

## **A rare occurrence of a metastatic urothelial carcinoma to the thoracic vertebra: A case report**

### **ABSTRACT**

Urothelial carcinoma (UC) is a common urinary tract malignancy that predominantly affect the urinary bladder with a low recurrence rate after surgical removal. It usually metastasizes to the lungs, regional lymph nodes, and liver. However, it rarely spread to the thoracic spine and bones, especially in the Asian populations. A 50-years-old Asian man, with a one-year history of surgically resected UC, presented to us with a complaint of worsening upper back pain for three months. Magnetic resonance imaging (MRI) showed a destructed second thoracic (T2) vertebra with lytic lesion. A thoracic vertebrectomy was performed and histopathological examination (HPE) showed high-grade infiltrating metastatic malignant UC. Postoperatively, he was well and did not have any back pain. He was followed up under combined spine and oncology clinic regularly and was planned for chemoradiotherapy. UC commonly metastasizes to the lungs, liver, and lymph nodes. In young Asians, thoracic spinal metastases are rare. Urgent palliative spinal surgery is indicated to prevent further deterioration of function. Intraoperative usage of targeted controlled infusion (TCI) of remifentanyl and propofol as maintenance of anaesthesia are gold standard in assisting spine surgeons who are guided by neuromuscular monitoring. Spinal metastasis to the thoracic vertebra is rare among young Asian men. Patients presented with acute neurological deficits and back pain are indicated for spinal surgery. Multidisciplinary approach is needed for management of patients with spinal metastasis. Targeted controlled infusion (TCI) of remifentanyl and propofol are gold standard for maintenance of anaesthesia for spine surgeries which are guided by somatosensory, and motor evoked potential monitoring.