VOLUME - 12, ISSUE - 01, JANUARY - 2023 • PRINT ISSN No. 2277 - 8160 • DOI : 10.36106/gjra

POR RESERVED

Original Research Paper

Neurosurgery

FOOTPRINT SIGN IN BRAIN: REVISITED

Sharma SaurabhDepartment of NeurosRaj AbhishekDepartment of Neuros

Department of Neurosurgery, SGT Medical College, Haryana, India.

Department of Neurosurgery, Sushila Tiwari Hospital, Haldwani, India

KEYWORDS:

We would like to share an interesting case of a 53 year old female, who presented with history of seizures, multiple episodes of vomiting and altered sensorium. On neurological examination, her Glasgow coma scale was E3V3M6 and pupils were normal. Her biochemical parameters were normal. Immediate computed tomography scan of brain was taken and it showed a well-defined hypodense lesion in left parietal region with perilesional edema and significant mass effect, suggestive of intracranial space occupying lesion, most probably high grade glioma. MRI brain with contrast was suggestive of well-defined hypo to hyperintense lesion in left parietal region, masquerading a human footprint with mass effect. Condition of the patient was explained and surgery was advised but patient's relatives were not willing for any surgical intervention, hence patient was discharged against medical advice in a stable condition.

In 2011, Nayil et al. described a foot print sign in axial view of MRI brain, which was diagnosed to be a hydatid cyst caused by echinococcal infection.^[1] Many radiological signs have been described for hydatid cyst, depending on the various shapes they resemble, for example cresent sign, camalote or waterlily sign, pomegranate sign, honeycomb sign or spoke wheel, meniscus sign, onion peel sign or combo sign, inverse crescent sign and the signet ring sign.^[23] But these signs have been described for hepatic and pulmonary echinococcal infection and, not for brain hydatidosis.



Fig 1: Axial T2-weighted MR image shows a well defined oval solid cystic lesion in left parietal lobe with significant perilesional edema and midline shift towards right side



Fig 2: Saggital T1WI shows heterogenous lesion resembling "human foot print" with cystic component with perilesional edema and mass effect.

CONCLUSION:

A foot print sign in MRI brain, is not exclusive to brain hydatidosis and may also present in other solid cystic lesions of brain like pilocytic astrocytoma, hemangio blastoma, ganglioglioma, high grade gliomas, pleomorphic xanthoastrocytoma or meningiomas.

Funding

No funding accepted.

Conflict of interest

No conflicts of interest arised.

Authors' contributions

Sharma S is the corresponding author, reviewing and editing. Raj Abhshek did conception of idea, reviewing and editing.

REFERENCES:

- Nayil K, Ramzan Å, Jain Å. Footprint in Brain. Neurosurgery 2011;68(1):E284.
 Beggs I. The radiology of hydatid disease. Am J Roentgenol 1985;145(3):
- beggs I. The radiology of hydrau alsease. Am J hoentgenol 1985;145(3): 63948.
 K. J.D. K. JUN JUL J. M. TH. CTL.
- Koul PA, Koul AN, Wahid A, Mir FA. CT in pulmonary hydatid disease: unusual appearances. Chest 2000;118(6):1645-7.