Bioplastique Injection for Patulous Eustachian Tube Disorder

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I have nothing to disclose.

No, within the last 12 months I have not had any type of financial arrangement or affiliation with commercial interests related to the content of this continuing education activity that requires disclosure.
Thanks – I think!

1994

2019
Introduction

• Assumptions:
  • ET anatomy and physiology
  • Definition
  • Symptoms, signs & investigations
  • Treatment options

• Selection
• Bioplastique technique
• Results and tips
Causes

- Loss of Ostmann’s fat
- Weight loss
- Post radiotherapy
- Neuromuscular disorders
- Nasopharyngeal scarring
- Balloon tuboplasty!

1. Poe & Pyykö O&N 2011
• Wide nasopharyngeal lumen
• Concave antero-lateral cartilagenous wall
  • Tension of anterolateral wall
  • Reduced anterolateral wall movement
Selection - diagnosis
Selection - Preop

- Posture / neck pressure
- Reflux
- Stop decongestants
- (Sniffing)
- Saline spray
- Oestrogen drops
- Patul-END - dilute hydrochloric acid, Chlorobutanol, Benzylalcohol

Surgical Treatments - Nasal

- Bioplastique
- Polymethylsiloxane elastomer
Bioplastique Technique
World Congress on Endoscopic Ear Surgery 3.0
June 13-15, 2019
BOSTON RENAISSANCE WATERFRONT HOTEL

Bioplastique Augmentation
Patient Group

- 40 patients – at least 6 month FU
- Average age 40yrs, (17-71yrs)
- Tertiary referrals
- Multiple different procedures
- Symptoms mainly all day, average 10yrs duration
- Range 1-4 injections
<table>
<thead>
<tr>
<th>Outcome</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete relief</td>
<td>26</td>
<td>47%</td>
</tr>
<tr>
<td>Improved, satis</td>
<td>14</td>
<td>26%</td>
</tr>
<tr>
<td>Improved, dissat</td>
<td>7</td>
<td>13%</td>
</tr>
<tr>
<td>Unchanged</td>
<td>5</td>
<td>9%</td>
</tr>
<tr>
<td>Worse</td>
<td>3</td>
<td>5%</td>
</tr>
<tr>
<td>Total Satisfied</td>
<td>40</td>
<td>73%</td>
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<tr>
<td>Complications</td>
<td>10 glue ear</td>
<td></td>
</tr>
<tr>
<td>Tubes</td>
<td>7</td>
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</tr>
</tbody>
</table>
Complications

• Failure! – migration (dynamic structure)
• Low freq resonance
• Central head pressure
• Dizziness
• Sore throat
• Ear clicking
• Irreversible
Summary

- Awareness of diagnosis, exclude SSCD etc
- Static / dynamic lateral wall problem
- Beware mental health issues
- Bioplastique is effective but not perfect
- Very grateful patients – if you get it right!
Acknowledgements

• Dennis Poe
  Boston, USA
• Sam MacKeith
  Oxford, UK
Thank you
## Results for Patulous ET Treatment

<table>
<thead>
<tr>
<th></th>
<th>Cath %(^1)</th>
<th>PETR%(^2)</th>
<th>Ligatn%(^3)</th>
<th>HA(^4)</th>
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</thead>
<tbody>
<tr>
<td>Complete/Improved</td>
<td>74</td>
<td>69</td>
<td>85</td>
<td>50</td>
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<td>Complications</td>
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<td></td>
<td>19 Extr</td>
<td>0</td>
<td>1 Bleed</td>
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<td>4 Grans</td>
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<td>2 Infectn</td>
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<tr>
<td></td>
<td>21</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

1. Poe et al 2010 n=47  
2. Poe et al 2007 n=22  
3. Rotenberg 2013 n=14  
4. Vaezeafshar 2014 n=23