Patients had metastatic prostate cancer with bony lesions amenable to pamidronate treatment. Neither had a history of ocular or connective tissue disease.

The close temporal relationship between pamidronate infusion and the onset of orbital symptoms in our patients is in agreement with prior reports of pamidronate-related ocular and orbital inflammation.1-3 Rapid response to pamidronate withdrawal and prednisone therapy supports a drug-related etiology for this orbital process. These 2 cases represent a potentially serious adverse effect of pamidronate that has not been noted previously in the treatment of malignancy. Whether this process represents a distinct pathogenic entity or is rather an orbital equivalent of previously described anterior segment inflammation remains to be determined.

Prem S. Subramanian, MD, PhD
John B. Kerrison, MD
Preston C. Calvert, MD
Neil R. Miller, MD
Baltimore, Md

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Corresponding author: Prem S. Subramanian, MD, PhD, Wilmer Eye Institute, Maumencee B109, The Johns Hopkins Hospital, 600 N Wolfe St, Baltimore, Md 21287 (e-mail: psubram1@jhmi.edu).


Improved Technique for Temporary Tarsorrhaphy With a New Cyanoacrylate Gel

The use of cyanoacrylate adhesive to form a temporary tarsorrhaphy was first reported by Schimek and Ballou in 1966.1 They applied Eastman 910 monomer (methyl 2-cyanoacrylate), a clear, colorless liquid adhesive, to the upper eyelashes of 4 patients via a cotton-tipped applicator or the metal spear from the tube and approximated the eyelashes to the skin of the lower eyelid. Numerous reports have discussed accidental tarsorrhaphy of the eyelids and eyelashes from accidental splashing of acrylic adhesive into the eye.2,5 Other studies have shown the efficacy of using either fibrin glue or cyanoacrylate glue to close corneal perforations up to 3 mm in diameter.5 In 1991, Donnenfeld et al6 discussed the technique of applying liquid cyanoacrylate with an applicator tip to the upper and lower eyelashes to form a temporary tarsorrhaphy in patients who are unsuitable for more invasive or permanent procedures. We report that the use of the new gel form of cyanoacrylate facilitates the application process, affords better control of tarsorrhaphy length, diminishes any secondary abrasions from applying the liquid adhesive from the standard tube, and reduces the possibility that the glue will spill over the eyelid margin and solidify in the fornix.

Report of a Case. An 81-year-old black woman sought treatment at our eye clinic for left eye pain. She was currently admitted to the hospital for a cardiac workup secondary to chest pain. Her medical history was significant for hypertension, diabetes mellitus, atrial fibrillation, and glaucoma. She was being treated with warfarin sodium, heparin, oral hypoglycemics, and atenolol. Her ocular history revealed glaucoma, bilateral cataract extraction with implants, and a left corneal transplant. She denied any prior surgery. She did not remember exactly when any of the procedures had been performed.

Visual acuity was 20/40 OD and 20/400 OS at 14 inches without correction. Her pupils were unresponsive secondary to prior surgery. She demonstrated full ocular motility and intraocular pressure of 10 mm Hg OD and 17 mm Hg OS with Schiotz tonometry. Findings from an external lid examination were normal. Her left conjunctiva was slightly hyperemic. The left cornea contained a mildly edematous corneal graft with an epithelial defect in the inferolateral quadrant measuring approximately 2 mm in diameter. There was no anterior chamber reaction. A dilated fundus examination revealed a cup-disc ratio of 0.95% in the right eye but no view of the left fundus. B-scan ultrasonography of the left eye revealed only a posterior vitreous detachment. The patient was prescribed antibiotic prophylaxis for the epithelial defect, frequent corneal lubrication, and a topical glaucoma medication. Over the next 2 days the defect did not heal, so we decided to create a temporary tarsorrhaphy. Because of the patient’s hypocoagulable state, we ruled out an invasive tarsorrhaphy procedure.

After informed consent was obtained, sterile cyanoacrylate liquid was applied to the lateral eyelid margins using an applicator tip. This immediately ran over the eyelid margins onto the conjunctiva and extended too far medially onto the eyelids. Most of this material had to be removed because it was noted to have jagged edges as it hardened within the inferior fornix and would have caused further corneal injury if left in place. We then decided to try the new gel form of cyanoacrylate. The cyanoacrylate gel was applied, with an easily controlled amount, to the eyelid margin and eyelashes. The standard applicator tip, supplied with the gel, was used, and we did not need additional tips, syringes, or needles. Owing to the gel’s quick hardening and ability to stay in the location in which it was applied, the lateral eyelids now stayed well approximated once closed with the gel, without any escape of the gel medially onto the eyelid margins or posteriorly into the fornix.

The gel is manufactured by Pacer Technology (Rancho Cucamonga, Calif). It is composed of ethyl-2-cyanoacrylate, polymethylmethacrylate, and hydroquinone (0%-1%). The gel has a specific gravity of 1.05 and is polymerized by water, alcohol, amines, alkaline materials, and direct UV exposure.

Comment. The use of cyanoacrylate is an excellent method for cre-
ating a temporary tarsorrhaphy in patients unsuitable for more invasive procedures, for temporary eyelid apposition for persistent epithelial defects, or just for ease of use in the office or at the bedside. Cyanoacrylate glue is readily available and does not require an operating room setting; application is a relatively easy skill to learn. We have observed that use of the gel form of cyanoacrylate makes this simple procedure even easier and more controllable, with less chance of causing an inadvertent corneal abrasion in a patient with an already problematic cornea. Patients will therefore have less discomfort with the procedure because there is a greatly reduced chance of accidentally getting any glue on the ocular surface, thereby removing the possible need for a post-procedure bandage contact lens to cover any iatrogenic abrasions. In addition, there is no need for a separate syringe or needle because the gel comes with an applicator tip. This will help alleviate patient fears because there is now no need to approach the patient with a sharp object, which allows for better patient compliance as the gel is being applied.

Michael Ehrenhaus, MD
Peter D’Arienzo, MD
Flushing, NY

The authors have no relevant financial interest in this article.

Corresponding author and reprints: Michael Ehrenhaus, MD, St Joseph’s Eye Care Center, 158-40 79th Ave, Flushing, NY 11366 (e-mail: drmike1@optonline.net).

ARCHIVES Web Quiz Winner

Congratulations to the winner of our May quiz, Edmund Wong, MD, Retinal Fellow, Joslin Diabetes Center, Harvard Medical School, Boston, Mass. The correct answer to our May challenge was acute zonal occult outer retinopathy (AZOOR). For a complete discussion of this case, see the Photo Essay section in the June ARCHIVES (Smetana S, Feman SS, Kleber C. The retinal features of acute zonal occult outer retinopathy. Arch Ophthalmol. 2003;121:914-915).

Be sure to visit the Archives of Ophthalmology Web site (http://www.archophthalmol.com) and try your hand at our Clinical Challenge Interactive Quiz. We invite visitors to make a diagnosis based on selected information from a case report or other feature scheduled to be published in the following month’s print edition of the ARCHIVES. The first visitor to e-mail our Web editors with the correct answer will be recognized in the print journal and on our Web site and will also be able to choose one of the following books published by AMA Press: Clinical Eye Atlas, Clinical Retina, or Users’ Guides to the Medical Literature.