ZENKER’S DIVERTICULUM

- Optimal and Effective Surgical Patient Management under Budgetary and Resource Constraints – Doing More with Less
- Argument for Endoscopic vs Open

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Morningside H & N MDT
Pretoria Oct 2018
Endoscopic vs Open

- Optimal and Effective Surgical Management
- Budgetary and Resource constraints
- Doing more with less

Patient

Cost & Resources

Result and Risk of Surgery

Recovery

Outcome

Endoscopic better Literature

- Optimal & Effective Surgical Management
- Budgetary and Resource constraints
- Doing more with less

Results/Recovery/Risk (Harvard) 1,2,3,4,5
- Less Risk (Cx) for same result
- Quicker Recovery (swallow / home)

Cost less 6
- Time (30min) & Hospital stay (1 day)
- Standard ENT resources
- Stapler: cost offsets (consumables)

Staff / facilities
- More cases theatre / beds
- One Surgeon (more cases)

Literature
**TRANSORAL LASER MICROSCUREGY**

95 CASES

- Simple & Quick (20 - 30 mins)
- Minimal Surgical Trauma
  - Comorbid disease
  - 60s and 70s
- No Assistant
- No sutures, dressings, drains
- Magnification !

<table>
<thead>
<tr>
<th>Comorbid Disease / Age</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiac</td>
<td>33.7%</td>
</tr>
<tr>
<td>Carcinoma</td>
<td>7.6%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>5.5%</td>
</tr>
<tr>
<td>COPD (oxygen)</td>
<td>3.3%</td>
</tr>
<tr>
<td>DVT</td>
<td>3.3%</td>
</tr>
<tr>
<td>Other</td>
<td>9.1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>58.4%</strong></td>
</tr>
</tbody>
</table>

- 61-70
- 71-80
**Endoscopic better**

Cx 5.2% (5/95 Own Series)

**Complication History**

<table>
<thead>
<tr>
<th>Complication</th>
<th>History</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leak (3)</td>
<td>2 Conservative 1 Surgery</td>
</tr>
<tr>
<td>Air (1)</td>
<td>Surgical emphysema. G scope.</td>
</tr>
<tr>
<td>Teeth (1)</td>
<td>Crown</td>
</tr>
</tbody>
</table>

**Risk = Lower than Open 1, 2, 3, 4, 5**

**Recovery = Quicker, Easier**

<table>
<thead>
<tr>
<th>Matters to Patient</th>
<th><strong>ENDOSCOPIC LASER</strong></th>
<th><strong>OPEN</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluid Diet Post Op</td>
<td>Immediately</td>
<td>Nil for 3 - 7 Days</td>
</tr>
<tr>
<td>Soft / Pureed</td>
<td>Day 2 – 10 (normal diet)</td>
<td>Day 7 - 14</td>
</tr>
<tr>
<td>Hospital Stay</td>
<td>1 Day</td>
<td>5 - 7 Days</td>
</tr>
<tr>
<td>Barium Swallow</td>
<td>No</td>
<td>Yes (+/-)</td>
</tr>
<tr>
<td>NGT</td>
<td>No</td>
<td>Yes (+/-)</td>
</tr>
</tbody>
</table>

Endoscopic =

OUTCOME 95% with ENDOSCOPIC

Same or Better 1, 2, 3, 4, 5

<table>
<thead>
<tr>
<th>Previous Surgery 19%</th>
<th>Patients 18</th>
<th>Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open</td>
<td>12</td>
<td>66.7%</td>
</tr>
<tr>
<td>Endoscopic</td>
<td>6</td>
<td>33.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Revision 5.5%

Optimal & Effective Surgery
- Simple & Quick
- 1 Day

Budget and Resource Constraints
- Reduced Cost
- Standard Resources

More with less

CONCLUSION: ENDOSCOPIC IS BETTER

- Risk
  - Op Time / Ward stay
  - Sutures
  - Consumables/Drains
  - Dressings
  - Offset staples

- Outcome
  - Theatre
  - Beds
  - Surgeons

HARVARD

CONCLUSION: ENDOSCOPIC IS BETTER