MIND THE GAP IN PTERYGIUM SURGERY

Overview

Multiple procedures have been advocated in the treatment of pterygium ranging from simple excision to the use of grafts to cover the bare sclera. Even with the same surgical technique, the incidence of postoperative complications, including recurrence, varies. It has been recognized that pterygium extends from the caruncle and fornix regions, flattening and stretching the caruncle/semilunar fold toward the limbus (Fig. 1&2). After pterygium excision, we have observed that a gap invariably remains between the conjunctiva and Tenon's capsule, allowing reinvasion (herniation) by the residual fibrovascular tissue giving rise to recurrence. Recently our preliminary studies suggest that closure of such a gap will not only reduce the recurrence by creating a mechanical barrier, but also help restore the normal anatomy at the caruncle.

GAP Consequences

1) **G**ranuloma & Inflammation
2) **A**natomical Distortion at Caruncle
3) **P**terygium Recurrence & Motility Restriction

Sealing the GAP

1) Reduces Granuloma & Postoperative inflammation
2) Restores anatomy at Caruncle
3) Reduces Pterygium Recurrence

How to Seal the GAP

1) Sealing by fibrin glue (Fig. 3) may not be strong enough for creating a stable barrier.
2) Sealing by continuous 8-O Vicryl running (Fig. 4) may be a better option.

Sealing the GAP is a crucial surgical step in treatment of primary or recurrent pterygium

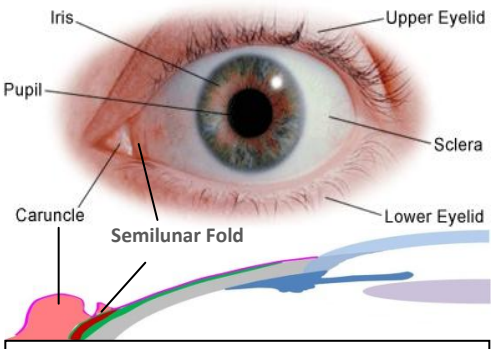

Figure 1. Normal Caruncle Anatomy

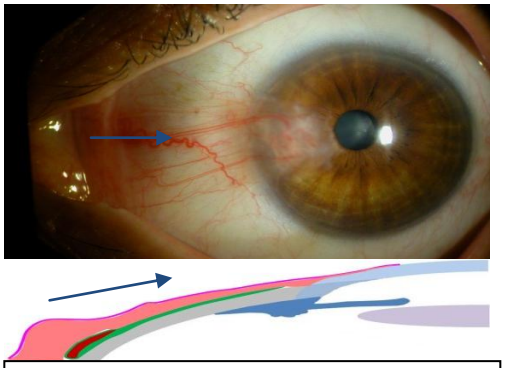

Figure 2. Pterygium Drags Caruncle (arrow)

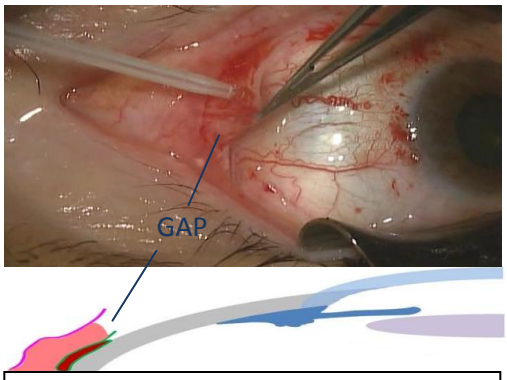

Figure 3. Closing the GAP with Fibrin Glue

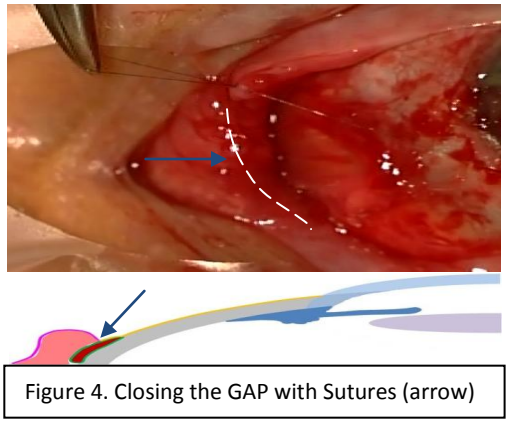

Figure 4. Closing the GAP with Sutures (arrow)