Acute urinary retention associated with spinal arteriovenous malformation

A 32-year-old healthy Taiwanese woman presented to hospital with back pain, progressive weakness of the left leg, and acute urinary retention for the last 5 days. Physical examination demonstrated neurosensory impairment at the T3–4 level and decreased muscle power of the left leg. Computed tomography and magnetic resonance imaging showed an intradural hypervascular lesion at T4 level and spinal angiography confirmed arteriovenous malformation of the spinal cord at the T4 level (*Figure 1*). Conservative observation was suggested. She was discharged in an uneventful condition on the 12th day.

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Vascular malformations of the spine and spinal cord, single or multiple feeding arteries from branches of the anterior and/or posterior spinal arteries, are rare, only accounting for 2–4% of all spinal diseases (Lee et al, 2014). Clinical manifestations include a transient neurological deficit, a progressive sensorimotor transverse lesion or acute paraplegia (Amarouche et al, 2015). Conservative observation, endovascular embolization, radiation therapy and microsurgical resection have been reported. Rates of arteriovenous malformation obliteration through microsurgical resection with or without embolization for spinal arteriovenous malformations range from 70–100% (Velat et al, 2012). BJHM

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Figure 1. a. Contrast-enhanced computed tomography scan revealed a hypervascular lesion within spinal cord at T4 level (arrows) and **(b)** magnetic resonance imaging depicted an intradural hypervascular lesion at T4 level (arrows). **c.** Digital subtraction angiography showed spinal arteriovenous malformation (arrow) at T4 level.