

**O.544 Minimally invasive management of salivary calculi – 4691 cases**

B. Bisase, K. Karavidas, H. Iro, J. Zenk, M. Escudier, O. Nahlieli, P. Capaccio, P. Katz, J. Brown, M. McGurk. *King's College Hospital, London, UK*

**Objective:** To evaluate the application of minimally invasive techniques in the management of salivary calculi.

**Background:** The incidence of salivary calculi is 60x106 per annum with most stones situated in the mid or proximal duct. The current treatment for these stones is adenectomy. This paper reports the results of minimally invasive methods of stone removal that avoid gland excision.

**Methods:** Observational study of 5528 consecutive patients treated by lithotripsy, endoscopy, basket retrieval and/or surgery in five centres from 1990 to 2004 inclusive. A total of 567 cases were excluded leaving 4691 patients (parotid n=1165; submandibular = 3526) for analysis.

**Results:** Salivary calculi were eliminated in 3775/4691 (80.5%) of cases and partly cleared in 782/4691 (16.7%). Salivary glands were removed in 134/4691 (2.9%) of patients with symptoms in whom treatment failed.

**Conclusion:** Minimally invasive techniques move treatment of salivary calculi to an outpatient or a day case setting. They are reliable ways of both retrieving stones and eliminating symptoms, and mean that the gland rarely has to be removed.