Use of Glues and Sealants in Glaucoma Surgery

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Why use Glue and Adhesives?
• Time
• Money
• Comfort
• Anatomy

Fibrin Glue—What to expect
• Sets up somewhat quickly
• Minimize manipulation after application
• Will last for several days
• Hemostasis
• Tissue planes maintained

Application of Glue

Glaucoma Drainage Device

<table>
<thead>
<tr>
<th></th>
<th>Tissue Group</th>
<th>Suture Group</th>
<th>ANOVA (p-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time of surgery in minutes</td>
<td>10.32 (+/-2.04)</td>
<td>25.62 (+/-3.73)</td>
<td>&lt;0.001</td>
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<tr>
<td>Post-operative glaucoma drops</td>
<td>0.52 (+/-1.5)</td>
<td>1.6 (+/-1.4)</td>
<td>0.004</td>
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<tr>
<td>Post-operative conjunctival inflammation</td>
<td>1.8 (+/-0.44)</td>
<td>2.92 (+/-1.02)</td>
<td>&lt;0.001</td>
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</tbody>
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Procedures in which fibrin glue has been Helpful

- Tubes
- Canaloplasty
- Trabeculectomy/Express
- Conjunctival closure over sclerostomy
- Complicated conjunctival closure/inhibition of flow
- Overfiltration

5 year data - Tubes

- 118 cases
- No late migration of conjunctiva, patch graft or tube
- 3% rate of retraction
  - Prior operated eyes
  - Infranasal placement

Resure for sealing conjunctival incisions
Express Shunt Conj Sealing

Finding the leak

Sealing late leaks

Removal of Express

Sealing the sclera

Glues, Adhesives and Sealants in Glaucoma Surgery

- Useful for adhering sclera and conjunctiva
- Can prevent and stop low flow leaks
- Provide hemostasis
- Limit scarring
- Eliminate or minimizes suture use
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