

Madigan Army Medical Center Referral Guidelines

Pseudofolliculitis Barbae

Diagnosis/Definition

Pseudofolliculitis Barbae (PFB) is a disease involving either the embarbment of a growing hair back into the skin, or, a hair, which, while growing, does not clear the follicular orifice, but instead, penetrates the follicular wall into the surrounding skin. Either results in an inflammatory response consistent with a foreign body reaction, and the potential for a scar and even a keloid (a tumor made of scar tissue – see Figure 1). It takes approximately 3-5 days for the hair to grow long enough to embarb into the skin. Penetration from within the follicle occurs if the follicle is damaged, or, if the hair is clipped too short, as many electric shavers and multiple track razors can do. This disease occurs primarily in the beard hair area, and, while usually seen in male patients of African-American descent, can potentially be seen in any ethnic/racial population, and in either gender. It frequently flares when shaving is required, such as when a patient enters active duty in military service. Pustules also form when the lesion becomes secondarily infected, usually with *Staphylococcus aureus*. Scarring, dimpling or pitted scars and pigmentation changes may occur as a result of the disease process. The following are guidelines in managing patients with this disease, and guidelines for referral.



Figure 1 - Keloid

Initial Diagnosis and Management

- An examination of the facial skin should reveal in-growing hairs, often associated with a raised papule or pustule, and rarely a hypertrophic scar or early keloid. Gently lifting the in-growing hair with a needle should release the end of the hair that is embarbing into the skin, confirming the diagnosis.
- Treatment should be conducted in three phases:
 - Phase I
 - Start with placing the patient on a profile change (DA3349) against shaving the beard hair (see figure 2) for one month (for more severe PFB, 2-3 months may be needed – only physicians may generate a temporary profile change that exceeds 30 days, not to exceed 90 days, except in the case of orthopedic PA's for orthopedic problems). This allows the beard to grow, assisting with releasing the embarbed hairs. The profile should include information regarding the need to shave the goatee (small triangle of hair just inferior to the lower lip), the need to

keep the mustache trimmed IAW appearance standards, and, the need to keep the beard hair at ¼ inch in length. The beard may NOT be styled. Include a demonstration of how to gently lift the in-growing hair ends out of the skin. Hair release treatment is probably the single-most important treatment for this disorder – if there is no in-growing hair, there is no inflammation. This should be performed by the patient regularly (daily-every other day), in a systematic way. Basically gently lift the hair with a sharp toothpick, or clean needle – it should not hurt to perform this procedure. Do NOT pluck the hair out with a tweezers – this damages the follicular wall, which may lead to a hair follicle infection, or the inability for the hair to track correctly as it grows back along the hair follicle. Start the patient on topical medications at this time - these may include a topical antibiotic such as clindamycin solution (i.e. Cleocin T), erythromycin solution (i.e. T-Stat), azelaic acid cream (i.e. Azelex), or sulfacetamide with or without sulfur (Klaron, Sulfacet-R). These may be massaged into the skin daily – bid, and they help reduce the potential for secondary folliculitis. Topical retinoids, including tretinoin (i.e. Retin A, Avita), and adapalene (Differin gel), massaged into the affected skin qhs help reduce the adherence of skin cells, attempting to help the skin shed old dead skin cells and may normalize keratinization, with resulting decrease in embarrment. Finally, hydrocortisone cream, 0.5% - 1% may be massaged into the affected irritated areas of the skin to decrease the foreign-body inflammation. Patient may gently clean the skin with mild soap, and gently scrub using a washcloth, Buff-Puff, or surgical hand scrub brush, gently swirling the skin. The treatment modalities listed here should continue not only through Phase I, but for the rest of the patient’s time on active duty, or when a clean-shaven appearance is needed.

