Modified Mullerectomy for Predictable Ptosis Repair

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Friday, June 7, 2013
I have no financial disclosures
To compare the results of a modified muller–conjunctival resection technique to the previous published results of standard muller–conjunctival resection for acquired ptosis repair.
Background

1961
- Fasanella–Servat (tarsconjunctival resection):
  - Resected Tarsus, Conj, Muller
  - Altered lid integrity

1961–1974
- Resection of muller, directly tied to superior tarsus
- Alleviated complications, but tedious

1975
- Muller–Conjunctival Resection (Mullerectomy):
  - Technically simplified

### Background


  - 90% with postop lid position within 1.5mm of contralateral lid
  - 2 of 234 patients required re–operation


  - 90% with postop lid position within 0.5mm of neo test position
  - 3 of 77 patients with postoperative corneal abrasions
  - 2 of 77 patients required re–operation
## Methods

<table>
<thead>
<tr>
<th></th>
<th>Original Description</th>
<th>Modified Technique</th>
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</thead>
<tbody>
<tr>
<td>Phenylephrine</td>
<td>10%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Anesthesia</td>
<td>Frontal nerve block</td>
<td>Local infiltration</td>
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<tr>
<td>Closure</td>
<td>Horizontal mattress and running conjunctival closure</td>
<td>Horizontal mattress</td>
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<tr>
<td>Securing Closure</td>
<td>4mm external lid crease incision with buried knot</td>
<td>Externalize suture with external knot</td>
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Methods

2.5% Phenylephrine x 3
Methods

- 4–0 traction suture
- Evert Upper lid
Methods

- Infiltration with local anesthetic
  - Hydro-dissection of conj-muller from overlying levator

- Marking
  - Tarsal margin
Methods

 Clamping
  ○ Tarsal margin
  ○ Previous marks

 Safety test
  ○ Anterior/Posterior Lamellae
Methods

- Place Suture
  - Double armed
  - Horizontal Mattress
  - Both ends lateral

- Excise Tissue
  - Metal on Metal
Methods

 Externalize Suture

 Retrospective Chart Review
  o Nov 1\textsuperscript{st} 2012 – May 1\textsuperscript{st} 2013
  o Single surgeon
Results

18 patients and 34 eyelids

- 78% (14 of 18) Caucasian
- 17% (3 of 18) African American
- 5% (1 of 18) Asian
- 39% (7 of 18) Male
- 61% (11 of 18) Female
- Age 71 (± 8.2)
Results

0 reoperations, 0 complications

- 1mm of neo test: 94%
- 2mm of neo test: 6%

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Conclusions

Our technique of a modified muller–conjunctival resection provides comparable results to previous published studies on standard muller–conjunctival resection with reduced complexity and minimal complications.
References