A Case of Balo’s Concentric Sclerosis with Typical MRI Findings and Complete Resolution of the Lesion Following Treatment

Shitiz K Sriwastava, M.D, Aaron Desai, M.D, Evanthia Bernitsas, MD
Department of Neurology, Wayne State University School of Medicine, Detroit, MI

INTRODUCTION

➤ Balo’s Concentric Sclerosis (BCS) is a rare and severe demyelinating disease of the central nervous system (CNS), and it is often viewed as a variant of multiple sclerosis (MS).

➤ The typical lesion in BCS is characterized by concentric layers of demyelination alternating with layers of preserved myelin and is known as the “onion bulb” appearance.

➤ It was thought that BCS represents an aggressive MS variant with poor prognosis.

➤ However, recent literature contradicts prior observations. We present a case of BCS with typical MRI findings and complete resolution of the lesion following treatment.

OBJECTIVE

➤ To report a case of Balo’s concentric sclerosis which resolved completely after treatment with steroid and plasmapheresis.

PATEINT’S CLINICAL HISTORY

➤ A 46-year-old man noticed numbness and tingling in his right upper extremity and left hand, followed by left eye visual impairment. MRI scan of the brain showed a lesion in left peritrigonal region, ovoid in shape, measuring 7-8 mm.

➤ Multiple patchy T2 lesions were also found in the cervical spinal cord at C5 with somewhat patchy distribution and no abnormal enhancement.

➤ CSF analysis was significant for more than 3 unique oligoclonal bands.

➤ CT of the chest was negative for hilar or mediastinal lymphadenopathy. The diagnosis of relapsing remitting multiple sclerosis (RRMS) was made.

RESULTS

➤ After treatment with steroids and plasma exchange, the patient’s disease course has been benign with only residual left hemiparesis and total resolution of the original Balo-like lesion.

➤ A follow-up MRI scan showed total resolution of the original BCS lesion.

DISCUSSION

➤ We present this case of BCS to shed light on this rare subtype of MS.

➤ Our case adds more evidence that new BCS can arise in the background of typical MS.

➤ This case also highlights its potential benign course after treatment with corticosteroids and plasma exchange.

REFERENCES

➤ Purohit B et al. Balo’s Concentric Sclerosis with Acute Presentation and Co-Existing Multiple Sclerosis Typical Lesions on MRI. Case Rep Neurol 2015;7:44-50


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