A rare cause of upper airway obstruction in neonates

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DESCRIPTION
A full-term baby girl weighing 2.9 kg was born by normal delivery. The anomaly scan at 20 weeks (including a 3D facial scan) was normal. She was born in good condition, but was noticed to have bilateral purple-coloured tense mobile, non-pulsatile masses below the medial canthus (figure 1).

At 6 h of age, she had a cyanotic episode with airway obstruction soon after feeding. She underwent resuscitation, during which a naso-gastric tube was passed through each nostril, excluding choanal atresia. An ultrasound scan confirmed bilateral cystic enlargement of the lacrimal ducts (14 mm), with some debris present. A diagnosis of bilateral congenital dacryocystocele was made.

Probing both cysts under local anaesthetic through the lacrimal punctums resulted in the release of mucoid material with marked reduction in size. Breast feeding was established and the baby was discharged home with ophthalmology follow-up.

Dacryocystoceles account for only 0.1% of congenital nasolacrimal duct obstruction and classically presents shortly after birth, more common in girls and usually unilateral.1 Differential diagnoses include encephalocele, haemangioma, dermoid cyst and nasal gliomas.1 Ultrasound provides a non-invasive diagnosis.2 Complications include infection that can be treated with topical antibiotics, warm compresses and gentle massage.1 Serious complications include sepsis, cellulitis and upper airway obstruction. Urgent probing can reduce dacryocystitis and cellulitis, spontaneous resolution is described.1,3

Learning points
▸ Dacryocystocele is a rare, but important, cause of upper airway obstruction in neonates.
▸ Urgent referral to paediatric ophthalmology can prevent serious complications.

Competing interests None.
Patient consent Obtained.

REFERENCES

Figure 1 Bilateral masses below medial canthus.