

Folliculitis

Folliculitis is an inflammation of the hair follicles, typically caused by infection. This condition can occur anywhere on the body where hair follicles are present, including the scalp and skin. It presents as pustules or papules, often resembling acne or crusted sores, and can be associated with mild itching or discomfort. The underlying etiology, clinical presentation, and treatment approaches for folliculitis vary, depending on whether the condition is acute or chronic, and whether it is caused by bacterial, fungal, or other infectious agents. This review examines the mechanisms, diagnostic considerations, and current management strategies for folliculitis.

Etiology and Pathophysiology

The most common causative agents of folliculitis are bacterial infections, particularly *Staphylococcus aureus* (staph bacteria). The infection occurs when these bacteria invade the hair follicles, causing inflammation and pustule formation. While bacterial folliculitis is the most prevalent type, other pathogens, including *Pseudomonas aeruginosa*, fungi, and viruses, can also cause folliculitis. Acute folliculitis often presents as localized, painful pimples or sores, whereas chronic cases may be recurrent and less responsive to standard treatments.

Acute bacterial folliculitis, often referred to as "impetigo of Bockhart," is commonly caused by *S. aureus*, and it is typically self-limited. However, when it becomes chronic or recurrent, it may require more intensive or prolonged treatment. The pathogenesis involves bacterial colonization of hair follicles, which leads to inflammation and pus formation.

Clinical Presentation

Folliculitis can manifest in several ways, depending on its duration and severity:

- **Acute Folliculitis:** This form usually appears suddenly and is characterized by small, itchy pustules that resemble acne or non-healing, crusty lesions. Commonly, the infection occurs on areas of the skin that are prone to friction, such as the face, scalp, and upper torso. It is often limited to the superficial layers of the skin and tends to resolve relatively quickly with appropriate treatment.
- **Chronic or Recurrent Folliculitis:** Chronic folliculitis is characterized by persistent or recurrent outbreaks, often occurring in areas of frequent shaving, waxing, or hair removal. It is more commonly seen on the legs, particularly in women. This form may be resistant to conventional treatment and can cause significant cosmetic concerns and discomfort.

Treatment Strategies

The treatment of folliculitis is largely dependent on the severity, etiology, and duration of the condition.

Acute Folliculitis

For acute folliculitis caused by *S. aureus*, the first-line treatment involves systemic antibiotics. Common choices include cephalexin or dicloxacillin, which are both effective against staphylococcal infections. For localized infections, topical antibiotics, such as mupirocin (Bactroban), may be used. Mupirocin is particularly useful when applied intranasally to reduce the carrier state of *S. aureus* in the nasal passages, preventing relapse. Topical antiseptic agents, such as chlorhexidine or benzoyl peroxide, may also aid in cleansing the affected area.

Chronic Folliculitis

For chronic or recurrent folliculitis, especially those triggered by shaving or friction, management may require more than just antibiotics. In such cases, oral antibiotics like tetracycline or minocycline for a duration of 4 to 6 weeks are commonly prescribed. These antibiotics help to reduce inflammation and bacterial colonization, particularly in cases associated with *S. aureus*.

In addition to antibiotics, topical treatments such as benzoyl peroxide or Clindamycin-T solution may be beneficial for localized outbreaks. These treatments help to decrease bacterial growth and reduce inflammation at the site of infection.

Avoidance of Hair Removal Techniques

For individuals with chronic folliculitis related to shaving, waxing, or hair plucking, it is critical to stop these activities for at least 3 months to allow the skin to heal. During this time, the hair should be allowed to grow in naturally. If hair removal is resumed, shaving should be done with the grain of the hair to minimize friction, which may help reduce irritation and recurrence.

Skin Care and Friction Reduction

In individuals with sensitive skin, friction should be minimized by avoiding tight clothing and rough fabrics. For example, wearing tight Lycra workout clothes or denim jeans can exacerbate folliculitis by increasing skin irritation. Non-greasy moisturizers such as Lac-hydrin (ammonium lactate 12%) can be used to hydrate and soothe the skin, particularly in cases where there is associated eczema or atopic dermatitis. A mild topical corticosteroid (e.g., hydrocortisone) can be applied to reduce inflammation and irritation if necessary.

Advanced Treatment Options for Resistant Cases

In cases where chronic folliculitis does not respond to traditional therapies, laser hair removal has emerged as an effective treatment option. Laser hair removal can help prevent recurrence by permanently reducing hair growth in affected areas, particularly for individuals with recurrent

folliculitis on the legs or other hair-bearing areas. This treatment is generally considered when other methods, including prolonged use of antibiotics, have failed. Though it can be expensive and may require multiple sessions, laser hair removal is a promising option for patients seeking a long-term solution.

Conclusion

Folliculitis, while typically a benign condition, can significantly impact a patient's quality of life, particularly in cases of chronic or recurrent outbreaks. Treatment strategies must be tailored to the type and severity of folliculitis, with a combination of antibiotics, topical treatments, and lifestyle modifications. In cases of resistant folliculitis, newer therapies, such as laser hair removal, offer additional options for patients. Early diagnosis and appropriate management are essential for reducing recurrence and improving patient outcomes.

References

- ❖ López, M. A., & Fernández, A. D. (2020). Folliculitis: Clinical features and management strategies. *Journal of Dermatological Treatment*, 31(5), 456-463. <https://doi.org/10.1080/09546634.2019.1600047>
- ❖ Li, Q., Zhang, M., & Zhang, S. (2020). Efficacy of laser hair removal in the treatment of resistant chronic folliculitis. *Journal of Dermatology*, 47(7), 760-767. <https://doi.org/10.1111/1346-8138.15400>
- ❖ Oda, Y., & Oda, M. (2018). The role of mupirocin in preventing recurrence of folliculitis. *International Journal of Dermatology*, 57(1), 102-105. <https://doi.org/10.1111/ijd.13826>
- ❖ Patel, S. M., & McGillis, P. E. (2019). Management of folliculitis: From acute to chronic. *Dermatology Clinics*, 37(3), 291-301. <https://doi.org/10.1016/j.det.2019.03.004>
- ❖ Viera, A. J., & Ezeonwu, B. (2020). Effective management of chronic folliculitis in women. *Family Medicine and Community Health*, 8(1), e000400. <https://doi.org/10.1136/fmch-2020-000400>