

Pseudofolliculitis Barbae

Pseudofolliculitis barbae (PFB), commonly known as razor bumps, is a frequent dermatological condition that predominantly affects individuals with curly hair, particularly African American men. PFB occurs when shaved hairs, often with sharp, pointed ends, grow back into the skin, resulting in inflammation and a foreign body reaction. Over time, this process can lead to the formation of keloidal scars in the affected areas, such as the beard and neck.

Pathophysiology

Pseudofolliculitis barbae arises when curved hairs grow back into the skin after shaving, triggering a foreign body inflammatory response. Shaving sharpens the ends of the hairs, transforming them into spear-like structures. As these hairs re-enter the skin, they initiate an immune response, which causes inflammation, follicular irritation, and the formation of raised papules or pustules. Over time, repeated trauma and inflammation can lead to keloidal scarring and the development of fibrotic nodules, resulting in the characteristic bumps observed in affected individuals.

The condition is more prevalent in individuals with curly or coarse hair, as the hair naturally curves back towards the skin. This phenomenon is especially common in African American men due to the typically curly texture of their facial hair. However, people of any ethnicity with curly hair types may also experience PFB.

Clinical Features

The primary presentation of PFB includes:

- Raised papules or pustules in the beard or neck area, often associated with itching and inflammation.
- Keloidal scarring may occur in severe or chronic cases, leading to hardened, elevated bumps.
- Lesions are most often found in areas where shaving occurs, including the beard and neck, and they typically follow the natural direction of hair growth.

Diagnosis

The diagnosis of pseudofolliculitis barbae is primarily clinical. A detailed patient history, including information about shaving habits and hair texture, is critical for distinguishing PFB from other causes of follicular inflammation, such as bacterial folliculitis or ingrown hairs. A skin biopsy is

typically not necessary unless there are concerns about differential diagnoses. In some cases, a culture or bacterial swab may be indicated if there is concern about a secondary infection.

Treatment Options

Preventive Measures and Lifestyle Modifications

The most effective strategy for preventing and treating PFB is to allow the beard to grow. When the hair grows long enough, it no longer curls back into the skin. For most patients, avoiding shaving for 3 to 4 weeks allows the lesions to resolve. During this time, mild prescription corticosteroid creams (e.g., hydrocortisone) may be applied to the affected areas to reduce inflammation and promote healing.

Shaving techniques

When shaving is necessary, several precautions can minimize irritation and prevent further hair regrowth into the skin:

- Shaving every other day rather than daily allows the hair to grow out slightly and reduces irritation.
- Preparation: Softening the beard with a hot, wet washcloth for 5 minutes before shaving, followed by the use of a lubricating shaving gel (e.g., Edge or Aveeno), can help to reduce irritation.
- Shaving with the grain of the beard and avoiding skin stretching can minimize the sharpness of hair ends and prevent hairs from curling back into the skin.
- Electric shavers: Using an electric razor on a high setting can provide a less close shave and may reduce the risk of hair regrowth into the skin. Electric razors should be used without stretching the skin, and shaving with the grain is crucial.
- Barber clippers with a guard can be used to ensure that the hair is not shaved too closely (ideally no closer than 1mm), reducing the likelihood of ingrown hairs.

Chemical Depilatories

- In some cases, individuals may opt for chemical depilatories as an alternative to shaving. These products, such as Magic Shave, Surgex, or Nair, contain active ingredients like barium sulfide or calcium thioglycolate that dissolve hair. However, these depilatories can cause chemical burns if not used carefully and should only be used when the skin is free from lesions.
- Usage guidelines:
 - Apply the depilatory to small areas of the face (e.g., 1/4 to 1/2 of the face).
 - Do not exceed the recommended application time: for barium sulfide depilatories, removal should occur within 3 minutes, and for calcium thioglycolate depilatories, within 5 minutes.

- Rinse thoroughly with soap and water after the application to prevent irritation, followed by neutralization with a diluted vinegar solution.
- Use these products no more frequently than every 48 to 72 hours to avoid excessive irritation.

Pharmacological Treatments

- **Topical corticosteroids:** Mild corticosteroid creams can help reduce inflammation and control pruritus in early cases. However, they may not be effective in preventing recurrence or reducing scarring.
- **Antibiotic therapy:** If the lesions become infected or there is a risk of secondary bacterial infection, topical antibiotics (e.g., Benzamycin, Cleocin-T) or oral antibiotics may be prescribed to address the infection and prevent further complications.
- **Glycolic acid:** Topical treatments containing 8% glycolic acid (e.g., Alpha-hydrox, Neo-Strata) have been shown to improve skin texture and promote healing by exfoliating the skin and preventing follicular occlusion.

Advanced Treatments

- **Electrolysis and laser hair removal:** For individuals with persistent or severe PFB, electrolysis or laser hair removal may be considered. These treatments involve the permanent destruction of hair follicles to prevent the recurrence of ingrown hairs. While effective, these treatments are expensive and often require multiple sessions. There is also a small risk of scarring.
- **Cryotherapy:** In some cases, cryotherapy can be used to treat keloidal scarring or chronic PFB, although evidence supporting its efficacy is limited.

Prevention and Prognosis

To prevent PFB, individuals should consider changing shaving habits, using proper shaving tools, and avoiding shaving when lesions are present. Patients should also be educated on the risks of mechanical irritation and the potential for scarring, which can result from repeated episodes of PFB.

The prognosis for PFB is generally good with appropriate management, though individuals with chronic cases may develop keloidal scarring that can be difficult to treat. Early intervention and lifestyle modifications are key to preventing long-term complications.

Conclusion

Pseudofolliculitis barbae is a common and treatable condition, particularly in individuals with curly hair. Through appropriate shaving techniques, the use of chemical depilatories, and pharmacologic treatments, the condition can be managed effectively. For severe or persistent

cases, electrolysis or laser hair removal may provide a permanent solution. Early diagnosis and a tailored treatment plan are essential to prevent scarring and improve patient outcomes.

References

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