


IMAGES OF SPINE CARE

Unusual presentation of an adult filum terminale teratoma associated with diplomyelia

A 62-year-old man presented to the neurosurgery clinic with weakness of lower extremities. There was no history of surgery or trauma. The power grade in the lower extremities was of 3 or 4. There were no definite sensory deficits. Magnetic resonance imaging revealed a heterogeneous solid mass with cystic and fatty components at filum terminale expanding the spinal canal. A thin linear filum lipoma was also seen beyond the mass. The fatty components of the mass and linear filum lipoma showed hyperintensity both on T1- and T2-weighted images with suppression on fat-saturated images (Fig. 1). The solid components showed enhancement after intravenous contrast administration (Fig. 2). Above this lesion, a diplomyelia was detected separating cord into equal hemicords with no interposed mesenchymal tissue (Fig. 2). The spinal cord was low lying at L3 level, and the filum was attached to the posterior wall of the spinal canal. These radiologic findings suggested teratoma. The patient was referred neurosurgery clinic for

surgical treatment. Histopathology specimens confirmed mature cystic teratoma.

Spinal teratomas of filum terminale are rarely encountered in adults [1,2]. A teratoma with a spinal canal malformation such diplomyelia supports the hypothesis of dysembryogenic origin of spinal teratomas. Teratomas should be taken into consideration in differential diagnosis of intramedullary lesions. Magnetic resonance imaging is the best neuroimaging technique for preoperative definitive diagnosis. Total surgical resection should be the aim; however, recurrence has been reported in incomplete removal [3].

References

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Fig. 1. A heterogeneous solid mass with cystic and fatty components at filum terminale expanding the spinal canal. The fatty components of the mass (arrowheads) and the filum lipoma (arrows) showed hyperintensity both on T1-weighted (Left) and T2-weighted images (Middle) with suppression on fat-saturated images (Right). The spinal cord was low lying at L3 level, and the filum was attached to the posterior wall of the spinal canal.



Fig. 2. The solid components and the wall of cystic components of the mass (arrows) enhanced on T1-weighted sagittal (Left) and axial images (Top; arrows). Above this lesion, a diplomyelia (arrows) was seen separating cord into equal hemicords with no interposed mesenchymal tissue on T2-weighted coronal images (Bottom).

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