Basic Sialendoscopy Set

- Instruments for Exposure of the Oral Cavity
  - Anesthesia – Nasal Intubation is preferred
  - Epistaxis
    - Pre-op nasal endoscopy to document spurs, deviated septum or other abnormality
    - Afrin and lubricated nasal trumpet while patient is in preoperative holding area
  - Disposable Plastic cheek retractor
  - Dental splints
  - Jennings's mouth gag
  - Minnesota and Sweetheart retractors

Disclosure

I have the following relationship(s) with commercial interests.

Hood Laboratories
*Walvekar Salivary Stent

Cook Industries

Medtronic Xome

A commercial interest is any entity producing, marketing, re-selling, or distributing health care goods or services consumed by, or used on, patients.
Schaitkin Salivary Dilator Set

standard dilatation
Kolenda Introducer Set (COOK)

Sialendoscopy

Sialendoscopy


- 1.3 mm Marchal*
- 1.1 mm Erlangen*
- 1.6 mm Erlangen*

*Karl Storz, Tuttingen, Germany

Sialendoscopes

Fiberoptic channel
Irrigation Port
Interventional Port

### Marchal Sialendoscope

![Marchal Sialendoscope](image)

### Basic Sialendoscopy Set

<table>
<thead>
<tr>
<th>Sialendoscopes</th>
<th>0.8 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Pediatric diagnostic sialendoscopy</td>
<td></td>
</tr>
<tr>
<td>No interventional channel</td>
<td></td>
</tr>
<tr>
<td>1.1 mm “all in one” Erlangen Sialendoscope</td>
<td>Can be autoclaved</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Interventional Tools that can be used with the scope</td>
<td></td>
</tr>
<tr>
<td>0.4 mm guide wire basket</td>
<td></td>
</tr>
<tr>
<td>0.4 mm stone basket</td>
<td></td>
</tr>
<tr>
<td>Laser fiber (Holmium laser)</td>
<td></td>
</tr>
<tr>
<td>Hand held microburr</td>
<td></td>
</tr>
<tr>
<td>Does not have a protective sheath</td>
<td></td>
</tr>
<tr>
<td>Dilate up to No.3 or 4 prior to endoscopy</td>
<td></td>
</tr>
</tbody>
</table>

### Basic Sialendoscopy Set

<table>
<thead>
<tr>
<th>Sialendoscopes</th>
<th>1.6 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>“all in one” Erlangen Sialendoscope</td>
<td>Can be autoclaved</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Interventional Tools that can be used with the scope</td>
<td></td>
</tr>
<tr>
<td>0.4/6 mm guide wire basket</td>
<td></td>
</tr>
<tr>
<td>0.4/6 mm stone basket</td>
<td></td>
</tr>
<tr>
<td>Cup forceps**</td>
<td></td>
</tr>
<tr>
<td>Does not have a protective sheath</td>
<td></td>
</tr>
<tr>
<td>Dilate up to No.5 or 6 prior to endoscopy</td>
<td></td>
</tr>
</tbody>
</table>

| Balloon Dilator (Storz) – compatible with all in one scopes |        |
Basic Sialendoscopy Set

- IV Extension Tubing
- 20 cc syringe
- Vessel loops
- Angled Forces with and without teeth
- Standard Endoscopy Tower and Monitor with recording capabilities**

Accessories

- Disposables
  - Stone baskets
  - Guide wires
  - Cleaning brushes
  - Stents (Hood Laboratories)*
  - Balloon Dilator
- Not Disposable
  - Hand-held micro burr
  - Stone forceps

**STORZ WIRE BASKETS

Three way stopcock/valve

COOK WIRE BASKETS - - N Gage

THE DISTAL END OF THE 0.4 MM STONE WIRE BASKET SHOWN "OPEN"
LSU Sialendoscopy Course

Diagnostic Sialendoscopy

Rohan R. Walvekar, MD
Department of Otolaryngology & Head Neck Surgery
Louisiana State University Health Sciences Center
New Orleans, LA

Diagnostic Sialendoscopy Data

- 100% Successful endoscopy
- Ductal or papillary stenosis in 7/15 (47%)
- Essentially normal endoscopy in 8/15 (53%)
- Symptoms improved in 13/15 (87%) cases

Bowen M et al. Diagnostic and Interventional Sialendoscopy: A preliminary experience. 2010 Laryngoscope (accepted for publication)

Sialendoscope Cannulation

- Progressive dilation
  - Marchal Dilator System (No.0000 to No.6)
  - Conical dilator
- Seldinger technique
  - Guide wire and bougies
- Papillotomy
  - 25% (7/28)
- Successful endoscopy
  - 96% (27/28)

Success of Diagnostic Endoscopy ~ 95-98%

Rate Limiting Step: Dilation of Papilla

- Approaches to the papilla
  - Dilation technique
  - Seldinger technique
    - With bougies
    - With sialendoscope
  - Papillotomy
  - Proximal papillotomy and sialodochoplasty
Papillotomy for diagnostic endoscopy...consequences.

Acknowledgements
- Dan W Nuss MD, Faculty and Residents Department of Otolaryngology
  Head Neck Surgery, LSU HSC, New Orleans, LA
- Barry Schaitkin, MD (University of Pittsburgh)
- OR Staff
  (Our Lady of the Lake Regional Medical Center)
- Head Neck Center
  (Our Lady of the Lake Medical Center)
Avoid Complications

**Local Anesthesia:**
- Lidocaine 4.5mg/kg (<300mg)
- Lidocaine/epinephrine 7mg/kg (<500 mg)

**MAC (sedation):**
- Over
- Under

**Local Anesthesia:**
- Beware of ETT position
- **NO** atropine or like medication

Technical Problems

**Maceration of the papilla:**
- Measured traction

**Avoid creating pseudo-orifices:**
- Injection
- Forceps
- Dilators

Technical Problems

**Overinjection of NSS:**
- 60cc syringe with IV extender
- Control your assistant enthusiasm
- Maintain one port open
- In the submandibular area it can lead to **AIRWAY COMPROMISE**

**False Passage (papilla):**
- Do not force the dilator
- Do not cut the papilla

**Ductal Perforation:**
- Do not advance blindly
- Do not force the instrument in
- Abort if identified
Equipment Failure

- Be cognizant of the turns:
  - scope is semi-rigid (it is fragile)
  - straighten the duct using manual traction and pressure

- Be cognizant of the teeth

- Have back up gear