Pediatric Salivary Duct Surgery/Sialendoscopy

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Objectives

- Understand appropriate indications for pediatric sialendoscopy
- Review technical pearls of pediatric sialendoscopy
- Understand expected outcomes of pediatric sialendoscopy

Juvenile Recurrent Parotitis (JRP)

- Recurrent parotid inflammation
  - Weeks-months between episodes
  - Unknown cause; can resolve in puberty
- Treatment
  - Conservative
  - Parotidectomy
  - Duct Sclerosis
  - Sialendoscopy

I have no financial disclosures
Pediatric Salivary Gland Disorders: Role of Imaging

Technique

Technique

Technique
Technique

• Nasotracheally intubate
• 180 degrees
• 0.5mg/kg Decadron IV
• 40mg/ml Kenalog in 30 cc saline

Tips I’ve learned

• Palpate gland to locate papilla
• Be kind to the papillae
• Angle is everything
• Slide larger dilator along current one
• Need more than two hands
• Continuous irrigation
• Know when to stop

Postop Care

• Hydration
• Massage
• +/-Antibiotics
• Analgesics

Complications

• Duct stricture
• Duct perforation/false passage
• Infection
• Ranula formation
• Wire basket/instrument impaction
• Temporary lingual nerve injury
Review of Current Pediatric Literature

**Israel**
- 70 patients with JRP (2 episodes/12 months)
- Modular salivascope PolyDiagnost with 60ml saline and 100mg hydrocortisone
- Ave follow-up: 12 months
- 5 repeat endoscopy; 9 repeat episode 14/70 (20%)


Review of Current Pediatric Literature

**Lyon, France**
- 38 patients
- JRP: 21
- Sialolithiasis: 14
- Normal: 3
- Ave follow-up: 24 months
- 4 recurrence (19%)
- Ave time to recurrence: 6 mo

*Arch OHNS 2010;136(1):33-36*

Review of Current Pediatric Literature

**Lyon, France**
- Technique
  - Solution: 50% xylocaine (2%) and 50% Saline (0.9%) with 120mg prednisolone
  - Post-op: 7 days Augmentin and 3 days Decadron 1mg/kg/d
- Complications
  - Stensen duct perforation
  - Airway obstruction

Review of Current Pediatric Literature

**U of Iowa and U of Pitt**
- 18 patients/33 procedures
- JRP: 12 (2 or more episodes)
- Sialolithiasis: 4
- Outcomes: 8/12 (67%) asymptomatic after 1 proc
- Complications: 3/18 (17%)

*Arch OHNS 2012;138(10):912-915*
Review of Current Pediatric Literature

• U of Iowa and U of Pitt
  – Complications
    • Transient swelling
    • Pain at 1 week
    • Possible ductal breech with stent placement

• U of Iowa and U of Pitt
  – Outcomes
  • Ave f/u=11.7 months
  • JRP
    – 8 pts=1 procs
    – 2 pts=2 procs
    – 1 pt=parotidectomy
    – 1 pt lost to f/u

UCSF Experience

Table I: All Patients – Age and Episodes at Presentation

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<th>N</th>
<th>Mean</th>
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<td>Stone Patients</td>
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<td>JRP Patients</td>
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<td>Presentation (All</td>
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<tr>
<td>Patients)</td>
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Table V: Patients with Sialendoscopy vs. Nonintervention

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Conclusions

- Diagnostic and therapeutic
- Treatment of sialadenitis and sialolithiasis
- Minimally invasive, gland sparing approach
- Patient selection important

Future Directions

- Can this procedure be done in the office in children
- What type of flushing agent most effective
  - Saline
  - Steroids
  - Antibiotics
  - Other immune modulators