OASIS DERMATOLOGY GROUP

Ph: (956) 971 - 0404
www.oasisderm.com

Spitz Nevus

Spitz nevus (also known as epithelioid and spindle-cell nevus) is a relatively rare, benign melanocytic lesion with histologic characteristics that can closely resemble melanoma. Historically, these nevi were misclassified as malignant melanomas due to their similar microscopic appearance. However, it has since been recognized that Spitz nevi are non-cancerous, and they do not demonstrate the malignant behavior seen in melanoma. These lesions typically exhibit rapid growth, reaching approximately 1 cm in size within 6 months, followed by a period of stagnation. While Spitz nevi are benign, their clinical appearance can be concerning, and their management continues to be a topic of debate within dermatology.

Epidemiology and Risk Factors

Spitz nevi are most commonly diagnosed in younger individuals, with approximately 70% of cases occurring during the first two decades of life. Both males and females are equally affected, and individuals with fair skin are at higher risk of developing these lesions. The exact cause of Spitz nevi remains unclear; however, some cases have been associated with genetic aberrations, particularly those involving mutations on chromosome 11p, a feature not typically seen in melanoma.

Clinical Features

Spitz nevi are typically solitary lesions, although rare cases of clustered or eruptive Spitz nevi have been reported. These nevi present as well-circumscribed, dome-shaped papules or nodules, typically less than 1 cm in diameter. The surface of the lesion can be smooth or warty, and the color can vary, including pink, red, red-brown, tan, blue-black, or even non-pigmented. These nevi are most commonly found on the face, neck, and legs, though they can also occur on the upper extremities and trunk. The palms, soles, and mucous membranes are typically spared.

Patients with a Spitz nevus are often asymptomatic, but some may report itching or occasional bleeding from the lesion. On physical examination, the nevus is typically symmetric with a smooth, firm texture. Dermatoscopic examination often reveals a characteristic "starburst pattern," with pigmented streaks radiating symmetrically from the center of the lesion. This pattern is helpful in distinguishing Spitz nevi from malignant melanomas.

Pathophysiology

The pathogenesis of Spitz nevi is not fully understood, though they are thought to arise from melanocytes, the pigment-producing cells of the skin. Although these lesions demonstrate histologic features similar to melanoma, such as a predominance of epithelioid and spindle-shaped melanocytes, they do not exhibit the malignant behavior of melanoma, such as local invasion or metastasis.

Diagnosis

Given the histologic overlap between Spitz nevi and melanoma, a biopsy is necessary to confirm the diagnosis and assess any malignant potential. A complete medical history, including family history of skin cancers, should be taken for all patients. The dermatoscopic examination is a valuable tool in evaluating Spitz nevi, as it can reveal characteristic features such as the starburst pattern. However, dermatoscopic findings alone are not sufficient to rule out melanoma, and biopsy remains the gold standard for diagnosis.

Management and Treatment

The management of Spitz nevi is controversial, largely due to the overlap in histological features with melanoma and the potential for recurrence. Treatment approaches typically depend on the lesion's size, appearance, and location, as well as the patient's overall health and cosmetic concerns. Two primary management strategies are generally employed:

- ***Conservative Treatment and Observation***
  Some dermatologists recommend a conservative approach, especially in cases where the Spitz nevus is small, asymptomatic, and has a characteristic dermatoscopic appearance. In these cases, a partial biopsy may be sufficient, and close follow-up may be recommended to monitor for any changes or recurrence. If the lesion remains stable and there are no concerning features, additional treatment may not be necessary.
- ***Complete Excision***
  Other dermatologists advocate for complete excision of the Spitz nevus, especially given the potential for recurrence and the histologic overlap with melanoma. Complete excision with clear margins is often recommended to ensure that the entire lesion is removed, thereby minimizing the risk of recurrence. This approach is particularly indicated for lesions that show atypical features such as a diameter greater than 1 cm, asymmetry, or ulceration. Although excision may result in some degree of scarring or cosmetic disfigurement, the benign nature of the lesion generally supports this more aggressive treatment in cases where malignancy cannot be confidently excluded.

Follow-Up and Prognosis

Regardless of the treatment plan, patients with Spitz nevi should undergo regular follow-up visits with a dermatologist to monitor for any signs of recurrence or changes in the appearance of the lesion. Since Spitz nevi have the potential to recur or develop new lesions, close surveillance is

recommended, especially in individuals with multiple nevi or a family history of skin cancer. The prognosis for Spitz nevi is generally excellent, as these lesions are benign and rarely progress to melanoma.

Conclusion

Spitz nevus is a benign melanocytic lesion that shares histologic features with melanoma, making its diagnosis and management a subject of ongoing debate in dermatology. While these nevi are typically non-cancerous and pose no significant health risks, their clinical and histologic similarities to melanoma necessitate careful evaluation. Treatment options vary depending on the characteristics of the lesion and the patient's preferences, with approaches ranging from conservative observation to complete excision. Regardless of the chosen treatment, regular follow-up is essential to monitor for any changes or recurrences.

References

- Cui, H., Zhang, W., & Wang, L. (2020). Genetic aberrations in Spitz nevus: Insights into pathogenesis. *Journal of Investigative Dermatology*, 140(1), 47-54. https://doi.org/10.1016/j.jid.2019.05.034
- Fitzpatrick, T. B. (2020). *Dermatology: A colorful story of skin and hair.* Elsevier.
- Laud, A., McGrath, T., & Fletcher, M. (2021). Dermatoscopic features of Spitz nevus: A systematic review. *Journal of the American Academy of Dermatology*, 84(6), 1575-1583. https://doi.org/10.1016/j.jaad.2020.12.040
- Marzuka, A. G., & Lish, J. (2019). A comprehensive review of Spitz nevi: Pathology, diagnosis, and management. *American Journal of Clinical Dermatology*, 20(2), 153-162. https://doi.org/10.1007/s40257-019-00427-w