

CLINICAL AND NEURORADIOLOGICAL FEATURES OF BLAKE'S POUCH CYST

ASPECTOS CLÍNICOS E NEURORRADIOLÓGICOS DA PERSISTÊNCIA CÍSTICA DA BOLSA DE BLAKE

Giuliano da Paz Oliveira^{1,2,3}, Cássy Geovanna Ferreira Moura⁴, Jean Lima Fontenele⁴, Mariana Botelho Ribeiro Mendes⁵, Jader Cronemberger Oliveira⁶, Nara Livia Rezende Soares⁷

A three-year-old male child, born to consanguineously married parents, presented to the child neurology outpatient department with parents complaints of neuropsychomotor development delay and macrocephaly. His head circumference was 56 cm (above the 97th percentile), and he had spastic diparesis, equinus gait, and mild appendicular and truncal cerebellar ataxia. Brain MRI disclosed infravermian cyst that communicates with the fourth ventricle, with no vermian hypoplasia and a normally positioned *torcula herophili* (Figure 1) and also a mild colpoce-

phaly (Figure 2). Based on these findings, a diagnosis of Blake's Pouch Cyst (BPC) was made.

Blake's pouch is an embryologic cystic appearing structure that represents posterior ballooning of the inferior medullary velum into the cisterna magna¹. BPC is caused by a failure of the regression of Blake's pouch secondary to the non-perforation of the foramen of Magendie and consists a rare entity of the Dandy-Walker *continuum spectrum*².

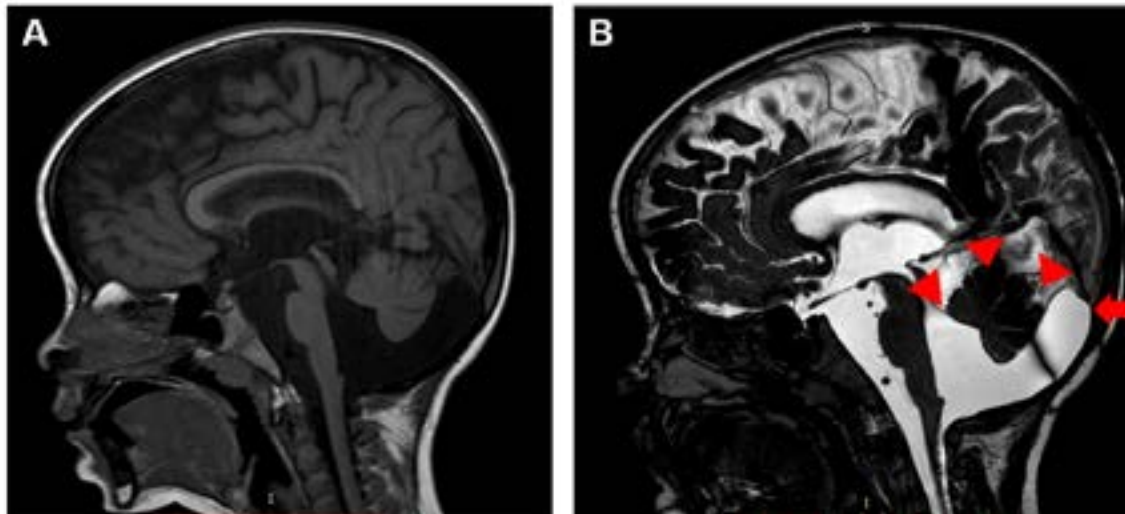


Figure 1: Sagittal T1 (A) and sagittal Fast Field Echo (B) brain MRI showing a cystic malformation of the posterior fossa. We highlight the normal position of torcula herophili (red arrow) and the normal morphology of cerebellar vermis (red arrowhead), characteristic findings of Blake's Pouch Cyst.

¹Professor at the Universidade Federal do Piauí, Campus Ministro Reis Velloso, Parnaíba-PI, Brazil

²Professor at Instituto de Educação Superior do Vale do Parnaíba (IESVAP), Parnaíba-PI, Brasil

³Programa de Pós-Graduação em Neurologia e Neurociências da Universidade Federal de São Paulo (UNIFESP), São Paulo-SP, Brazil

⁴Medical Student of the Federal University of Piauí (UFPI), Campus Ministro Reis Velloso, Parnaíba-PI, Brazil

⁵Physiotherapist, Associação de Pais e Amigos dos Excepcionais de Parnaíba-PI, Brasil

⁶Radiologist and Neuroradiologist

⁷Pediatrician, Resident in Pediatric Endocrinology, Irmandade Santa Casa de Misericórdia de São Paulo (ISCMSp), São Paulo-SP, Brasil.

Corresponding author e-mail: giulianopoliveira@gmail.com.

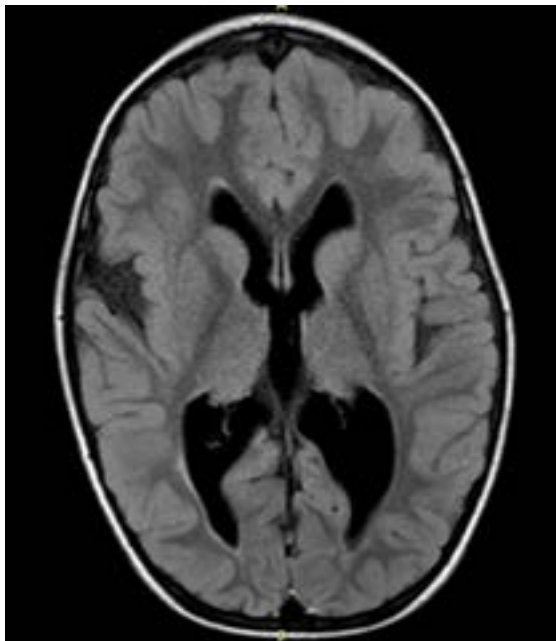


Figure 2: Axial FLAIR brain MRI disclosing cerebral atrophy and mild colpocephaly.

REFERENCES

1. Verma S, Sridhar M, Shashivadhanan S, Garg M. Blake's Pouch Cyst: A Case Report. *Indian Journal of Neurosurgery*. 2017; 06(02):122-125.
2. Cornips E, Overvliet G, Weber J, Postma A, Hoeberigs C, Baldewijns M, et al. The clinical spectrum of Blake's pouch cyst: report of six illustrative cases. *Child's Nervous System*. 2010; 26(8):1057-1064.