PHYSICAL PROFILE									
For use of this form see AR 40-501; the proponent agency is the Office of the Surgeon General.									
1. MEDICAL CONDITION (Indicate as appropriate) (Priority of) (USIL/ISS/ISS/ISS/ISS) 2. CODE (Form 7E AR 40-501) 3. TAGNO (Form 7E AR 40-501) 4. DATE (DDMMYY) 5. GRADE (Form 7E AR 40-501) 6. NAME (Form 7E AR 40-501)									
4. PROFILE TYPE									
A. TEMPORARY PROFILE (Indicate as appropriate) (Indicate as appropriate) (Indicate as appropriate)									
B. PERMANENT PROFILE (Indicate as appropriate) (Indicate as appropriate) (Indicate as appropriate)									
C. IF A PERMANENT PROFILE WITH A 3 OR 4 PALSIS, DOES THE SOLDIER MEET RETENTION STANDARDS (AMC/ART/2 AR 40-501)? (Indicate as appropriate) (Indicate as appropriate) (Indicate as appropriate)									
5. FUNCTIONAL ACTIVITIES FOR PERMANENT AND TEMPORARY PROFILES (Indicate as appropriate) (Indicate as appropriate) (Indicate as appropriate)									
A. ABLE TO CARRY AND FIRE INDIVIDUAL WEAPON WEAPONS									
B. ABLE TO MOVE WITH A FIGHTING LOAD AT LEAST 2 MILS PER SEC. (Indicate as appropriate) (Indicate as appropriate) (Indicate as appropriate)									
C. ABLE TO WORK PROTECTIVE MASK AND ALL CHEMICAL DEFENSE EQUIPMENT									
D. ABLE TO CONDUCT AN INDIVIDUAL FIGHTING POSITION (Indicate as appropriate) (Indicate as appropriate) (Indicate as appropriate)									
E. ABLE TO DO A BARRAGE WORK (Indicate as appropriate) (Indicate as appropriate) (Indicate as appropriate)									
F. IS SOLDIER HEALTHY WITHOUT ANY MEDICAL CONDITION THAT PREVENTS DEPLOYMENT?									
6. ART									
A. ART 1									
B. ART 2									
C. ART 3									
D. ART 4									
E. ART 5									
F. ART 6									
7. STANDARD OF MODIFIED ADDING OR DEDUCTING ACTIVITIES (Indicate as appropriate)									
UNLIMITED (U) (Indicate as appropriate) (Indicate as appropriate) (Indicate as appropriate)									
LIMITED (L) (Indicate as appropriate) (Indicate as appropriate) (Indicate as appropriate)									
NO (N) (Indicate as appropriate) (Indicate as appropriate) (Indicate as appropriate)									
8. UPPER BODY WEIGHT TRAINING (Indicate as appropriate) (Indicate as appropriate) (Indicate as appropriate)									
9. LOWER BODY WEIGHT TRAINING (Indicate as appropriate) (Indicate as appropriate) (Indicate as appropriate)									
10. OTHER (Indicate as appropriate) (Indicate as appropriate) (Indicate as appropriate)									
11. THIS PARASITIC AN OPTIMAL USAS IS USED (Indicate as appropriate) (Indicate as appropriate) (Indicate as appropriate)									
12. TYPE NAME, GRADE OR PROMOTION OFFICER									
13. SIGNATURE									
14. DATE (DDMMYY)									
15. ACTION APPROVED AUTHORITY									
16. TYPE NAME, GRADE OF SIGNED PROFILE OFFICER OR APPROVING AUTHORITY									
17. SIGNATURE									
18. DATE (DDMMYY)									
19. ACTION BY UNIT COMMANDER (Form 7E AR 40-501)									
20. COMMENT									
21. TYPE NAME, GRADE OF UNIT COMMANDER (Indicate as appropriate) (Indicate as appropriate) (Indicate as appropriate)									
22. SIGNATURE									
23. DATE (DDMMYY)									
24. PATIENT'S IDENTIFICATION (Indicate as appropriate) (Indicate as appropriate) (Indicate as appropriate)									
25. UNIT									
26. ISSUING OFFICE, PROVIDOR EMAIL & PHONE NUMBER									
PROVIDOR OFFICE (Indicate as appropriate) (Indicate as appropriate) (Indicate as appropriate)									
PROVIDOR (Indicate as appropriate) (Indicate as appropriate) (Indicate as appropriate)									
UNIT (Indicate as appropriate) (Indicate as appropriate) (Indicate as appropriate)									
ISSUING OFFICE (Indicate as appropriate) (Indicate as appropriate) (Indicate as appropriate)									
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UNIT (Indicate as appropriate) (Indicate as appropriate) (Indicate as appropriate)									

