### Purpose & Background

To examine the outcomes of salivary duct intervention at St Peter’s Hospital (SPH) based on symptomatic improvement and patient follow up.

Salivary duct intervention is a minimally invasive technique used to treat benign obstruction in the parotid or submandibular glands. Patients most commonly present with facial swelling and/or facial pain. The most common cause is calculi (75%) followed by strictures (25%).

A sialogram uses contrast and fluoroscopy to view the anatomy of the ducts. Intervention comprises either balloon dilatation for stenoses, or wire basket retrieval for stones. This procedure is generally well tolerated and can avoid more invasive surgery.

### Methods & Materials

- **Retrospective study**
- **Inclusion criteria:** sialoplasties and salivary duct stone retrievals at SPH over a 2 year period from January 2016 to January 2018.
- **Exclusion criteria:** external/private patients or those who declined procedure

### Results

- **27 patients; 5 excluded; N = 22 (20F, 2M)**
- **Mean age of cohort: 61.3 years**

**Indications:**
- 11 L parotids (50%), 7 R parotids (32%), 4 L submandibulars (18%), 0 R submandibulars

**Diagnoses:**
- 4 calculi (18%); 18 strictures (82%)

**Complications:**
- 1 mild infection (4%); 1 moderate infection (4%); 1 extravasation of contrast (4%)

#### Symptom Improvement after 3 Months

**None:**
- 13%

**Partial:**
- 5%

**Total:**
- 68%

**Procedure successful:**
- 9%

**Procedure unsuccessful:**
- 5%

#### Long term follow up

**Discharged from ENT/Max-fax clinic:**
- 64%

**Other:**
- 14%

**Invasive surgery:**
- 4%

**Conservative management:**
- 14%

### Conclusion

In terms of symptomatic improvement it appears SPH has favourable outcomes. Intervention for stones and strictures has led to a total symptomatic improvement in 68% of patients, and partial symptomatic improvement in a further 10%. This aligns with current success rates in the literature of 60-70% for both stones and stricture.

In terms of long term follow up, 64% were able to be discharged from ENT/Max-fax clinics. Only 1 patient went on to have lithotripsy and only 1 went on to have invasive surgery. This suggests that a large majority of patients are avoiding more invasive and riskier surgery.

The complication rate was relatively low at 12%, including 1 extravasation of contrast, 1 mild infection requiring oral antibiotics and 1 moderate infection requiring IV antibiotics.