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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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50 year-old female patient admitted to our hospital with increasing back pain, weakness in the legs , walking and urinating disorders. Magnetic resonance imaging (MRI) was performed and there was a solid lesion in the right side of the T7 and T8 segments of spinal cord, measuring 20 x 6 mm, located intramedullary. Lesion was isointense on T1 weighted images (WI), hyperintense on T2WI and there was homogeneous enhancement on T1W contrast enhanced (CE) series (Figure 1). Patient underwent surgical operation and lesion confirmed histopathologically as diffuse large B-cell lymphoma. The probability of secondary lymphoma involving the spinal cord was excluded with abdominal and chest tomography.

Primary intramedullary spinal cord lymphoma (PISCL) is a rare disease, constitutes only 1% of the central nervous system lymphomas. It develops mainly in 4th and 5th decades and it is more common in women than men (1). There are risk factors for lymphoma development like AIDS, organ transplantation, congenital immune deficiency syndromes and Epstein-Barr virus. Clinical findings are pain, sensory and motor disorders in extremities. Non-hodgkin lymphomas constitutes 85% of all cases and they are usually B-cell lymphomas. PISCL most often located in upper thoracic or lower cervical cord and rarely in lumbar segments (2). They are usually solitary lesions, multiple lesions seen rarely. Conventional MR findings can mimic demyelinating disease (3). PISCL is isointense on T1WI and hyperintense on T2WI, on the contrary of intracranial lymphomas. There is usually homogeneous enhancement on T1 CE series (3). Intramedullary spinal cord lymphoma is a rare

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

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Figure Legends

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

