The unmasking of latent dermatochalasis is a potential complication of the use of BTX-A in the treatment of forehead wrinkles. Thorough preoperative assessment of these patients can identify those at risk of this problem and thus reduce the risk of the complication.

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Sir,

Dehiscence of radial keratotomy incision during phacoemulsification

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Patients with previous radial keratotomy (RK) have radial incisions of unknown depth, often extending to the limbus, limiting the space for safe placement of a corneal section for phacoemulsification. We report a case of dehiscence of an RK incision during phacoemulsification.

Case report

An 85-year-old male with high myopia presented with a best-corrected visual acuity (BCVA) of 6/36 in either eye. Examination revealed bilateral RK with eight incisions in each eye and significant bilateral lens opacity. The RK, performed 14 years earlier, reduced his myopia (spherical equivalent) from −17.00 to −5.50 D in the right eye and −19.50 to −6.00 D in the left eye. Phacoemulsification in the right eye was carried out through a superior clear corneal section. During phacoemulsification one of the RK incisions adjacent to the section started to dehisce resulting in profuse leak and anterior chamber shallowing. A 10/0 nylon suture perpendicular to the RK incision apposed the gape preventing further extension of the dehiscence (Figure 1).

Phacoemulsification was completed without further complication with insertion of a foldable silicone intraocular lens (IOL). In the absence of pre-RK refraction or keratometry, we used the standard Holladay formula with axial length measurements from B-scan ultrasound and keratometry from a Nidek handheld keratometer. The IOL selected was predicted to give a −1.67 D postoperative refraction. Postoperative recovery was uneventful and corneal topography was stable at 2 weeks (Figure 2a) and 10 weeks (Figure 2b) postoperatively. Suture removal was deferred to maintain wound integrity and to limit corneal flattening in the axis of the incision. Myopic degeneration limited the BCVA to 6/12 with a manifest refraction of $-0.75\ -1.25 \times 131$ at 3 months after surgery. Uneventful phacoemulsification was carried out using a superior scleral tunnel for the left eye. Insertion of a foldable silicone IOL produced a BCVA of 6/12 with a manifest refraction of $-1.75\ -1.00 \times 26$ at 3 months.

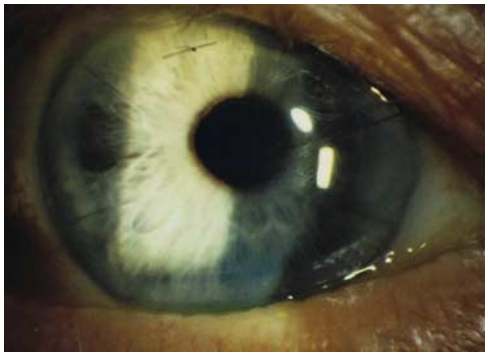

Figure 1 Nylon suture perpendicular to the dehisced radial keratotomy incision.

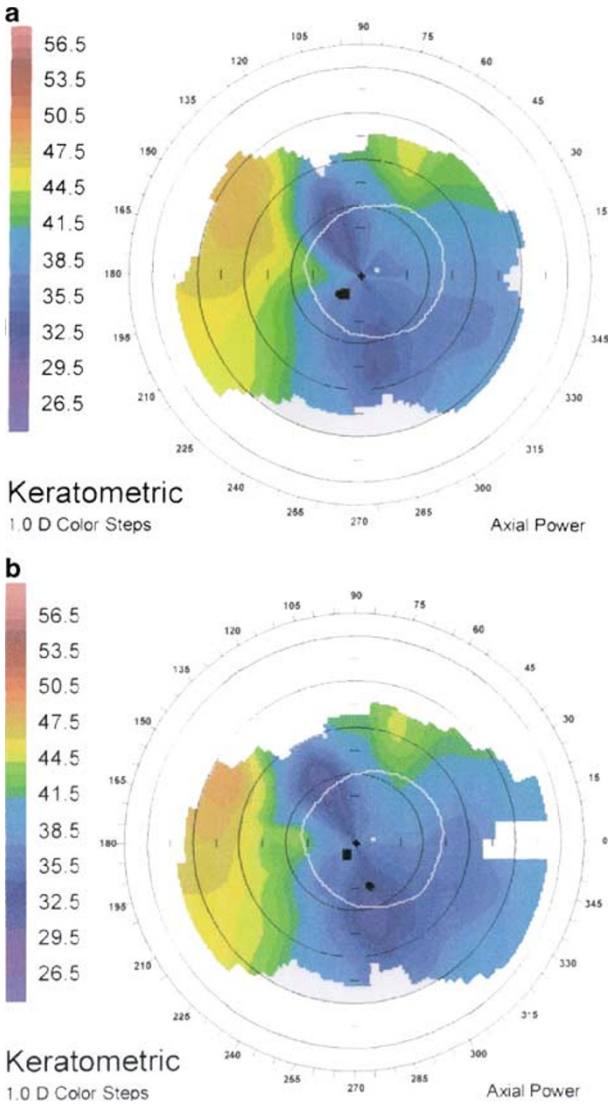

Figure 2 (a) Corneal topography at 2 weeks post-op. (b) Stable topography at 10 weeks post-op.

Comment

Dehiscence of RK incisions has been previously reported during penetrating keratoplasty, retinal detachment surgery and following blunt trauma.[1–5] There has also been a single case report of wound dehiscence during clear corneal cataract surgery 11 months after RK, which necessitated suturing of the keratotomy incision.[6] The slow healing of RK incisions is evidenced by clinical reports of late dehiscence, supported by histological findings.[7] Our patient developed dehiscence during phacoemulsification 14 years after RK.

