

Nevus Anemicus

Nevus anemicus is a harmless, congenital (present at birth) skin condition where a patch of skin appears paler than the surrounding skin. This happens because the blood vessels in that area are more sensitive to chemicals that cause blood vessels to constrict, reducing blood flow and making the skin look lighter. This condition is usually benign (not harmful) and does not require treatment. It doesn't cause any symptoms or health problems. Nevus anemicus is typically noticed in infancy or early childhood and remains stable throughout life.

Clinical Presentation

Nevus anemicus appears as a pale or hypopigmented patch of skin, often with a well-defined border, and is usually smaller than 10 cm in size. These lesions commonly occur on covered areas of the body, like the trunk or limbs, and they do not change over time (no scaling or ulceration).

A key feature for diagnosing nevus anemicus is its blanching response. When the lesion is rubbed, the surrounding skin turns red (due to increased blood flow), but the lesion remains pale because it has reduced blood flow. This helps doctors tell nevus anemicus apart from other conditions, like vitiligo or pityriasis alba, where the affected skin doesn't change color when rubbed.

Pathophysiology

The cause of nevus anemicus is linked to an abnormal response of blood vessels to certain substances in the body, like norepinephrine and endothelin-1, which cause blood vessels to tighten. In people with nevus anemicus, the vascular smooth muscle cells in the affected area are extra sensitive to these substances, causing persistent vasoconstriction. This reduces blood flow, which results in the pale appearance of the skin since there is less blood to give the normal redness to the area. Unlike other skin conditions, nevus anemicus is not due to changes in pigmentation or skin structure. Instead, it is a vascular issue, meaning it is caused by blood flow problems in the skin.

Diagnosis

The diagnosis of nevus anemicus is primarily based on its characteristic appearance and the blanching test. When the lesion is rubbed, the surrounding skin turns red, while the lesion itself remains pale due to reduced blood flow. This unique response helps differentiate nevus anemicus from other skin conditions like vitiligo, tinea versicolor, or lichen sclerosus.

In most cases, dermatoscopy is not needed, but it can be used if there's uncertainty to examine the vascular pattern. A biopsy is rarely necessary, as nevus anemicus is a benign and non-progressive condition. However, if the lesion looks unusual or is in an uncommon location, a biopsy might be done to rule out other possible vascular or dermatologic disorders.

Management and Prognosis

Nevus anemicus is generally a cosmetic concern rather than a medical one. The lesion is asymptomatic (doesn't cause symptoms), doesn't grow over time, and does not pose a risk of skin cancer. Because of this, treatment is usually not needed. Most cases can simply be observed over time, as the condition does not affect skin function or cause discomfort. However, if the lesion is in a place that's hard to hide or if it causes psychological distress, some people may choose cosmetic treatments to improve its appearance, although this is rarely necessary.

For those who want treatment for cosmetic reasons, options like laser therapy may be considered. Pulsed dye lasers or intense pulsed light (IPL) therapy can be used to target the blood vessels and reduce the lesion's appearance. However, the results can vary, and these treatments are typically not required for a benign condition like nevus anemicus.

Conclusion

Nevus anemicus is a benign (non-harmful) skin condition caused by increased sensitivity of blood vessels to certain chemicals that cause them to tighten. This results in a pale skin patch in the affected area. The condition is usually diagnosed based on its distinctive appearance and a blanching response when the lesion is rubbed. Since nevus anemicus doesn't cause symptoms or complications, it typically doesn't require medical treatment. However, if the lesion's appearance is a concern, cosmetic treatments can be considered. Overall, the prognosis is excellent, as the condition is stable and does not lead to any serious health issues.

References

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