DIDACTIC IMAGE

SCLERAL MELTING SECONDARY TO SURGICAL EXCISION OF A PTERYGIUM AUGMENTED WITH MITOMYCINE C APPLICATION

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This 67-year-old female complained from recurrent pain in her LE, which had progressively increased in severity, followed by burning and foreign body sensation since 10 days before the appointment.

She had a past history of local surgical excision of a nasal pterygium associated with Mitomycine C adjuvant application 7 years earlier.

The general history revealed that the patient was only treated with atenolol for systemic hypertension.

On presentation, her BCVA was 20/30 in RE and 20/400 in LE.

Anterior biomicroscopy showed a marked conjunctival injection surrounding a nasal area of focal necrosis, thinning, scleral melting with signs of focal ischemia in the region of the previously excised pterygium, adjacent corneal edema, inflammatory cells +++, patchy hyphema and fibrin in the anterior chamber, nuclear sclerosis 4+ and posterior synechiae (Figure 1).

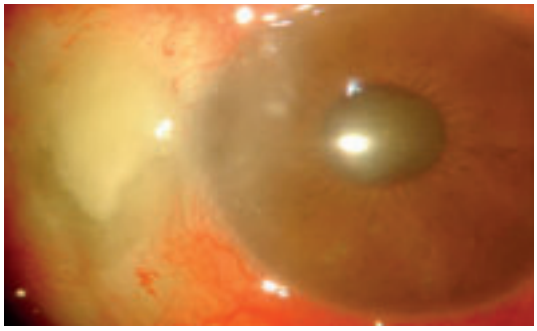

Fig. 1

The patient was treated with a scleral patch from human preserved sclera in emergency. For the surgical procedure a subconjunctival anesthesia was performed, followed by conjunctival and tenon dissection. The area to be excised was measured with a caliper and a scleral patch was prepared using the same measures. A gentle scleral lamellar dissection was performed and irrigated with antibiotics, then the scleral patch was sutured in place using a 10-0 nylon interrupted sutures. By the end of the procedure a conjunctival graft, obtained from the fellow eye, was sutured over the scleral patch using an vicryl 8-0 interrupted sutures. Half of the specimen was sent for histopathological analysis and the other half was sent for microbiological study. Histopathological analysis of the lesions revealed acute and erosive inflammatory infiltrates. Bacteriologic analyses of the secretions showed the presence of germs Cox Gram (+)microorganisms. Blood analysis ruled out systemic autoimmune disease.

Successful postoperative evolution at days 5, 20 and 45 is illustrated on Figure 2.

DISCUSSION

Scleral melting or necrosis after pterygium surgery has been reported to be 0.2% to 4.5%. It can manifest in several ways: (1) quiet scleral melting, or scleromalacia, often with an overlying calcified plaque noted on routine examination; (2) noninfectious necrotizing scleritis, presenting as a localized area of scleral inflammation and melting, possibly associated with slight tenderness on palpation but no anterior

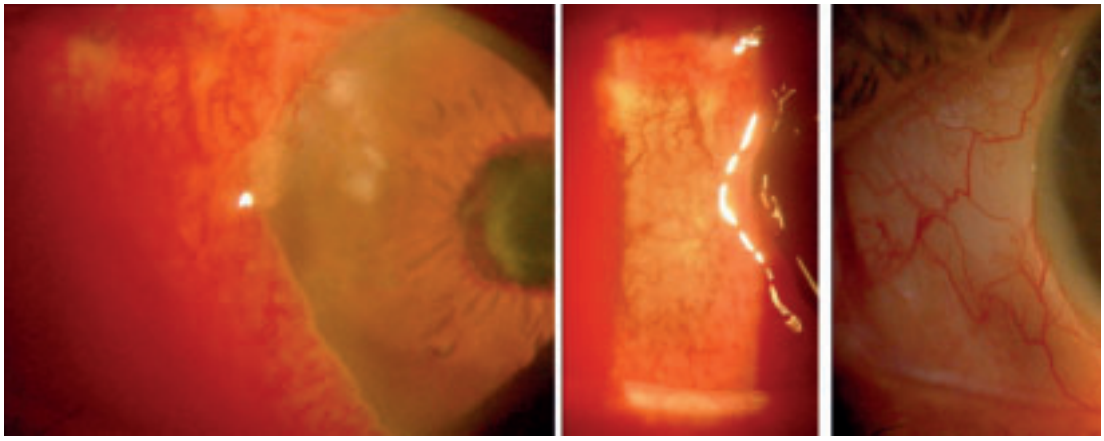

Fig. 2: Post-operative evolution at
Day 5 Day 20 Day 45

chamber reaction and good visual acuity; and (3) infectious scleritis, usually associated with severe pain, blurred vision, discharge, and the presence of a scleral abscess, sometimes accompanied by a severe anterior chamber reaction.

Different donor materials have been used to provide tectonic covering, but the most common tissue for anterior segment reconstruction is preserved sclera; other options include pericardium, dura mater, amniotic membrane and cornea.

In this case, the patient showed an infectious scleritis, with typical signs and symptoms. The prompt surgical treatment is the best therapeutic option in those cases in order to prevent other complications.

REFERENCES

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