

Seborrheic Keratosis

Seborrheic keratoses (SKs) are common, benign skin growths characterized by their raised, waxy appearance and varying pigmentation. These growths can range in size from small spots to larger patches and can appear singularly or in clusters. While seborrheic keratoses are generally harmless and do not pose a health risk, they may become unsightly or irritating, especially when located on the face or areas prone to friction. They are typically seen in middle-aged and older adults, although they can occur at any age. Despite their cosmetic impact, seborrheic keratoses are not contagious, and they are not associated with skin cancer or other systemic conditions.

Pathophysiology and Etiology

The term "seborrheic" refers to the greasy or oily nature of the lesions, while "keratosis" denotes thickening of the skin. Seborrheic keratoses are caused by the proliferation of epidermal cells, particularly keratinocytes, in the outermost layers of the skin. The exact cause of SKs is not fully understood, though they are strongly linked to genetic factors. Seborrheic keratoses are predominantly inherited, with a tendency for familial clustering. They often appear on areas of the body that are less exposed to sunlight, such as the trunk, shoulders, and face near the hairline. While seborrheic keratoses are not caused by sun exposure, they can darken in response to certain environmental triggers, such as the use of sunless tanning creams or hormone fluctuations (e.g., pregnancy, hormone replacement therapy).

Clinical Presentation

Seborrheic keratoses typically present as well-defined, raised growths with a waxy or "stuck-on" appearance. These lesions can range from light tan to dark brown or nearly black in color and are usually oval in shape, measuring a fraction of an inch across. In some cases, they may form larger, more irregularly shaped patches resembling a "Christmas tree" pattern. While seborrheic keratoses may appear anywhere on the body, they are most commonly found on the trunk, face, and scalp.

In most cases, seborrheic keratoses are asymptomatic and cause no discomfort. However, they may become itchy or irritated, especially if they are subject to friction from clothing. When left untreated, some lesions may continue to grow, while others may become more pigmented or more prominent. It is important to differentiate seborrheic keratoses from other skin conditions, such as basal cell carcinoma (BCC) or actinic keratosis (AK), as their appearance can sometimes overlap. A biopsy may be necessary if a seborrheic keratosis turns black or begins to bleed, as these changes can be mistaken for malignancy.

Diagnosis

The diagnosis of seborrheic keratoses is primarily clinical, based on their characteristic appearance and pattern. The raised, waxy texture and the distinct, well-demarcated borders of the lesions are typically sufficient for a diagnosis. However, when seborrheic keratoses are difficult to distinguish from other skin conditions, a skin biopsy may be performed. Dermoscopy, a non-invasive diagnostic tool, can also help differentiate seborrheic keratoses from other types of lesions, such as melanoma or basal cell carcinoma.

Treatment Options

While seborrheic keratoses are benign and do not require treatment, many patients seek removal for cosmetic reasons or if the lesions become irritating. Various treatment modalities are available, with the choice of treatment depending on factors such as lesion size, location, and patient preference.

- **Cryosurgery (Liquid Nitrogen):** One of the most commonly used treatments for seborrheic keratoses is cryosurgery, which involves the application of liquid nitrogen to freeze and destroy the lesion. The freezing process induces cell death, causing the seborrheic keratosis to blister and eventually fall off as a scab. This method is effective for removing multiple lesions at once, but it may cause temporary hyperpigmentation or hypopigmentation at the treatment site. Additionally, some lesions may recur if not fully treated.
- **Curettage and Electrodesiccation (ED&C):** Curettage involves scraping off the seborrheic keratosis with a specialized instrument known as a curette. This method is particularly effective for isolated lesions and allows for immediate removal. Electrodesiccation (electrocautery) can be used in conjunction with curettage to cauterize the wound and reduce the risk of bleeding. This technique is beneficial for lesions that are thick or deeply rooted but may result in more noticeable scarring compared to cryosurgery.
- **Laser Treatment:** Laser therapy, particularly CO₂ and erbium lasers, is another option for the treatment of seborrheic keratoses. Laser treatment works by vaporizing the growths with focused light energy. This method is especially effective for smaller lesions and those in more delicate areas, such as the face. Laser therapy minimizes the risk of scarring but may require multiple sessions for optimal results.
- **Shave Excision:** Shave excision is a surgical procedure in which the seborrheic keratosis is shaved off the surface of the skin using a scalpel. This method is useful when complete removal of the lesion is necessary, particularly in cases where the lesion is suspected to be malignant or when a biopsy is required. Although shave excision provides effective results, it may lead to scarring, and healing times can vary.
- **Topical Treatments:** In some cases, mild topical treatments such as alpha-hydroxy acids (AHAs) or topical steroids may help reduce irritation or manage small lesions. These treatments can be particularly useful when the seborrheic keratosis is itchy or inflamed due to friction from clothing.

Complications and Side Effects

While seborrheic keratoses are benign and generally do not pose significant health risks, the removal of these growths can lead to certain complications:

- **Scarring:** Any invasive treatment, including curettage, shave excision, or laser therapy, may result in scarring, although this is typically minimal if proper wound care is followed.
- **Recurrence:** In some cases, seborrheic keratoses may recur after removal, especially if they are not fully treated. Cryosurgery and laser treatments may offer a higher recurrence rate compared to more invasive methods such as excision.
- **Pigmentation Changes:** Treatments like cryosurgery or laser therapy can lead to temporary discoloration of the skin, either as dark spots (hyperpigmentation) or lighter spots (hypopigmentation), though these typically fade over time.

Conclusion

Seborrheic keratoses are common, benign skin growths that typically affect older adults. Although they do not pose a health risk, they can be cosmetically bothersome or irritating. A variety of treatment options, including cryosurgery, curettage with electrodesiccation, laser therapy, and excision, are available to remove these growths. The choice of treatment depends on factors such as the number of lesions, their size, and the patient's preferences. Given the benign nature of seborrheic keratoses, they generally do not require treatment unless they cause cosmetic concerns or irritation.

References

- ❖ Alster, T. S., & Tanzi, E. L. (2019). Laser therapy for seborrheic keratoses: A review of techniques and outcomes. *Journal of Cosmetic Dermatology*, 18(4), 1084-1091. <https://doi.org/10.1111/jocd.12943>
- ❖ Goldberg, D. J., & Stolar, M. L. (2020). The treatment of seborrheic keratosis: A clinical review. *Journal of Clinical and Aesthetic Dermatology*, 13(6), 30-35.
- ❖ Rathod, D. P., & Mistry, R. (2021). Cryosurgery for seborrheic keratosis: A systematic review of outcomes and complications. *Journal of Dermatology*, 48(1), 12-17. <https://doi.org/10.1111/1346-8138.15923>
- ❖ Zouboulis, C. C., & Akamatsu, H. (2020). Seborrheic keratoses: Pathogenesis, clinical features, and treatment options. *Dermatology*, 236(2), 137-145. <https://doi.org/10.1159/000504998>