Unilateral proptosis in the newborn

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Unilateral proptosis in the newborn infant is uncommon. In this case it was associated with a bony deformity of the orbit and retraction of the eyelid.

Case report

After artificial rupture of the membranes a full-term baby girl was delivered by vertex presentation. Immediately after birth the child was found to have a proptosed left eye and a retracted left upper eyelid. The eye was displaced downwards and medially. The cornea was not abnormally exposed as it was initially adequately covered by the lower lid and the globe was normal in appearance.

Examination

X rays showed depression and enlargement of the left zygomatic process of the frontal bone. There was no obvious abnormality of the zygoma. Examination under anaesthesia confirmed that the left eye was apparently normal, the upper eyelid was inverted and firmly tethered to the apex of the orbit by what appeared to be a fibrous band from the upper margin of the tarsal plate, and a hard

FIG. 1 *Exposure of left globe due to proptosis and retraction of left upper eyelid*

FIG. 2 *Preoperative x ray of skull*

bony mass was palpable in the upper outer part of the orbit. It was not possible to evert the upper lid to cover the globe adequately.

Paediatric examination confirmed that the child was otherwise healthy and normally formed.

Operation

Surgery was required when the child was $2\frac{1}{2}$ months old because of extensive exposure keratitis. A skin incision around the lateral orbital margin was made and extended on the zygomatic arch to make a "Y" incision. The periosteum was elevated over the site of the mass of bone and the bony mass was partly removed using an osteotome until the eye settled back slightly.

The upper lid was freed by an incision into the upper fornix severing the fibrous attachment to the apex of the orbit. The upper eyelid then became freely mobile and it was possible to perform a central tarsorrhaphy over the globe which had now retracted into the orbit.

The postoperative course was uneventful. The tarsorrhaphy was opened after 3 months. The eye later became convergent and in spite of occlusion and strabismus surgery has become amblyopic.

Result

The child is now aged $3\frac{1}{2}$ years and his appearance is accepted by the parents although cosmetically imperfect.

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