two times a day) was prescribed and continued for 14 months. The patient stopped the topical treatment because of no response.

**Your Diagnosis?**

See page 226 for diagnosis

**Photoclinic Diagnosis: Multiple Plaques of Necrobiosis Lipoidica Diabeticorum**

**N**ecrobiosis lipoidica diabetorum (NLD) is a chronic granulomatous skin disease that is more seen in diabetics. The most common locations are the bilateral pretibial areas.<sup>1-3</sup> Other occasional locations include the scalp, face, hands, and forearms. The lesions are sharply demarcated plaques with shiny atrophic surfaces. Each lesion begins as a red or reddish-brown flat surface that expands slowly. Although NLD has its onset at any age, but usually develops in young adults and in early middle life.<sup>3</sup> <sup>4</sup> The age of onset is somewhat later in the non-diabetic group. It is rare in early childhood, but some cases have been reported.<sup>5</sup> It occurs three times more often in women than in men.<sup>2</sup>

Our case is a 7-year-old boy with multiple plaques of NLD that is rare in children especially in male gender. In 90% of NLD cases, one or two lesions are usually seen on the shins; in the remaining 10%, they may appear on the arm, scalp, and face; NLD lesions have even been reported in the glans penis of a child.<sup>4</sup> This patient's lesions increased despite the use of human insulin (NPH, 15 IU/day) in combination with topical corticosteroid ointment (two times daily). Although intralesional injection of long-acting corticosteroid with topical use of its ointment

is the preferable mainstay therapy for NLD,<sup>3, 5</sup> some recalcitrant lesions have not been responded to these therapies, in which, we had to use systemic pentoxifylline, nicotinamide, tretinoin, cyclosporine, and chloroquine that have helped in some reported cases.<sup>3</sup> This case is a boy with juvenile diabetes with multiple plaques (11 lesions) of NLD that can be considered extremely rare .

### References

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