

Necrobiosis Lipoidica Diabeticorum

Necrobiosis lipoidica diabeticorum (NLD) is a rare skin condition that causes shiny, red-brown patches, usually on the lower legs. These patches can sometimes form open sores that heal slowly. NLD is most commonly seen in people with diabetes, but it can also affect people with a family history of diabetes or those at risk for it. The cause of NLD isn't fully understood, but it may be linked to changes in blood vessels and the body's immune system, especially in people with diabetes. NLD can make skin wounds heal slowly and cause pain or discomfort.

Clinical Presentation

NLD usually appears as raised patches on the skin, often on the lower legs. These patches are shiny, red-brown, and have a yellowish center. Over time, they may turn into open sores that are slow to heal. Although the patches usually don't cause much pain, they can sometimes be tender. In some cases, these sores can get infected or have trouble healing. NLD can appear in different areas of the body, but it's most common on both shins.

Etiology and Risk Factors

While the exact cause of NLD is not fully understood, it is most closely linked to diabetes. High blood sugar levels can harm the small blood vessels in the skin, leading to skin changes that cause NLD. Other factors that may increase the chance of getting NLD include having a family history of diabetes, insulin resistance, or other health problems like kidney or eye issues caused by diabetes.

NLD is also sometimes seen in people with autoimmune conditions, such as rheumatoid arthritis or thyroid problems.

Diagnosis

The diagnosis of NLD is primarily clinical, based on the characteristic appearance of the skin lesions. However, since NLD can look present similarly to other conditions such as granuloma annulare, a skin biopsy is often required for definitive diagnosis. The biopsy helps doctors see the changes in the skin and confirm the diagnosis. In some cases, doctors might do other tests to rule out other systemic conditions, such as systemic lupus erythematosus or rheumatoid arthritis, which could present with similar skin manifestations.

Management and Treatment

The management of NLD is challenging due to its chronic and often relapsing nature. There is currently no cure for the condition, but a variety of treatments can help control symptoms and prevent disease progression. Treatment options range from topical therapies to systemic medications and light therapy, depending on the severity of the condition.

➤ **Topical Corticosteroids:**

- Topical corticosteroids are often used as first-line treatment for NLD. High-potency corticosteroid creams or ointments may be applied to the lesions to reduce inflammation and improve healing. The effectiveness of topical treatments can be enhanced by covering the lesions with airtight dressings, which helps increase the absorption of the medication into the skin.

➤ **Intralesional Corticosteroid Injections:**

- For more resistant cases, intralesional corticosteroid injections may be more effective than topical steroids in reducing inflammation and improving the appearance of the lesions. This treatment is typically used for localized lesions that do not respond to topical applications.

➤ **Systemic Therapy:**

- In severe or widespread cases, systemic corticosteroids such as prednisone may be used to control inflammation and provide symptomatic relief. However, long-term use of oral steroids requires careful monitoring due to the risk of side effects such as hyperglycemia and osteoporosis, particularly in patients with diabetes.
- Aspirin and pentoxifylline, which have anti-inflammatory and blood-thinning properties, have shown some benefit in improving NLD symptoms by reducing vascular inflammation and promoting better healing of lesions.

➤ **Ultraviolet (UV) Light Therapy:**

- Ultraviolet light therapy (specifically narrowband UVB) has been found to be effective in controlling active lesions of NLD, particularly during flare-ups. UV therapy helps to reduce inflammation and promote healing, although it may require multiple sessions and should be administered under the supervision of a dermatologist.

➤ **Wound Care and Infection Prevention:**

- If the patches turn into open sores, it's important to take care of them properly to avoid infection. This includes cleaning the sores, covering them with dressings, and sometimes using antibiotics. Good control of blood sugar is also important to help the sores heal faster.

Conclusion

Necrobiosis lipoidica diabetorum (NLD) is a long-term skin condition that is often linked to diabetes. It appears as shiny, red-brown patches on the skin, which may develop into sores that heal slowly. The exact cause is not fully understood, but it is thought to be related to changes in the small blood vessels and other skin problems that can occur with diabetes. If you have NLD, it's

important to work closely with your doctor to manage your diabetes and any other health problems. Regular check-ups with a dermatologist (skin doctor) are also recommended to keep an eye on your skin. By following a good treatment plan, people with NLD can control their symptoms and improve their quality of life.

References

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