

2024 COS Annual Meeting | Congrès annuel de la SCO 2024

Abstract Booklet | Livre des résumés

Surgical Videos | Vidéo D'interventions Chirurgicales

Cornea, External Disease and Refractive Surgery

**Abstract #:** 4439

**Abstract Name:** A technique for repairing large corneal perforations in eyes with no visual potential

**Abstract Author/Producer:** Georgios Kontos\*

\*I do not have any affiliation (financial or otherwise) with a commercial organization.

Abstract

**Purpose:** This video presentation presents a surgical technique for repairing large non infected corneal defects, utilizing pericardium patch grafts and conjunctival advancement flap. Corneal defects are often challenging and can result from various factors. In this case this 74-year-old female patient presented with acute angle closure glaucoma that was managed with topical and systemic IOP lowering drugs as well as YAG laser peripheral iridotomy. She then had elective cataract surgery combined with KDB goniotomy. Following the procedure, the corneal endothelium failed leading to corneal oedema and corneal epithelial breakdown further complicated by aqueous misdirection with uncontrolled IOP and extensive optic nerve damage. A central corneal ulcer developed and was treated over several weeks. Following the resolution of the ulcer, a large central perforation from a corneal melt eventually ensued leading to a non-seeing eye that would not benefit from further surgery.

**Methods:** To cover this large corneal defect, and preserve the globe, a double sheet of pericardium patch was utilised. The first patch graft of 8.5 mm was sutured on the cornea with interrupted 10-0 nylon sutures. A slightly larger diameter 9.5 mm pericardium patch graft was glued on the smaller patch with fibrin glue and anchored to the cornea with interrupted 10-0 vicryl sutures. This double layer was further reinforced with conjunctival advancement flap over the whole cornea.

**Results:** The above intervention allowed the patient to maintain the globe and greatly improved comfort. Over the proceeding months the eye maintained its volume and the patient achieved comfort.

**Conclusion:** By the conclusion of this video, viewers will have gained valuable insights into a surgical method for repairing large corneal defects in eyes with no visual potential.

[Watch the Video here](#)