SPECIAL ARTICLE

A Simple Maneuver to Reposit a Subluxed Globe

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In patients with thyroid orbitopathy, severe lid retraction and proptosis may produce spontaneous axial globe subluxation. This acute event is characterized by anterior displacement of the globe beyond the orbital rim, retraction of both upper and lower eyelids behind the globe, and tethering of the optic nerve.[1,2] This frightening occurrence causes severe pain because of exposure keratopathy and forward displacement of the globe, as the retracted eyelids are squeezing the retrobulbar tissues. Spontaneous globe subluxation frequently occurs at home or at work, and patients experiencing this for the first time often panic because they have never been forewarned of this possibility nor received any instruction on how to attend to such an emergency. The lack of concise patient instruction for a quick and safe method of self-administered globe reposition is the main impetus for the design of current technique.

One quick maneuver to extricate the eyelids from behind the globe is to instruct the patient to maintain a constant downgaze posture, thus negating the retracting action of the levator and simultaneously relaxing the superior rectus. While pinching and pulling the upper eyelid skin upward with two fingers of one hand, the index finger of the other hand makes contact with the superior scleral surface and pushes the globe downward and backward at the same time (**Figure 1**). To minimize discomfort and to avoid possible corneal abrasion, the patient is carefully instructed to make contact only on the scleral surface. This synchronized motion permits the upper eyelid to ascend the posterior scleral surface more easily. Once the upper eyelid arches over the equator, and while the fingers are still firmly pinching the eyelid skin forward, the patient then looks upward; superior rectus action rotates the globe under the distracted upper eyelid. This maneuver usually will reposition the globe behind the eyelids and can be performed by the patient immediately when the incident occurs. For patients who are predisposed to this condition, this maneuver is demonstrated to them as a precautionary measure, in a similar manner as instructing the Heimlich maneuver for relieving foreign body airway obstruction.

If the patient is unsuccessful in correcting the problem and presents to the emergency department or the physician's office, a small pediatric Desmarres retractor may be used to engage the eyelid to pull it over the globe. Frequently, however, the curved blade of the Desmarres retractor cannot get under the tight and retracted upper lid. To circumvent this, a large-sized paper clip may be used. The paper clip is spread apart to form a right angle, similar to the configuration of a hand-held laryngoscope. The wider and longer horizontal arm of the paper clip is bent slightly and the sharp end of the wire is bent upward further to avoid inadvertent contact with the globe (**Figure 2**). Topical anesthetic is applied to the exposed globe before attempting extrication. The physician positions the horizontal arm on top of the globe and introduces it between the upper lid margin and superior rectus. The superior rectus muscle insulates the tip of the paper clip from accidental contact with the optic nerve. Once the tip of the clip is under the eyelid, the globe is depressed with the ring finger of the hand holding the clip, while the ex-

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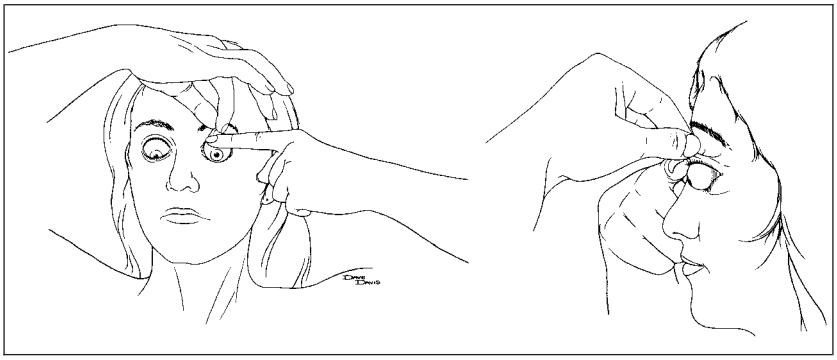

Figure 1. *Left, Front view. While the patient is maintaining a constant downward gaze posture, the upper eyelid skin is pulled upward with the fingers of one hand and the globe is simultaneously depressed with the index finger of the other hand. The importance of contacting only the scleral surface is emphasized to the patient. Right, Side view. This maneuver permits the retracted upper eyelid to ascend the posterior scleral surface and to arch over the equator.*

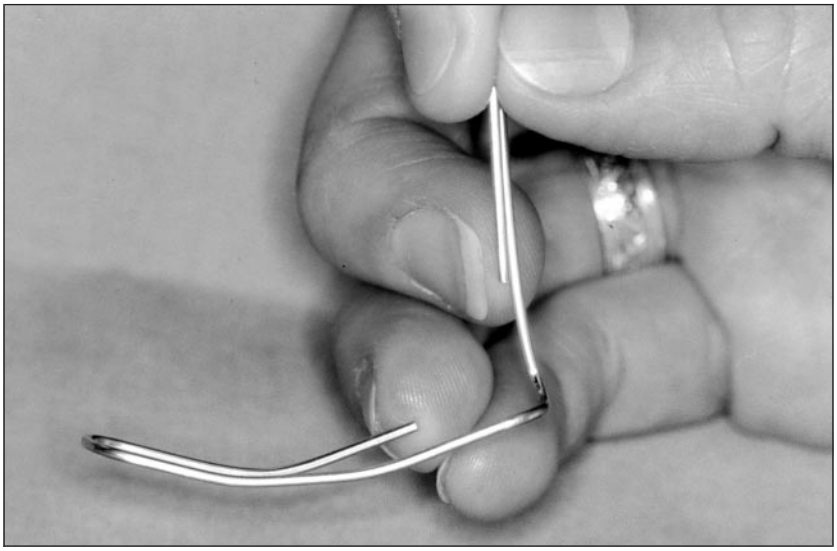

Figure 2. *Note the horizontal blade of the paper clip is bent upward and the ring finger insulates the sharp end of the wire.*

aminer simultaneously pulls the eyelid skin upward with the fingers of the other hand. The upper eyelid glides over the curved arm of the paper clip. When the eyelid passes over the equator, the patient is instructed to look upward, thus pulling the globe behind the eyelid. In this maneuver, the paper clip functions like a shoehorn in guiding the lid over the subluxed globe. This simple instrument has been successful in extricating the retracted upper eyelid from behind the globe.

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From the Archives of the ARCHIVES

A look at the past . . .

Dr Knapp said, in former times when, afraid of the danger, he had cauterized superficially, the treatment had been negative, *ie*, followed by no marked improvement. During the last six or eight years he had used galvano-cautery, with a disciform electrode. Without perforation of the cornea the effect was slight, and the operation had to be repeated. Of late he therefore had perforated the cornea; the results had been good, no eye lost; in one eye the heat had produced a cataract; the eye after extraction obtained very good sight. He had usually applied the electrode a little below the centre of the cornea, had made iridectomy in two cases, in one for optical purposes, in the other for glaucoma which had set in when the corneal fistula had closed.

Reference: Knapp H. The surgical treatment of keratoconus and high degrees of myopia. *Arch Ophthalmol.* 1898;27:452.