

# Necrobiosis lipoidica diabetorum: Understanding this rare diabetes-related skin condition

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## INTRODUCTION

Necrobiosis Lipoidica Diabeticorum (NLD) is a rare skin condition often associated with diabetes mellitus. Characterized by the formation of specific skin lesions, NLD can be a visible marker of diabetes and can affect a person's quality of life. Understanding the nature of NLD, its relationship with diabetes, and management strategies is crucial for individuals affected by this condition.

## DESCRIPTION

Necrobiosis lipoidica diabetorum is a chronic skin disorder that typically presents as well-defined, reddish-brown patches with a yellowish center. These lesions often appear on the lower legs, but they can also occur on other parts of the body. The condition is more common in women and is frequently associated with type 1 or type 2 diabetes. The exact cause of NLD is not fully understood, but it is believed to involve changes in the skin's connective tissue and blood vessels, possibly related to chronic hyperglycemia (high blood sugar) and poor diabetes control. The primary symptom of NLD is the development of distinctive skin lesions. These lesions start as small, red or brown spots and gradually enlarge to form larger plaques with a characteristic yellowish center. The edges of the lesions are well-defined, and the skin may become atrophic (thinned) over time. Some individuals with NLD may experience itching or mild discomfort in the affected areas, although the lesions themselves are usually painless. Lesions commonly appear on the shins, but they can also occur on the thighs, arms, and other areas. The lesions often develop symmetrically, and multiple patches may be present simultaneously. The condition tends to progress slowly. Over time, the lesions may become more prominent, and new lesions may develop while existing ones persist. Diagnosis of NLD is primarily based on the clinical appearance of the skin lesions. A healthcare provider will examine the lesions and consider the patient's medical history, particularly their history of diabetes. To confirm the

diagnosis, a skin biopsy may be performed. This involves taking a small sample of skin tissue from the lesion and examining it under a microscope. The biopsy can reveal characteristic changes in the skin's structure, such as the presence of lipid deposits and changes in connective tissue. While there is no specific blood test for NLD, blood tests may be used to assess blood glucose levels and overall diabetes control. This helps in understanding the relationship between NLD and diabetes management. NLD is strongly associated with diabetes, and its presence can be indicative of underlying issues with glucose control. The condition is often seen in individuals with poorly controlled diabetes, but it can also occur in those with well-managed diabetes. The relationship between NLD and diabetes highlights the importance of maintaining good blood glucose control to potentially reduce the risk of developing skin complications. Achieving and maintaining optimal blood glucose levels is crucial in managing NLD. Effective diabetes management can help prevent the progression of NLD and may lead to improvements in existing lesions. Various topical treatments may be used to manage the symptoms of NLD. These include corticosteroid creams or ointments, which can help reduce inflammation and improve the appearance of lesions. In some cases, laser therapy may be considered to improve the cosmetic appearance of NLD lesions. Regular follow-up with a healthcare provider is essential for monitoring the progression of NLD and adjusting treatment plans as needed. Addressing any changes in the condition promptly can help in effective management [1-4].

## CONCLUSION

Necrobiosis Lipoidica Diabeticorum is a rare but notable skin condition associated with diabetes. The presence of characteristic skin lesions can be a visible marker of underlying diabetes and may indicate the need for improved glucose control. Understanding the symptoms, diagnosis, and management of NLD is crucial for individuals affected by this condition. Through effective diabetes management, appropriate treatment, and regular monitoring, individuals with NLD can work towards improving their skin health and overall quality of life.

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## CONFLICT OF INTEREST

The author has nothing to disclose and also state no conflict of interest in the submission of this manuscript.

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## REFERENCES

1. Xiang Q, Hening W, Keyu D. Specific deletion of CDC42 in pancreatic  $\beta$  cells attenuates glucose-induced insulin expression and secretion in mice. *Mol Cell Endocrinol*; 518:20:483-488.
2. Abhinav C, Khyati G, Prosenjit M. Low-dose naltrexone rescues inflammation and insulin resistance associated with hyperinsulinemia. *J Bio Chem*; 295:48:16359-16369.
3. Catheryn W, Gray C, Coster F. From insulin to Akt: Time delays and dominant processes. *J Theo Bio*; 5071:21:1144-1154.
4. Sprio E, Lucotti P, Lovati E. Use of insulin degludec in pregnancy: Two case reports and a literature review. *Endo Metabol Sci*; 12:4:79-84.