Case Report

Congenital dilatation of the nasolacrimal sac (Dacryocystocele): Case report

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Abstract

Congenital dacryocystoceles are usually diagnosed in the third trimester by parental ultrasound as a cystic lesion adjacent to the medial and inferior aspects of the fetal orbit. A considerable number of dacryocystocele are bilateral and resolve spontaneously in utero and/or immediately after delivery. Persistent dacryocystoceles need ophthalmological consultation to avoid the possible potential complications. This case report represents a case of congenital dacryocystocele diagnosed by antenatal 2D and 3D ultrasounds, which disappeared spontaneously 2 days after birth. To highlight that, the diagnosis of congenital dacryocystoceles is important to avoid additional postnatal diagnostic techniques and to manage the potential postnatal complications.

Keywords: Congenital, dacryocystocele, dilatation, nasolacrimal

Introduction

Congenital dacryocystoceles are usually diagnosed in the third trimester by parental ultrasound as a cystic lesion adjacent to the medial and inferior aspects of the fetal orbit.[1]

A considerable number of dacryocystocele are bilateral and resolve spontaneously in utero and/or immediately after delivery.[1,2]

Persistent dacryocystoceles need ophthalmological consultation to avoid the possible potential complications.[2]

Case Report

A 38-year old, 34-week pregnant female was diagnosed with fetal right-sided cystic lesion adjacent to the medial and inferior aspects of the fetal orbit (dacryocystocele) [Figure 1].

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The 2D ultrasound diagnosis of dacryocystocele was confirmed by the 3D ultrasound scan [Figure 2] and at birth by a bluish cystic swelling below the medial canthal area [Figure 3].

The dacryocystocele of the studied case disappeared spontaneously 2 days after birth.

Discussion

Dacryocystocele usually resolves spontaneously before birth in 50% of cases. Bilateral dacryocystocele may have intranasal extension and may cause respiratory distress.[1,2]

Persistent epiphora, conjunctivitis, cellulitis and airway obstruction can occur in cases of persistent dacryocystoceles (bilateral cases).[2]

The 3D ultrasound is helpful to confirm the diagnosis of dacryocystoceles and to avoid additional postnatal diagnostic techniques.[2]

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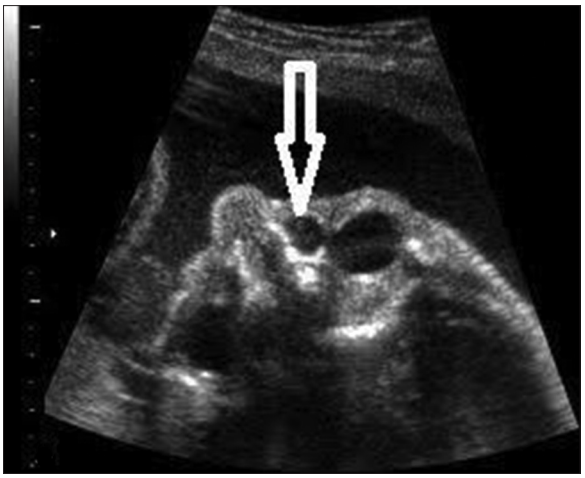

Figure 1: The prenatal two-dimensional (2D) ultrasound diagnosis of dacryocystocele

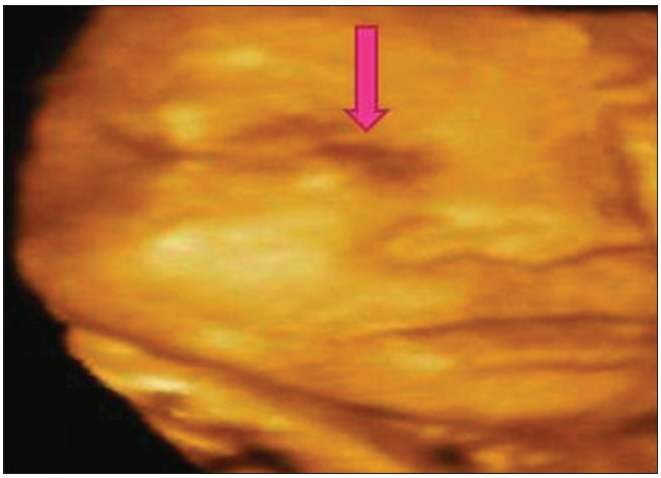

Figure 2: The prenatal three-dimensional (3D) ultrasound diagnosis of dacryocystocele

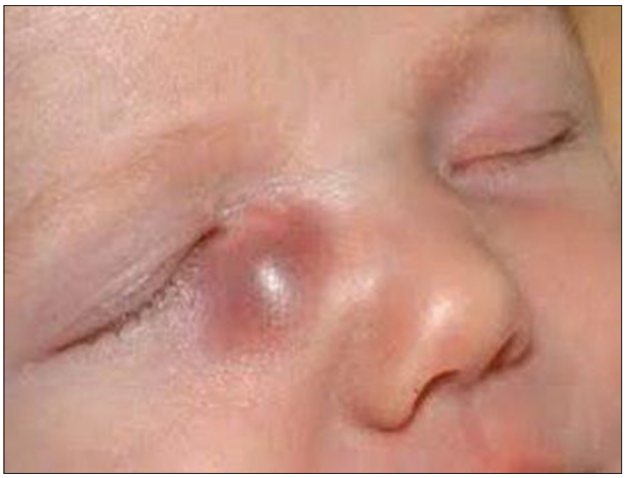

Figure 3: Dacryocystocele appears as a bluish cystic swelling below the medial canthal area

Rogister *et al.* reported three newborns with dacryocystoceles, one of them developed respiratory distress (bilateral dacryocystoceles) and was managed by marsupialization.[3]

Durmaz *et al.* reported a case of congenital bilateral dacryocystoceles with intranasal extension in a 3-day old newborn presented with respiratory distress and managed by endoscopic marsupialization.[4] Yin *et al.* reported a successful management of bilateral dacryocystoceles in a 5-day old girl.[5]

Bachelard-Serra *et al.* reported three cases of congenital bilateral dacryocystocele diagnosed prenatally by an ultrasound. Two of them developed respiratory distress and were managed by marsupialization.[6]

An initial conservative management of congenital dacryocystocele may be considered, but the surgical management is recommended if there is persistent respiratory obstruction.[7] Sarbajna *et al.* reported that the endoscopic marsupialization is an effective surgical management for congenital dacryocystocele.[8]

This case report represents a case of congenital dacryocystocele diagnosed by antenatal 2D and 3D ultrasounds, which disappeared spontaneously 2 days after birth. To highlight that, the diagnosis of congenital dacryocystoceles is important to avoid additional postnatal diagnostic techniques and to manage the potential postnatal complications.

Conclusion

Diagnosis of congenital dacryocystoceles is important to avoid additional postnatal diagnostic techniques and to manage the potential postnatal complications.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient has given her consent for her and her child images and other clinical information to be reported in the journal. The patients understand that her and her child names and initials will not be published and due efforts will be made to conceal her and her child identities, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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