The calculation of IOL power in the presence of RK is reported to be inaccurate in the absence of pre-RK keratometry with a high incidence of postoperative central corneal flattening and hyperopic shift.[8,9] In our case, pre-RK keratometry was not available at the time of surgery, hence we relied on prephacokeratometry and B-scan axial length measurements using the Holladay formula to calculate IOL power. This simple method produced a satisfactory prediction of lens power for both eyes.

Postoperative central corneal flattening and hyperopic shift are reported following cataract surgery, mimicking the changes seen after the initial RK. This is often accompanied by a diurnal variation in vision. It is postulated that both of these phenomena are related to postoperative corneal oedema, which would be more evident on waking. Slow resolution of this hyperopic shift precludes early intervention with lens exchange. As the interval between RK and cataract surgery increases, incision integrity improves and corneal flattening is less evident.[8] In our case, the 14-year gap between RK and phacoemulsification might explain the refractive stability demonstrated by postoperative topography.

Cataract surgeons may consider the following to optimise management of cataract patients with previous RK: (1) only use a clear corneal incision if there is sufficient distance between the RK incisions, otherwise consider a scleral tunnel; (2) dehiscence can be managed by suturing of the radial incision; (3) as the interval between RK and cataract surgery increases, improved integrity of the RK incisions may reduce the expected postoperative hyperopic shift.

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Sir,

Diplopia following intravenous administration of pamidronate

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We report the case of a 77-year-old man who developed lid oedema, chemosis, and diplopia on two occasions following intravenous administration of disodium pamidronate.

Pamidronate,[1] or aminobiphosphonate, is a potent inhibitor of osteoclastic bone resorption but does not inhibit bone formation. It is used in the control of hypercalcaemia of malignancy, and in the treatment of osteolytic lesions and bone pain associated with metastatic breast carcinoma and multiple myeloma. It is sometimes indicated in the management of Paget's disease of bone.[2] Ocular side effects, including conjunctivitis, episcleritis, scleritis, and uveitis have been described in the literature.[3] Although the manufacturer has confirmed rare reports of transient diplopia, we found no other cases in the published literature.

Our patient was given intravenous disodium pamidronate for treatment of osteolytic lesions secondary to multiple myeloma. On each occasion, he became symptomatic 2 days after receiving the treatment. He developed erythema and swelling of both upper lids, chemosis, and vertical diplopia, worse on upgaze. On the first occasion, he was assessed in the eye clinic several days after the onset of symptoms. Chemosis and conjunctival injection had begun to subside by the time of examination. He had a 1 mm left ptosis and bilateral limitation of upgaze, which affected the right eye more than the left. There was some limitation of abduction bilaterally. After 4 months, he received intravenous disodium pamidronate again. Eyelid oedema, chemosis, conjunctival injection, and diplopia developed within 48 h of administration, and again resolved spontaneously. The time course of onset and resolution were similar to the previously observed pattern. On review, 2 months later he was free of symptoms and ocular motility testing was normal. Vertical diplopia in the primary position recovered over the course of 2 weeks on each occasion, diplopia on elevation persisting for a further 2 weeks. Chemosis and lid oedema had resolved within 5 days of onset of each episode. No signs of uveitis were observed on either occasion.

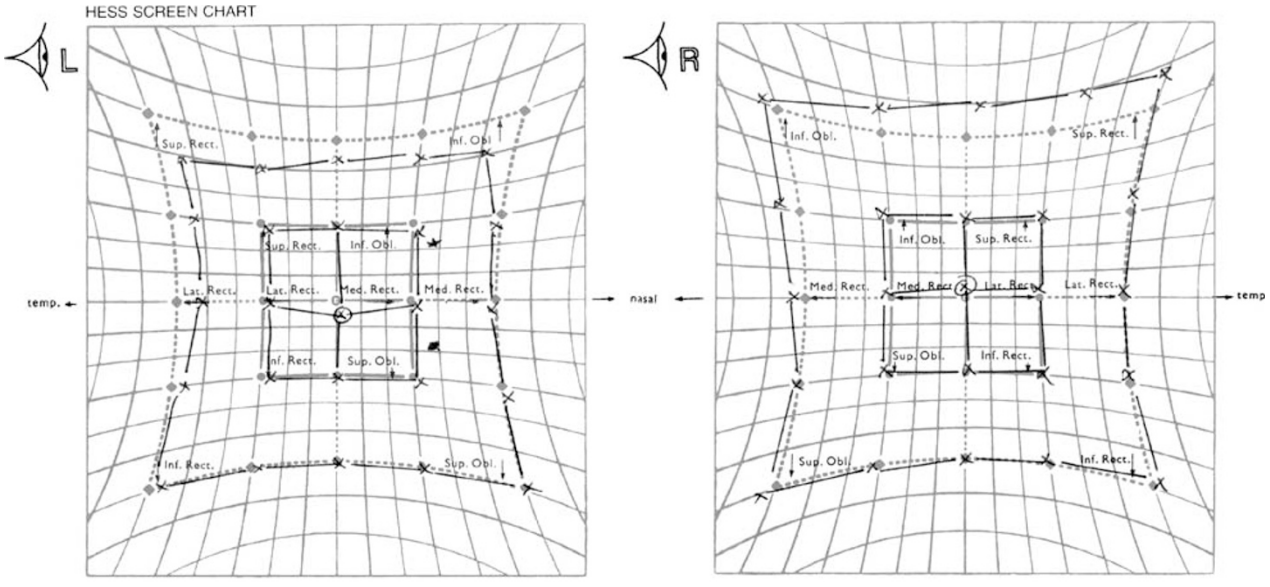

Figure 1 Hess chart recorded following re-challenge with intravenous disodium pamidronate.