

## Clinical characteristics and surgical outcomes of transcutaneous versus transconjunctival excision of Wolfring gland ductal cysts

**Purpose:** To analyze the clinicopathological characteristics and surgical outcomes of patients with Wolfring gland ductal cysts (WGDCs).

**Methods:** A retrospective, consecutive, interventional comparative case series was performed over a period of 7 years. Data on demographic and clinical characteristics, pathological findings and outcomes of surgically excised cysts were collected. A comparison between the transconjunctival and transcutaneous approaches was also assessed.

**Results:** Forty-eight patients (48 eyelids) were included in the final analysis. The most common presenting symptom was painless eyelid swelling (81.3%). The median symptom duration was 11.5 months (IQR, 18.25). The upper eyelid was involved in 31 (64.6%) patients, 29/31 of whom had cysts in a medial or centromedial location. Forty-five (93.8%) cysts were bluish gray and transilluminable with clear contents on lid eversion and a median largest dimension of 22 mm (IQR, 8). A transverse conjunctival fibrotic band was observed along the proximal tarsal border in the cyst area in all patients. Signs of chronic trachoma were noted in 38 (79.2%) patients. Preoperative significant ptosis was present in 28/31 (90.3%) of the upper eyelid cysts. Thirty cysts (62.5%) were excised through the skin, and 18 cysts (37.5%) were excised transconjunctivally. Intraoperative cyst rupture, the need for conjunctival grafting and postoperative residual upper lid ptosis were significantly greater in the transconjunctival group (p = 0.009, p < 0.001, and p = 0.016, respectively).

Conclusion: The present study highlights the clinicopathological characteristics of a relatively large series of surgically excised WGDCs. Transcutaneous excision of WGDCs has proven to be an effective treatment with fewer adverse sequelae than the transconjunctival approach.