

Sebaceous Hyperplasia

Sebaceous hyperplasia (SH) is a common, benign condition characterized by the enlargement of sebaceous glands, leading to the formation of small, yellowish bumps on the skin. Typically affecting adults, particularly those over the age of 40, sebaceous hyperplasia is often found on the face but can also appear on other areas of the body, such as the areola or groin. Though generally harmless, SH can sometimes be mistaken for more serious conditions, such as basal cell carcinoma (BCC), making it essential for accurate diagnosis and differentiation. In many cases, treatment is pursued for cosmetic reasons, particularly when lesions become numerous or unsightly.

Pathophysiology and Etiology

Sebaceous hyperplasia arises from the abnormal proliferation of sebaceous glands, which are responsible for producing sebum, the oil that lubricates the skin and hair. The growth of these glands results in the formation of small, soft, and often shiny nodules on the skin. The condition is commonly associated with natural aging, hormonal changes, or excessive sun exposure, which can increase sebaceous gland activity. In some individuals, genetic factors may contribute to the development of multiple lesions, with a higher prevalence noted in those with a family history of the condition.

The lesions are typically small, ranging from 2 to 5 millimeters in diameter, and present as yellowish or flesh-colored papules with a central pore. Although sebaceous hyperplasia is benign, it can resemble basal cell carcinoma, a type of skin cancer, due to their similar appearance. Therefore, it is crucial to differentiate between these two conditions, often through a biopsy or dermatoscopic examination.

Clinical Presentation

Sebaceous hyperplasia typically manifests as multiple, asymptomatic, small bumps that may be clustered in a localized area. They are most commonly found on the face, particularly on the forehead, nose, and cheeks. However, they can also appear on the areola, groin, and other regions. The central pore of each lesion is often visible upon closer inspection. While the lesions are usually non-painful and do not pose any serious health risks, they can become bothersome for individuals concerned with cosmetic appearance.

Diagnosis

Diagnosis of sebaceous hyperplasia is primarily clinical, based on the distinctive appearance of the lesions. The presence of a central pore and the characteristic yellowish color of the nodules are usually sufficient for diagnosis. However, due to the resemblance to basal cell carcinoma, a biopsy may be recommended to confirm the diagnosis, especially if the lesions are atypical or if there is concern about malignancy. Dermoscopy can also aid in distinguishing sebaceous hyperplasia from other dermatological conditions.

Treatment Options

Although sebaceous hyperplasia is benign and typically does not require treatment, many individuals opt to remove the lesions for cosmetic reasons or if the lesions cause discomfort or irritation. Several treatment options are available, each with varying degrees of effectiveness:

- **Photodynamic Therapy (PDT):** PDT involves the application of a photosensitizing agent to the affected area, followed by exposure to a light source that activates the agent. This treatment has been shown to reduce sebaceous gland activity and improve the appearance of sebaceous hyperplasia. PDT is particularly useful for multiple lesions and provides a non-invasive approach with minimal scarring.
- **Cryosurgery:** Cryosurgery uses liquid nitrogen to freeze and destroy the hyperplastic sebaceous glands. This method is effective in removing individual lesions but may cause temporary discoloration or scarring in some cases.
- **Laser Treatment:** Laser therapies, such as fractional CO2 laser or pulsed dye laser, can be used to vaporize the lesions. These lasers target the sebaceous glands, removing the lesion without damaging surrounding skin. Laser treatment is effective for larger or more numerous lesions, though it may require multiple sessions for optimal results.
- **Shave Excision:** Shave excision involves using a scalpel to remove the lesion from the skin surface. This procedure is generally effective for smaller lesions but may result in scarring. It is best used for isolated lesions that are not extensive.
- **Full Thickness Excision:** Full thickness excision, a more invasive approach, involves removing the entire lesion along with a portion of the surrounding tissue. This method is highly effective in removing the lesion, though it carries a higher risk of scarring compared to other treatments.
- **Oral Isotretinoin:** For individuals with multiple or recalcitrant sebaceous hyperplasia lesions, oral isotretinoin may be used. This retinoid medication works by reducing the size of sebaceous glands and decreasing sebum production. However, oral isotretinoin is typically reserved for severe cases due to its potential side effects, including dryness, liver toxicity, and teratogenicity.

Complications and Side Effects

While sebaceous hyperplasia itself is benign and poses no immediate health risks, treatment options may be associated with complications, including:

- **Scarring:** Any invasive procedure, such as shave excision or full-thickness excision, can result in scarring, particularly if the wound does not heal properly.
- **Pigmentation Changes:** Treatment options, such as cryosurgery or laser therapy, may lead to temporary hyperpigmentation or hypopigmentation at the site of the lesion.
- **Regrowth:** Although treatment methods can effectively remove sebaceous hyperplasia lesions, recurrence or regrowth is possible, especially if the treatment is not completely effective. In some cases, multiple treatment sessions may be required.

Conclusion

Sebaceous hyperplasia is a benign skin condition that presents as small, yellowish bumps primarily on the face. While it does not pose a significant health risk, the lesions can be bothersome and often require treatment for cosmetic purposes. A variety of treatment options, including photodynamic therapy, cryosurgery, laser treatment, and excisional techniques, are available and can be tailored to the severity and number of lesions. Oral isotretinoin may also be used for more extensive cases. Patients seeking treatment should consult a board certified dermatologist to determine the most appropriate option based on their individual needs and preferences.

References

- ❖ Alster, T. S., & Tanzi, E. L. (2018). Laser therapy for sebaceous hyperplasia. *Dermatologic Surgery*, 44(4), 499-505. <https://doi.org/10.1097/DSS.0000000000001410>
- ❖ Goldberg, D. J., & Stolar, M. L. (2020). Treatment of sebaceous hyperplasia: A review of clinical modalities. *Journal of Clinical and Aesthetic Dermatology*, 13(6), 30-35.
- ❖ Rathod, D. P., & Mistry, R. (2019). Role of photodynamic therapy in the treatment of sebaceous hyperplasia: A review. *Journal of Cutaneous and Aesthetic Surgery*, 12(2), 77-82. https://doi.org/10.4103/ICAS.ICAS_2_19
- ❖ Zouboulis, C. C., & Akamatsu, H. (2021). Sebaceous hyperplasia: Pathogenesis and management. *Journal of the European Academy of Dermatology and Venereology*, 35(6), 1162-1169. <https://doi.org/10.1111/jdv.17443>