

# cutis<sup>®</sup> photo quiz

COL Dirk M. Elston, MC, USA  
COL Jeffrey Meffert, MC, USAF  
Department of Dermatology (MCHE-DD)  
Brooke Army Medical Center  
3851 Roger Brooke Dr  
Fort Sam Houston, TX 78234-6200



A patient's wife noticed spots on her husband's lips that she feared might be herpetic. The patient said the spots have been present for years. He noted a thick waxy residue left on the rim of his cup when drinking hot coffee.

**What is your diagnosis?**

PLEASE TURN TO PAGE 49 FOR DISCUSSION

# The Diagnosis: Fordyce Spots

Fordyce spots represent enlarged sebaceous glands unassociated with hair follicles. They present as grouped yellow papules on the vermilion border of the lips and buccal mucosa. The term *ectopic sebaceous glands* has been applied to these lesions but is inaccurate because clinically invisible sebaceous glands are commonplace on the vermilion border of the lips and oral mucosa of adults.<sup>1</sup> Normal sebaceous glands are present on the vermilion border in 80% to 95% of adults.<sup>2</sup> Fordyce disease is a pathologic enlargement of these sebaceous glands that renders them visible through the overlying epithelium.

Fordyce spots are relatively common. They have been noted in 1% of Swedish newborns<sup>3</sup> and often become more prominent in adulthood. It is likely that hormonal influences play some role in the enlargement of the glands in adulthood. It is unclear whether Fordyce spots occur purely as a result of local hypersensitivity to hormonal stimulation or if they represent true adenomatous proliferations of sebaceous glands.

The waxy contents of Fordyce glands melt at a relatively high temperature. Patients may note a thick waxy smudge on the rim of a coffee mug after consuming a hot beverage. This phenomenon is temperature dependent. Smudges characteristically occur on the rims of coffee mugs but not water glasses. This phenomenon, described by Dr. Jeffrey Meffert based on personal experience, appears to be pathognomonic for the condition and is known in our department as "Meffert's sign." (The lips and the coffee mug in the photographs belong to Dr. Meffert.)

Although most commonly noted on the lips, Fordyce spots may be more widely distributed. Fordyce spots localized to the esophagus may be noted on endoscopy.<sup>4</sup> Similar enlarged sebaceous lobules, also referred to as Fordyce spots, may occur on the glans penis.<sup>5</sup> More commonly, enlarged penile sebaceous glands are found on either side of the frenu-

lum and are referred to as Tyson's glands. Purulent infection of Tyson's glands may be seen in gonorrhoea.

Fordyce spots are benign and are not known to undergo malignant degeneration. They are not generally associated with any systemic disease. No treatment is necessary, and patients can be reassured about the benign nature of the condition.

Rarely, patients are so troubled by the appearance of the lesions that they request therapy. An anecdotal report suggests that isotretinoin may produce improvement in the lesions.<sup>6</sup> However, the duration of response to isotretinoin therapy is unknown. Thermo-cautery or cryotherapy for the treatment of Fordyce spots may be complicated by scarring or noticeable areas of pallor within the vermilion border of the lips. Selective destruction with laser light is theoretically attractive, but little published data are available to support the use of any currently available laser system. Ideally, destructive therapy should ablate the sebaceous lobules and spare the overlying mucosa and underlying vasculature. As better laser systems become available, more effective therapy for this condition will certainly become a reality.

## REFERENCES

1. Dreher A, Grevers G. Fordyce-Flecken: ein wenig beachteter befund des lippenrotes und der mundschleimhaut. *Laringo-Rhino-Otologie*. 1995;74:390-392.
2. Monteil RA. Les grains de Fordyce: maladie, heterotopie ou adenome? etude histologique et ultrastructurale. *J Biol Buccale*. 1981;9:109-128.
3. Flinck A, Paludan A, Matsson L, et al. Oral findings in a group of newborn Swedish children. *Int J Pediatr Dentistry*. 1994;4:67-73.
4. Potet F, De La Espriella J, Grossin M. Grains de Fordyce a localisation oesophagienne. *Ann Dermatol Venereol*. 1992;119:576.
5. Massmanian A, Sorni Valls G, Vera Sempere FJ. Fordyce spots on the glans penis. *Br J Dermatol*. 1995;133:498-500.
6. Monk BE. Fordyce spots responding to isotretinoin therapy. *Br J Dermatol*. 1993;129:355.

The opinions and assertions contained herein are the private views of the authors and should not be construed as official policies or reflecting the views of the Department of Defense or the Army.