Ping-Pong Fracture in Newborn: A Rare Diagnosis

Fratura em Pingue-Pongue no Recém-Nascido: Um Diagnóstico Raro

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A neonate from the first pregnancy of a healthy 36-year-old woman was born by eutocic delivery with birthweight 2620 g. There was no trauma during pregnancy or labor. She presented a depression in the right parietal region, approximately 4 × 3 cm and a depth of 2 cm (Fig.1); the remaining physical examination was normal. Our diagnostic hypothesis was ping-pong fracture. Skull radiograph revealed an abnormal concavity in the parietal bone. Cranial ultrasound showed no intracerebral bleeds or haematomas (Fig. 2). Watchful waiting was decided, and within three months there was spontaneous elevation of the deformity.

Ping pong fractures in neonates occur in 4 – 10/100 000 live births, and are due to the relatively malleable nature of the skull.¹ The main cause of these fractures is birth trauma (instrumentation or maternal bone structures), causing inward buckling of the bones.¹,² Skull radiography shows the degree of deformation and cranial ultrasound can identify intracranial hemorrhages or hematomas. Although computed tomography scan is more sensitive, it should be performed only if there is diagnostic doubt or complications.¹ Treatment options include non-surgical reduction using digital pressure or vacuum extractor, surgical elevation or watchful waiting.³,⁴ The choice is based on clinical examination, the severity of the fracture and underlying brain injury.³ The prognosis is good in spontaneous cases and when neurological examination is normal.³,⁴

Figure 1 – Newborn of 13 days with right parietal depression present since birth

Figure 2 – Right parietal depression visualized in the plain radiograph of the skull, with no associated fracture line

The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the Helsinki Declaration of the World Medical Association.

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REFERENCES