

The Use of Dehydrated Amniotic Membrane (AmbioDry™) Following Excision of Recurrent Pterygium

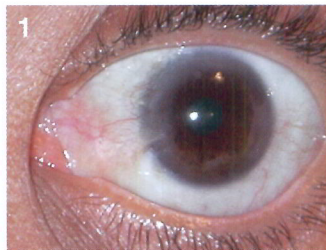
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PURPOSE

To report the surgical use of dehydrated amniotic membrane following the removal of recurrent pterygium.

A 49-year-old woman presented with a history of recurrent pterygium in her left eye. At the time of initial examination, the patient had undergone two prior attempts with lamellar keratectomies for removal of a fibrovascular growth that was affecting her visual acuity and producing chronic irritation and inflammation. The last procedure had been performed six months before evaluation and there was evidence of recurrence with involvement of the plica semilunaris and caruncle (*Photo 1*). There was also restricted movement of the globe on abduction.



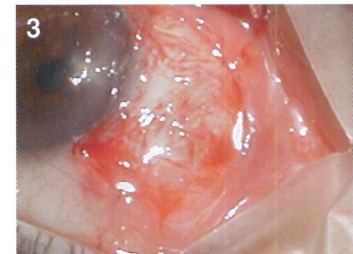
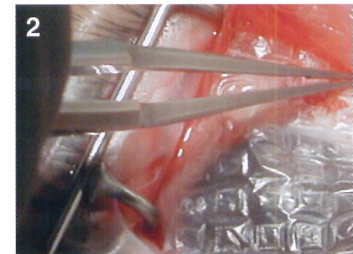
In January 2003, the patient underwent a third procedure for removal of the pterygium. The pterygium was surgically removed with great care

to protect the semilunar fold and caruncle. The area of the defect was properly cleaned and burred for subsequent placement of the amniotic membrane graft.

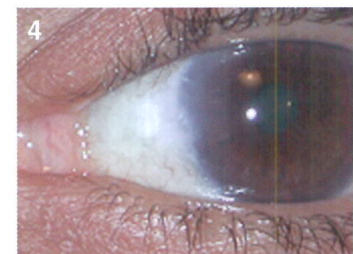
In its dry state, the amniotic membrane graft was trimmed with sharp scissors to the approximate area of the defect. The graft was then placed on the eye and hydrated with sterile saline drops for a period of two minutes. At the junction of the graft and the host, the free edge of the amniotic membrane graft was imbricated under the recipient conjunctival membrane to allow sliding of the host epithelium over the basal lamina at the point of junction with the donor tissue.

Using 10-0 nylon, the graft was anchored to the junction of bare sclera and conjunctiva maintaining the basement side of the graft superiorly (*Photo 2*). Cardinal sutures

were placed first, and then interrupted 10-0 nylon sutures were used to create an even distribution of the tension over the graft's surface (*Photo 3*). Excess graft was trimmed at the edges. Blood and debris under the graft was irrigated with saline.



Postoperatively, the patient was treated with a Tobradex taper that began at six times a day and terminated after 8 weeks at once a day. The results of the surgery were very successful with minimal pain and discomfort. The sutures were removed after three weeks and the patient recovered full range of motion. At 100 days post-op (*Photo 4*), the eye is quiet and being treated with lubricating drops. The postoperative acuity is 20/20 and the tension is normal. There is only 0.50D of cylinder in the refraction.



CONCLUSION

The use of conjunctival autografts has been popularized by anterior segment surgeons following excision of pterygium. The surgical use of preserved amniotic membrane has been reported for decades as a viable and advantageous substitute for conjunctival autografts. In this case, significantly less surgical time was required and the patient's conjunctiva was preserved.

CASE REPORT

AmbioDry: Batlle/Pterygium Case Report

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