



Letter to the editor

## Simple dacryops: Do we really need imaging?

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Dear Editor,

Classically, dacryops have been described as an ectasia of lacrimal ductule(s) of uncertain etiology.<sup>1</sup> In general, patients remain asymptomatic and cosmetic deformity of the lid is the usual reason for visiting an ophthalmologist.<sup>1</sup> Being rare and simulating few other clinical conditions, many ophthalmologists are unfamiliar about this cyst and may advice unnecessary imaging.

A 45-year-old female was presented with gradual painless swelling of the left upper eyelid for 2 months (Figure 1A). There was no history of trauma, inflammation, discharge, epiphora, eye surgery, or systemic illness. The patient mentioned periodic fluctuation in the size of swelling, which increased on crying or chewing. An orbital computed tomography scan orbit was advised by an ophthalmologist at another hospital 1 month earlier, which the patient refused. By then, no diagnosis was made. At present, best corrected visual acuity in both eyes was 6/6 with glasses. There was a nontender, fluctuant, tense swelling of the lateral two-thirds of the upper lid leading to severe mechanical ptosis with “S”-shaped deformity of the lid. Levator action was good. There was no limitation of extraocular movements, proptosis, or globe dystopia. On partially everting the lid, a bluish-pink cystic distension of the superior fornix was noted. There was no sign of inflammation, and tear breakup time and Schirmer's test results

were normal. External transillumination test was performed, which was positive with brilliant transillumination, confirming a clear, cystic nature of the lesion (Figure 1B). Ultrasonography showed a single-walled cyst with low internal reflectivity, without intraorbital extension (Figure 2). Excision of the cyst was performed through the conjunctival side using a cryoprobe. Histopathology of the cyst wall revealed double-layered lining epithelium similar to the lacrimal duct along with adjacent acni of the lacrimal gland (Figures 1C and 1D).

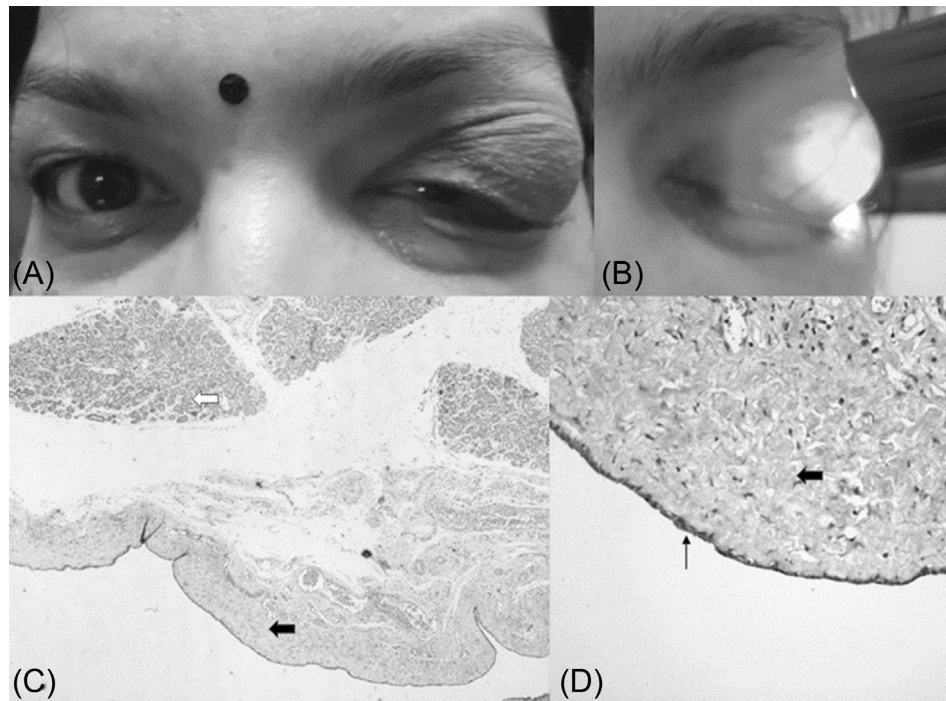
The hypothesis of “neuromuscular dysfunction” and “spiral valve mechanism” of a diffuse segment of duct wall reflects the underlying functional problem and intermittent fluctuation of swelling.<sup>2</sup> Typical history of increase in swelling on chewing or crying could be explained by autonomic stimulation of lacrimation. The S-shaped deformity could be a marker of lacrimal region pathology.

