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A rare cause of spinal mass: Primary intramedullary spinal cord lymphoma

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Abbreviated title: Primary intramedullary spinal cord lymphoma

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1 **A rare cause of spinal mass: Primary intramedullary spinal**

2 **cord lymphoma**

3 50 year-old female patient admitted to our hospital with increasing back pain,

4 weakness in the legs , walking and urinating disorders. Magnetic resonance imaging

5 (MRI) was performed and there was a solid lesion in the right side of the T7 and T8

6 segments of spinal cord, measuring 20 x 6 mm, located intramedullary. Lesion was

7 isointense on T1 weighted images (WI), hyperintense on T2WI and there was

8 homogeneous enhancement on T1W contrast enhanced (CE) series (Figure 1).

9 Patient underwent surgical operation and lesion confirmed histopathologically as

10 diffuse large B-cell lymphoma. The probability of secondary lymphoma involving the

11 spinal cord was excluded with abdominal and chest tomography.

12 Primary intramedullary spinal cord lymphoma (PISCL) is a rare disease,

13 constitutes only 1% of the central nervous system lymphomas. It develops mainly in

14 4th and 5th decades and it is more common in women than men (1). There are risk

15 factors for lymphoma development like AIDS, organ transplantation, congenital

16 immune deficiency syndromes and Epstein-Barr virus. Clinical findings are pain,

17 sensory and motor disorders in extremities. Non-hodgkin lymphomas constitutes 85%

18 of all cases and they are usually B-cell lymphomas. PISCL most often located in

19 upper thoracic or lower cervical cord and rarely in lumbar segments (2). They are

20 usually solitary lesions, multiple lesions seen rarely. Conventional MR findings can

21 mimic demyelinating disease (3). PISCL is isointense on T1WI and hyperintense on

22 T2WI, on the contrary of intracranial lymphomas. There is usually homogeneous

23 enhancement on T1 CE series (3). Intramedullary spinal cord lymphoma is a rare

24 disease but must be considered in differential diagnosis of intramedullary spinal
25 masses and radiological features should be kept in mind.

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34 **Figure Legends**

35 **Figure 1:** Intramedullary mass located in level of T7 and T8 segments. Lesion
36 is isointense on T1WI (a), hyperintense on T2WI (b) and enhancement is seen on
37 post contrast T1WI (c) and subtraction images (d).

