

Dacryocystocele

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A 3-day-old boy was noted to have a bump near his left lower eyelid. The neonate had been born after an uneventful pregnancy, and his parents had noticed the mass immediately after delivery.

Physical examination. A 0.2-cm blue mass was present on the boy's face, inferior to the left medial canthus (**Figures 1 and 2**). There was no erythema, drainage, or tenderness. Red reflexes were equal bilaterally, and the remainder of eye examination findings were unremarkable. The patient was afebrile and otherwise well-appearing.





Discussion. The patient's examination findings were consistent with dacryocystocele, a congenital anomaly in which a cyst forms following nasolacrimal duct obstruction. The obstruction is typically unilateral. The differential diagnosis includes hemangioma, dermoid cyst, and meningoencephalocele. Dacryocystoceles appear below the medial canthus and may extend to the inferior eyelid but never arise directly from the eyelid.³ The accumulation of mucoid material within the cyst causes a blue-gray discoloration of the overlying skin.

In contrast to dacryocystoceles, hemangiomas have irregular borders and are not present at birth. Dermoid cysts are located above the medial canthus and are fixed to the underlying bone. It can be difficult to clinically differentiate a meningoencephalocele from a dacryocystocele, since both are present at birth. Meningoencephalocele may have a pulsating quality, but imaging is used to differentiate the lesions.¹

Early diagnosis is imperative, since dacryocystoceles can become superinfected. Secondary dacryocystitis can develop rapidly. Treatment consists of systemic antibiotic therapy and decompression; complications include periorbital or orbital cellulitis, abscess, and bacteremia.⁴

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When dacryocystocele is suspected, ophthalmologic evaluation will confirm the diagnosis. This includes visual inspection and endoscopic nasal examination for accompanying endonasal cysts. Imaging studies, including ultrasonography or magnetic resonance imaging, can be used to confirm the diagnosis.¹

Treatment of dacryocystocele without secondary dacryocystitis remains controversial, with some authors recommending monitoring and nasolacrimal massage and others recommending immediate decompression with nasolacrimal duct probing or endoscopic marsupialization.¹⁻⁴

Outcome of the case. The patient was referred for ophthalmologic evaluation, and conservative measures were recommended. The dacryocystocele spontaneously decompressed several days later and did not recur.

References:

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