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ISSN: 2572-5629
Diabetes Case Reports

Perspective

The Impact of Necrobiosis Lipoidica Disorder Occur in Diabetes

Cohen Breen*

Departments of Diabetes and Metabolism, McMaster University, Hamilton, ON, Canada

DESCRIPTION

Necrobiosis Lipoidica Disorder (NLD) is one of the idiopathic cutaneous palisade granulomatous dermatitis associated with degeneration of collagen, most commonly observed on the legs and common in patients with diabetes mellitus. The disease can cause skin atrophy and can be exacerbated by topical or intraregional treatment with corticosteroids, the most commonly used treatments. Similarly, systemic glucocorticosteroids can cause skin fragility and elevated serum glucose levels, contraindicating the use of this drug in diabetic patients. It was considered feasible, but the patient declined this option due to the risk of hyperpigmentation and bullous lesions.

Necrobiosis lipoidica is a chronic granulomatous idiopathic disease. It usually presents as a yellow-brown atrophic telangiectatic plaque with a raised purplish border, typically in the anterior tibialis region of both extremities, with or without ulceration. There are few reported cases of childhood NL in atypical locations. Treatment with strong topical mometasone furoate 0.1% and clobetasol propionate and 6 months of systemic antioxidant therapy with ascorbic acid and vitamin E were ineffective. A 3-month study of radiotherapy and systemic allopurinol therapy was stopped due to lack of response.

The legs are most commonly affected by NLD, but other parts of the body such as the face, abdomen, and scalp have also been reported as affected areas. Initially, 1-3 mm reddish-brown spots develop over months or years, but these increase in size and gradually become yellow and shiny. Painful ulcers may develop after trauma. The Koebner phenomenon the formation of new psoriatic plaques after skin infection or injury has been demonstrated in patients with NLD. When lesions are multiple and bilateral, they may be painless or very painful due to common cutaneous nerve damage.

The legs, especially the shins, are by far the most common sites, but the forearms, hands, and trunk can also be affected. Three-quarters of cases are bilateral at presentation, and many more become bilateral thereafter. Lesions may be single, but more commonly multiple. Females are affected at a rate of 3 times more often than males. Although the average age of onset is 35 years, this condition is also seen in children. It has occurred in monozygotic twins but has not occurred in adulthood. Although the association of these lesions with diabetes has been debated, the role of this metabolic disorder in the development of skin lesions is not understood. Diabetic vascular changes can be significant.

Necrotizing vasculitis has been reported in some early lesions. The lesions show increased blood flow, disproving the hypothesis that the disease is a sign of ischemic disease. Detection of Glut-1, a protein involved in glucose transport across epithelial and endothelial barrier tissues, in areas of sclerotic collagen raises the possibility that disruption of glucose transport by fibroblasts contributes to histological findings.

CONCLUSION

Several studies have suggested that no effect of glucose control on the development of NLD or the clinical course of the lesion. On the contrary, NLD is usually associated with poor glucose control, and it was concluded that tighter glucose control, as currently practiced, could ameliorate or prevent this disorder. It is a chronic degenerative disease of connective tissue of the skin of unknown cause that occurs in diabetic patients. The disease is unsightly and carries significant morbidity. The occurrence of complications such as ulcers and squamous cell carcinoma underlines the importance of understanding the pathogenesis of NL.

Correspondence to: Cohen Breen, Departments of Diabetes and Metabolism, McMaster University, Hamilton, ON, Canada, E-mail: Breen_C@hotmail.com

Received: 05-Dec-2022, Manuscript No. DCRS-22-19785; **Editor assigned:** 08-Dec-2022, PreQC No. DCRS-22-19785 (PQ); **Reviewed:** 29-Dec-2022, QC No DCRS-22-19785; **Revised:** 06-Jan-2023, Manuscript No. DCRS-22-19785 (R); **Published:** 16-Jan-2023, DOI: 10.35841/2572-5629.23.8.141

Citation: Cohen B (2023) The Impact of Necrobiosis Lipoidica Disorder Occur in Diabetes. Diabetes Case Rep. 8:141.