The bluish hue points toward mucoid content, which might also be seen in the case of conjunctival retention cyst, but this could be ruled out based on the aforesaid classical history.<sup>2</sup> Similarly, dermoid and cysticercosis cysts could also be ruled out based on history, absence of inflammation, and brilliant transillumination. Hydatid cyst, which transilluminates brilliantly like dacryops, could be excluded on the ground of history of fluctuation in size, bluish hue, and ultrasonography. Ultrasonography shows characteristic double-wall sign and no internal reflectivity but echogenic sand-like materials in the dependent part of hydatid cyst.<sup>3</sup> Although positive fluctuation could distinguish the cystic nature of the lesion in the present case, positive transillumination test established the clear content of the cyst. So far, we did not need computed tomography or magnetic resonance imaging to set up a provisional diagnosis of classical (simple) dacryops. As there was no clinical signs or symptoms of orbital involvement, namely, proptosis, globe dystopia, limitation of extraocular movements, diplopia, and diminution of vision, orbital imaging would not provide any new

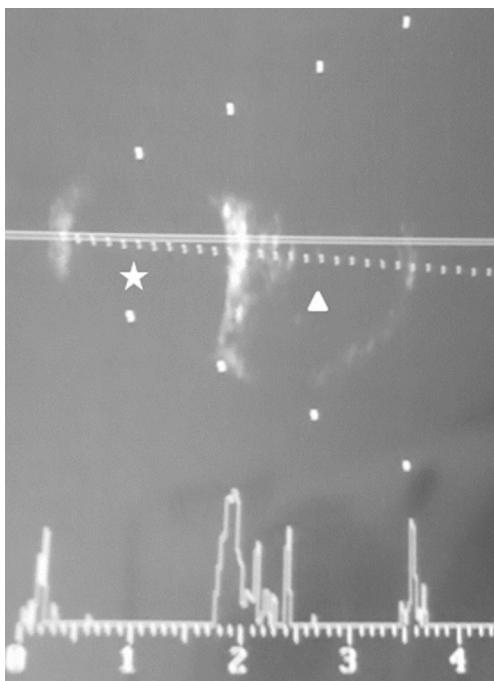
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E-mail address: [gdarshiaiims@gmail.com](mailto:gdarshiaiims@gmail.com) (G. Lokdarshi).<http://dx.doi.org/10.1016/j.tjo.2016.07.004>2211-5056/Copyright © 2016, The Ophthalmologic Society of Taiwan. Published by Elsevier Taiwan LLC. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).



**Figure 1.** (A) Painless swelling causing severe mechanical ptosis and S-shaped deformity of the left upper lid. (B) Brilliant transillumination suggesting clear content inside the cyst. (C) Microphotograph shows lacrimal acini (white arrow) lying in the fibrous wall (black arrow) of the cyst (H&E stain, 100 $\times$ ). (D) Double layer of flattened cuboidal epithelium (thin arrow) lining the fibrous cyst wall (thick arrow; H&E stain, 200 $\times$ ). H&E, hematoxylin and eosin.



**Figure 2.** B-Scan and A-Scan (at 56 dB) showing a clear cyst (star) of the lid with no extension behind the globe (triangle).

information. Therefore, for adults, in whom orbital dacryops are not as common as in children, ultrasonography for delineating orbital extension is not required.<sup>4</sup> Histopathology of the cyst wall must be done to confirm the diagnosis, irrespective of the surgical choice of excision or marsupialization. We believe that cryo-assisted complete excision of the cyst would be a better choice. This would not only yield the lacrimal end of the cyst wall, but also take care of recurrence and missed hydatid.<sup>5</sup>

To conclude, the “pathognomonic” history and diligent clinical examination can uncover simple dacryops. Ultrasonography may be the only imaging required. Histopathology is needed to confirm the diagnosis.

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