

# THE CORRELATION BETWEEN LACRIMAL SYRINGING AND DACRYOCYSTOGRAPHY FOR THE EVALUATION OF NASOLACRIMAL DUCT STENOSIS: A SINGLE-CENTRE PROSPECTIVE STUDY

**Purpose:** To evaluate the sensitivity of clinical lacrimal syringing in detecting nasolacrimal stenosis (NLDS).

**Method:** A prospective single-centre case series was conducted. All 159 participants presenting with epiphora to the oculoplastic unit of Royal Adelaide Hospital between 2014 and 2016 underwent lacrimal syringing and radiological investigation with dacryocystography (DCG) and dacryoscintigraphy (DSG). Patients with reflex tearing, hypersecretory aetiologies, punctal abnormalities and eyelid malpositions were excluded. Lacrimal syringing was performed by the oculoplastic clinician. Patency on syringing was defined as flow of fluid into the pharynx and an absence of reflux from the fellow punctum. Nasolacrimal duct stenosis was defined as the nasolacrimal duct diameter being less than 0.4mm on DCG.

**Results:** 30% of patients who demonstrated patency on lacrimal syringing fulfilled the criteria for NLDS on DCG. These patients all showed post-sac delay on DSG.

**Conclusion:** Patency on syringing fails to reveal 30% of patients who have NLDS. Hence, clinical lacrimal syringing may not be a sensitive indicator of NLDS.