Letters

Misplaced Spending

The Opinion "Waste Not? Why Bother!" (March) addressed one of my pet peeves about the increasing regulation and control of our profession.

Last year, our local hospital closed our "laser center" and moved all the lasers to the operating room. Previously, we could use the same bottle of topical anesthetic or dilating drops for multiple patients. Now, due to increasing regulation from outside agencies, we have to use a brand-new bottle of drops for each patient encounter. Please take a look at this photograph of eyedrops that I collected at the time of one of our scheduled laser treatments. That is easily several thousand dollars' worth of eyedrops needlessly charged to Medicare or other third-party payers. It is absolutely insane, and no amount of complaining will change anything. It's like the doctors' opinions don't count.

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Alcohol Delamination

I read with interest "Treatment of Recurrent Corneal Erosions" (Ophthalmic Pearls, March). The real issue with treatment of recurrent corneal erosion (RCE) is prevention in the first place. Initial corneal erosions need to be managed effectively by proper removal of loose corneal epithelium with a sponge or forceps. Blades and burrs should be avoided, as these damage the all-important basement membrane and Bowman's layer, which are crucial for effective adhesion of the epithelium.[1] If the loose corneal epithelium is removed effectively, this allows the surrounding healthy epithelium to migrate and close the gap. If the loose corneal epithelium is not removed, this may lead to recurrent erosion.

The review covers most of the traditional treatment options for RCE but failed to mention alcohol epithelial debridement or delamination as a surgical treatment option. Alcohol delamination is very effective at removing the epithelium without damaging Bowman's layer or the lamina densa of the basement membrane.[2] It allows adhesion of the epithelium with a very good success rate.[3,4]

The technique was first reported in a retrospective case series as a novel but effective alternative for treating RCE.[2] It was observed that retreatment after LASEK was associated with increased difficulty in removing the epithelium the second time around. This prompted the authors to use this technique for removing the epithelium in the treatment of RCE. Under topical anesthesia, approximately 4 or 5 drops of 20 percent alcohol are placed into the space within a 9-mm optical zone marker or well held firmly on the cornea to cover the area of erosions, and left for 30 seconds maximum. Care is taken to avoid alcohol coming in contact with the limbal stem cells. The alcohol is removed from the "alcohol well" with sponges, and the ocular surface irrigated with at least 20 mL of balanced salt solution. A large bandage contact lens is placed for one to two weeks. Preservative-free antibiotic eyedrops, four times a day, are prescribed postoperatively for two weeks, with oral analgesia as needed.

Therapeutic options such as anterior stromal puncture, diamond burr polishing, and phototherapeutic keratectomy have all been used successfully but are limited by potential for scarring over the visual axis, refractive change, or cost and availability. Alcohol delamination of the corneal epithelium produces no scarring or significant refractive change and is a cost-effective option for treating intractable recurrent corneal erosion. Although the precise mechanism of action of this technique is not known, by cleaving along the lamina lucida, alcohol delamination enables efficient removal of the epithelium and subbasal cellular debris with an almost complete preservation of Bowman's layer.[5] This leaves behind a very smooth surface, which facilitates migration and firmer adhesion of new epithelial cells.

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1 Afshari N et al. Recurrent corneal epithelial erosion. In: Albert D, Miller J, eds. *Albert & Jakobiec's Principles and Practice of Ophthalmology.* 3rd ed. Philadelphia: Elsevier, Inc.; 2008.
2 Dua HS et al. *Ophthalmology.* 2006;113(3):404-411.
3 Singh RP et al. *Br J Ophthalmol.* 2007;91(7):908-911.
4 Agrawal P et al. *Ophthalmology.* 2007;114(10):1953-1954.
5 Mencucci R et al. *Br J Ophthalmol.* 2010;94(7):933-939.