Monocanalicular versus bicanalicular intubation in external dacryocystorhinostomy for primary acquired nasolacrimal duct obstruction.

Saleh GM, Tossounis CM, Litwin AS, Gauba V, Samaras K, McLean CJ.

Royal Surrey County Hospital, Guildford, UK.

Orbit. 2009;28(2-3):110-4.

Abstract

PURPOSE: Monocanalicular intubation offers potential advantages over bicanalicular intubation including ease of removal and use of only one canaliculus. Recent reports suggest equal outcomes with both types of tubes for nasolacrimal intubation. This study aimed to evaluate the outcome of monocanalicular intubation during external dacryocystorhinostomy.

METHODS: Fifty-seven lacrimal systems of 54 adults with primary acquired nasolacrimal duct obstruction were prospectively randomized into two cohorts for either bicanalicular intubation (n = 29) or monocanalicular intubation (n = 28) during external dacryocystorhinostomy. All subjects had their symptoms evaluated subjectively according to a modified Munk scale and objectively by the dye disappearance test along with probing and irrigation, pre- and post-operatively. Complete success was defined as a total disappearance of symptoms, partial success as an improvement with some residual symptoms, and failure as an absence of improvement or worsening of symptoms at the last follow-up. Patients with concurrent lid or ocular pathology were excluded.

RESULTS: Bicanalicular subjects had a significantly higher complete success rate (21/29, 72.4%) compared to the monocanalicular group (12/28, 42.9%) ($p = 0.03$). Complications included 3 slit punctuae and 2 early tube removals with bicanalicular intubation; 6 temporary superficial punctate keratopathies, 1 punctal stenosis and 4 premature tube losses occurred with monocanalicular intubation.

CONCLUSIONS: Patients with monocanalicular intubation during external dacryocystorhinostomy had a significantly lower success rate than patients with bicanalicular intubation in the treatment of nasolacrimal duct obstruction.

PMID: 19839894 [PubMed - indexed for MEDLINE]