# CASE REPORTS

### DELAYED POSTOPERATIVE HEMORRHAGE COMPLICATING CHALAZION SURGERY

Julian A. Procope, MD, and Earl D.R. Kidwell, Jr, MD Washington, DC

Chalazion surgery is a common minor ophthalmic surgical procedure used to treat chalazia after conservative measures have failed. Complications are infrequent and generally easily managed with minimal morbidity. This article presents an atypical case of an elderly woman with a history of hypertension who experienced sudden profuse hemorrhaging 10 days after chalazion surgery. The clinical findings are presented along with a brief overview of the relevant vascular anatomy of the eyelid and a discussion of possible etiologic factors. (*J Natl Med Assoc.* 1994;86:865-866.)

**Key words** • ophthalmic surgery • chalazia • postoperative hemorrhage

#### **CASE REPORT**

An 80-year-old black female with a history of controlled hypertension underwent uncomplicated chalazion removal from the left upper lid on August 20, 1992. The superior tarsal conjunctiva was infiltrated with lidocaine 2%/epinephrine 1:100 000 at the superior tarsal margin. A cruciate incision was made into the tarsal plate. Curettage of the wound and dissection of the remaining fibrous capsule was performed. The patient wore a pressure patch for 24 hours. Follow-up on the first postoperative day indicated a good result.

On August 30, 1992, the patient presented to the Howard University Hospital emergency room reporting

From Howard University College of Medicine, Washington, DC. Requests for reprints should be addressed to Dr Earl D.R. Kidwell, Jr, MD, 7131 Liberty Rd, Ste 101, Randallstown, MD 21207.

the sudden onset of profuse bleeding from the left eye beginning about 30 minutes earlier. Vital signs on admission were blood pressure, 130/90 mm Hg; pulse, 76; and temperature 99.0°F. An emergency ophthalmological consultation was requested.

The patient's left eye was covered with a gauze dressing that was soaked with blood. On removal of the dressing, a steady, broad stream of blood was emanating from between the closed lids. The patient denied any recent trauma to the eye, excessive rubbing, straining, or heavy lifting. She did, however, admit to poor compliance with her blood pressure medication.

On manual opening of the eyelids, large clots were expressed with continued rapid hemorrhage from a location on the tarsal conjunctival surface of the left upper lid. The globe was intact with normal-appearing anterior segment and posterior chamber intraocular lens. Visual acuity was 20/30 OD and 20/50 OS. On eversion of the upper lid, a single arteriolar bleeder was localized about 1 mm to 2 mm below the superior tarsal margin. Thermocautery of the vessel resulted in prompt cessation of bleeding. The patient was pressure patched and admitted for continued observation. The following day, the examination was normal except for a few small ecchymotic areas on the left upper lid. Blood work obtained that morning (approximately 12 hours after onset of hemorrhage) showed a decrease in the hematocrit from 38.9% on admission to 34.1%—an estimated blood loss of 250 cc to 300 cc. The patient had not received intravenous or significant oral fluid supplementation.

#### **DISCUSSION**

Chalazion surgery is a common ophthalmic surgical procedure, performed by junior residents as well as those at the attending level. There are many different management strategies and techniques for excision and drainage.<sup>1-3</sup> The procedure is relatively straightforward, and complications are generally few and easily managed. One of the possible complications of chalazion surgery is postoperative bleeding that normally occurs within the first 24 hours following the procedure; such bleeding is usually mild.

In the case described, the patient presented 10 days after her procedure with no history of antecedent trauma to nor excessive manipulation of the eyelid. The amount and rate of the bleeding were suggestive of an arteriolar source, which was confirmed on examination. The normal location of the peripheral vascular arcade of the upper lid is just superior to the upper tarsal border. Anomalous vessels, however, are known to exist. It is possible, therefore, that inadvertent damage to such a vessel was the etiologic factor in this case. Hypertension also may have been a contributing factor in light of the patient's confessed poor compliance, although her systolic blood pressure was never higher than 150 mm

Hg throughout her hospital stay. There was no previous history to suggest the presence of blood dyscrasias, nor any laboratory evidence of a bleeding or coagulation disorder. The patient denied the use of anticoagulants or aspirin-containing products.

A review of the literature failed to uncover any previous cases with the length of delay in and the extent of postoperative hemorrhage with which this patient presented. We present this case, therefore, as a reminder that although chalazion excision and drainage is a relatively minor procedure, complications do occur and potentially can be devastating.

#### **Literature Cited**

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## A Page in History...

The Journal of the National Medical Association began as a quarterly publication in 1909. The Journal was published at the Tuskegee Institute in Alabama and the subscription price for a year was 50 cents (this quickly jumped to \$1 a year in 1910). The Journal's first editor-in-chief was C.V. Roman, MD, from Nashville, Tennessee. Serving as his associate editor was J.A. Kenney, MD, from Tuskegee, Alabama with W.G. Alexander, MD, from Orange, New Jersey acting as the Journal's business manager. W.S. Lofton, DDS, from Washington, DC served as the Journal's dental editor and Amanda V. Gray, PharD, from Washington, DC acted as the pharmaceutical editor.