Figure 2 – DA Form 3349

- Phase II
 - Patient taken off of the profile and now is shown how to shave. Currently, there are a number of ways to remove facial hair, but only a couple are appropriate for patients at risk for PFB. A single-edged razor (i.e. Bic, Bumpfighter) can help – gives a fairly clean shave, and, if you confine the shaving to one pass per area of skin, leaves the hair just long enough to protrude from the follicle. The razor should be new for each shave, encouraging patients to buy the disposable razors. By trying to shave with a dull razor, there is more effort exerted, and, higher risk for nicking the skin, or razor burn. Shaving gels, particularly those with extra lubricants such as Edge Gel ultra-sensitive, are better than most foams for shaving preps. Beard-Mustache-Sideburn trimmers (i.e. Wahl, Andiss, Oster, Norelco, Panasonic) are non-adjustable, fine-toothed clippers. These can shave close enough to pass inspection, afford a tight seal with a protective mask, and leave the hair relatively long (slightly less than a typical 5 o'clock shadow), making penetrating hair problems unlikely. Use of a pre-shave lotion such as William's Lectric Shave, or Mennen's Skin Bracer can help lubricate the skin prior to shaving, making the clipper slide over the skin easier. Magic shave and other chemical depilatories certainly do a great job removing hair, but are so irritating, especially on already inflamed skin, that their use can only be performed every 4 days, long enough for hairs to embed into the skin. Regardless of the method for removing hair (depilatory excepted), patients should shave in the direction the hair is growing. They should NOT stretch the skin as this contributes to shaving TOO close. Do not go over an area of skin more than once or twice to get the last hair, as this can lead to razor burn. After demonstrating the correct shaving techniques, patient may be dismissed to do the treatment at home. The patient may follow-up during the next month to make sure that there are no flares and that the patient is following instructions. Adjust meds or other aspects of treatment as needed. After a month, patient may be released to Phase III.
- Phase III: Patient released from the program.
 - During the treatment period, intralesional steroids can be used to treat stubborn papules and small scars. Triamcinolone suspension, diluted to 3mg/cc, may be injected in small amounts into each stubborn papule – beware of the risks of atrophy, striae, telangiectasia formation, and pigment changes. Repeat monthly as needed.
 - Keep in mind that the patient has a vested interest in performing this self-care. In addition to minimizing scarring and discomfort, successful treatment means no need for a permanent profile change.

Indications for Specialty Care Referral

- Substantial keloid/scar formation.
- Poor or no response to conservative treatment.
- Patient can no longer wear MOPP gear (protective mask).
- Permanent hair removal via laser to be considered due to chronic management challenges.
- Permanent profile is contemplated.

Criteria for Return to Primary Care

- PFB has improved due to adequate self-care by patient.

- Patient has completed hair-removal treatments if performed.
- Patient has failed treatment due to poor compliance or non-compliance.
- Patient has received a permanent profile change, and skin condition is clinically clear and stable.



Figure 3 - Pseudofolliculitis Barbae

Pictures of Pseudofolliculitis Barbae (PFB) from Dermatology and [SAUSHEC](#) (San Antonio Uniformed Services Health Education Consortium) Dermatology teaching files

Last Review for this Guideline: **January 2010**
Referral Guidelines require review every three years.

Maintained by the Madigan Army Medical Center - Quality Services Division
Clinical Practice and Referral Guidelines Administrator