# P061 Role of dusting and pop-dusting using high power (100w) laser in treatment of paediatric stones

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**Introduction & Objectives:** The incidence of stone disease amongst paediatric population is increasing and stones are increasingly managed safely and effectively with minimally invasive endourological techniques. In the adult population a technique increasingly used is dusting and pop-dusting. The use of the holmium: Yttrium-aluminum-garnet laser at high-power, high-frequency, long pulse allows for dust production that can evacuate spontaneously. The advantage of dusting appears to be a reduction in operative time, ureteral access sheath usage, fragment retrieval and complications relating to basketing them. Dusting and pop-dusting has been shown to be safe and effective in the adult population but there is a lack of evidence in the paediatric population. Here we present the results from a cohort of paediatric patients that underwent dusting and pop-dusting for stones using high powered laser.

**Materials & Methods:** Between February 2016 and July 2018, 12 patients were treated with dusting and pop-dusting at Southampton General Hospital. Outcomes were collected retrospectively and complications graded using Clavien-Dindo criteria.

**Results:** Twelve patients underwent URS and stone dusting. The stone free rate (SFR) at time the of operation was 100%. All patients were followed up with ultrasound (mean 3.5 months, range 2-5months) and stone free rate was 91.6% (11/12); this was due to failure to fully visualise lower pole calyx in one patient. There were no post-operative complications for any patient.

**Conclusions:** Advancements in endourological technque have made URS in the paediatric population safe and effective. Although our conclusions are based on small case series it shows dusting and pop-dusting can be performed with low morbidity and high SFR in the paediatric population.