

Short Report

Open Access, Volume 3

Neurosarcoidosis leading to a rosary-like pattern

Abstract

Patricia Alejandra Garrido Ruiz*; Marta Román Garrido

Department of Neurosurgery, Care Complex University of Salamanca. Spanish Transition Walk, 37007, Salamanca, Spain.

*Corresponding Author: Patricia Alejandra Garrido Ruiz

Department of Neurosurgery, Care Complex University of Salamanca, Spanish Transition Walk, 37007, Salamanca, Spain.

Email: agrjandri_92@hotmail.com

Received: Aug 02, 2023 Accepted: Sep 01, 2023 Published: Sep 08, 2023

Archived: www.jclinmedimages.org Copyright: © Garrido Ruiz PA (2023).

Keywords: Rosary-like; Neurosarcoidosis; Periventricular; Periependymal.

We present a case of a 12-year-old patient suffering from progressive spastic paraparesis secondary to multiple contrast-enhancing ependymal spinal cord lesions. The patient has been presenting varied symptoms: patellar hyperreflexia, urinary and fecal incontinence without sensory disorder, motor deficit in the right lower limb, posterior uveitis with retinal vasculitis, abdominal pain and vomiting of four years of evolution, arthralgia and deformity in one finger of the hand, hypogammaglobulinemia and mild hereditary thrombocytopenia. MRI revealed extensive vascular enhancement, beaded-shaped, at the medullary and cerebral periependymal level, bilateral subcortical, cerebellar peduncles, and right cerebellar hemisphere; and punctate enhancement at the medullary level with extensive medullary myelopathy involving the conus medullaris [1-6,7-10]. All complementary studies to date had been negative.

Introduction

The differential diagnosis was between an inflammatory disease or a tumor (ganglioneuroma as a feasible possibility) [2-4], with infectious suspicion being the least likely. It was decided to perform a neuronavigation-guided biopsy and endoscopy of ventricular lesions in the left frontal horn with septostomy and biopsy in the contralateral caudate in which the uptake area can be seen [1].

Materials and methods

Neurosarcoidosis was the anatomopathological finding. Corticosteroids and immunosuppressants were prescribed and the patient's condition improved [2,6].

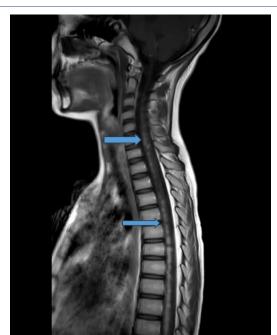


Figure 1: Sagittal brain and spine T1 MRI revealed periependimal hyperdensities in a rosary-like pattern (blue arrows).

Citation: Garrido Ruiz PA, Román Garrido M. Neurosarcoidosis leading to a rosary-like pattern. Open J Clin Med Images. 2023; 3(2): 1135.

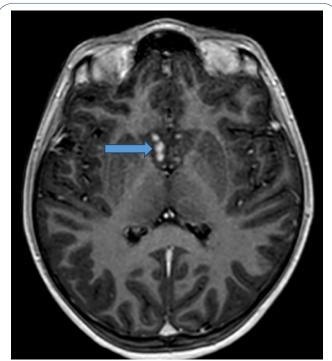


Figure 2: Axial brain T1 MRI revealed periventricular hyperdensities (blue arrow).

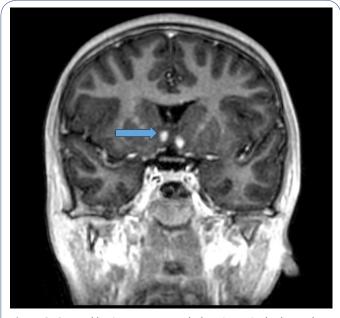


Figure 3: Coronal brain T1 MRI revealed periventricular hyperdensities (blue arrow).

Discussion and conclusion

Neurosarcoidosis is a rare complication of sarcoidosis. Patients undergo several tests until the diagnosis is reached. When periependymal beaded-shaped lesions are observed in the MRI and a broad spectrum of symptoms appears in addition to neurological focality, it should be suspected. Some cases disappear spontaneously within 4 to 6 months, other cases continue intermittently. Prognosis is acceptably favorable with treatment, so early diagnosis is important. The treatment of choice should be individualized but a high dose of steroids and suppression of the immune system with chemotherapy, and immunotherapy drugs, such as infliximab, are usually included. Treatment is necessary for at least 5 years.

Conflict of interest: The authors declare no conflicts of interest.

References

- AL Rhoton. Rhoton's Cranial Anatomy and Surgical Approaches. Oxford University Press, Congress of Neurological Surgeons (CNS). 2019.
- M Greenberg. Handbook of Neurosurgery, Thieme. 9th Edition. 2019.
- JM González Darder. Abordajes Neuroquirurgicos de la Patología Craneal y Cerebral. Elsevier España. 2015.
- Youmans. Neurological Surgery. 7th Edition. Saunders Company. 2016.
- Bathla G, Singh AK, Policeni B, et al. Imaging of neurosarcoidosis: Common, uncommon, and rare. Clin Radiol. 2016; 71: 96-106.
- Michotte A, Dequenne P, Jacobovitz D, et al. Focal neurological deficit with sudden onset as the first manifestation of sarcoidosis: A case report with MRI follow-up. Eur Neurol. 1991; 31: 376-79.
- Smith JK, Matheus MG, Castillo M, et al. Imaging manifestations of neurosarcoidosis. AJR Am J Roentgenol. 2004; 182: 289-95.
- 8. Robert F. Sarcoidosis of the central nervous system: Report of a case and review of the literature. Arch Neurol. 1962; 7: 442-49.
- Reske-Nielsen E, Harmsen A. Periangiitis and panangiitis as a manifestation of sarcoidosis of the brain: Report of a case. J Nerv Ment Dis. 1962; 135: 399-412.
- Herring AB, Urich H. Sarcoidosis of the central nervous system. J Neurol Sci. 1969; 9: 405-22.

www.jclinmedimages.org Page 2