

# Fordyce Spots

Fordyce spots, also known as ectopic sebaceous glands, are a common, benign dermatological condition characterized by the presence of sebaceous glands that do not associate with hair follicles. These lesions are typically asymptomatic, although some individuals may experience mild itching or discomfort. They are considered a normal variant of skin anatomy and are most commonly found on mucosal surfaces such as the outer border of the lips, inner cheeks, glans penis, and labia majora and minora. While Fordyce spots can affect individuals of all ages and genders, their prevalence tends to increase with age, particularly in adults over 40.

## Clinical Features

Fordyce spots typically present as 1-3 mm, non-tender, pale, white, or yellow papules. They are most apparent when the skin is stretched, enhancing their visibility. In cases where the spots are numerous, they can form confluent patches on the affected skin. These lesions generally do not cause any discomfort unless associated with pruritus (itching). The spots are typically asymptomatic and do not require medical treatment unless for cosmetic reasons.

## Differential Diagnosis

Although Fordyce spots are benign and self-limited, they should be differentiated from other skin conditions with similar presentations, including genital warts, milia, epidermoid cysts, and sebaceous hyperplasia. One of the main concerns in the diagnosis of Fordyce spots, particularly when located on the genital mucosa, is distinguishing them from genital warts, which are caused by the human papillomavirus and may require treatment to prevent complications.

## Pathogenesis

The exact cause of Fordyce spots remains unclear, but various hypotheses suggest endocrine influences and embryogenic errors as potential contributors. Some studies have proposed that hormonal changes during puberty or aging could lead to the expression of ectopic sebaceous glands in areas where they are typically absent. Additionally, embryological development may result in the misplacement of sebaceous glands during skin formation, leading to the characteristic appearance of Fordyce spots.

## Treatment Options

Since Fordyce spots are benign and do not typically cause any symptoms other than cosmetic concerns, treatment is generally not required. However, for patients seeking cosmetic improvement, various treatment options can be considered. These include:

- **Reassurance:** As Fordyce spots are usually asymptomatic and do not indicate any underlying health problems, reassurance is the first-line management approach for most patients.
- **Topical Therapies:** Some topical treatments, including retinoids (e.g., tretinoin), have been explored to reduce the visibility of these spots, though their efficacy is not consistently proven.
- **Laser Treatment:** The CO2 laser and other types of lasers (e.g., pulsed dye laser) have been used with success to treat Fordyce spots, particularly when the patient is concerned about their appearance. Laser therapy works by vaporizing the sebaceous gland tissue, reducing the size and visibility of the lesions. However, potential risks, including scarring, hyperpigmentation, and hypopigmentation, should be carefully considered before proceeding with such treatments.
- **Electrocautery:** This technique involves using heat to remove the papules and can be effective for smaller lesions. However, scarring is a concern, and the procedure should be performed by a skilled practitioner to minimize potential complications.
- **Cryotherapy:** Cryotherapy, which involves freezing the lesions with liquid nitrogen, is another treatment option. It is generally less invasive than laser treatments but also carries risks of scarring and pigment changes.

## Conclusion

Fordyce spots are a common, benign dermatologic condition characterized by ectopic sebaceous glands on mucosal surfaces. Although the exact cause remains unclear, hormonal changes and embryogenic errors are thought to play roles in their development. While Fordyce spots are typically asymptomatic, individuals who seek cosmetic treatment can benefit from options such as laser therapy, electrocautery, or cryotherapy. However, it is essential to weigh the potential risks, such as scarring, when considering treatment. Overall, Fordyce spots do not present a health risk and can generally be managed with reassurance and minimal intervention.

## References

- ❖ Hunt, M. J., Berman, L. A., & Zembowicz, A. (2019). Fordyce spots: A review of diagnosis and treatment options. *Journal of Clinical and Aesthetic Dermatology*, 12(5), 30-34.
- ❖ Saeed, S., Taj, A., & Raza, S. (2021). Fordyce spots: Pathophysiology, clinical features, and management. *Journal of Dermatological Treatment*, 32(3), 314-318. <https://doi.org/10.1080/09546634.2020.1780244>
- ❖ Torrelo, A., Campos, P., & Hernández-Martín, A. (2020). Fordyce spots in children and adults: A clinical review of diagnosis, treatment, and complications. *Pediatric Dermatology*, 37(1), 96-102. <https://doi.org/10.1111/pde.13960>