

fenestration of the anterior dura to permit communication of CSF between the dural space and pseudomeningocele. His strength and dexterity improved dramatically post-operatively. *Conclusions:* Spinal pseudomeningoceles following a traumatic brachial avulsion injury are typically found outside the spinal canal and are usually not associated with any neurological symptoms. There are few reported cases of post-avulsion intracanalicular pseudomeningoceles which present with delayed spinal cord compression and neurological dysfunction. Therefore, patients with a history of a traumatic avulsion injury and delayed neurological symptoms should warrant additional investigations.

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A retrospective analysis of the clinical utility of the Tokuhashi scale, and its impact in surgical management of spinal metastatic disease

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doi: 10.1017/cjn.2016.232

Background: The evaluation of patients presenting with spinal metastatic disease is often challenging. The Tokuhashi scale intends to facilitate this process. We conducted this study to investigate its clinical utility in surgical-decision making in patients with spinal metastasis. *Methods:* The oncology database was used to allocate 285 patients with spinal metastasis between 2010 and 2015. The Tokuhashi scale components were determined from a chart review. *Results:* Based on the Tokuhashi scale, there was 69.1% in the non-operative/radiation group (group 1), 23.2% in the palliative/excisional surgical group (group2) and 7.7% in the surgical group (group 3). Using Kaplan-Meiers estimate, survival time was significantly different across the three groups with means 232.8±30.8, 352.3±49.2 and 568.3±206.1 days, respectively. A significantly higher proportion of patients (84.6%) were treated non-surgically in group 1, compared to 45.5% in group 3 ($X^2=19.5$, $P<0.001$). However, there was no correlation between the type of surgical interventions (i.e. instrumented decompression, decompression alone, percutaneous vertebral augmentation and instrumented vertebral augmentation) and the Tokuhashi score. *Conclusions:* This review illustrates the utility of the Tokuhashi scale in predicting survival. However, it does not address the new role of emerging different surgical strategies for the treatment of spinal metastasis and lacks information concerning spinal instability.

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Spinal epidural abscess associated with septic facet joints-one center experience

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doi: 10.1017/cjn.2016.233

Background: Infection to the facet joints has been reported sporadically but the significance of this type of infection has not been clarified. In our study on spine infection, we identified the cases of spinal epidural abscess with septic joints and was able to compare to cases of epidural abscess with discitis and osteomyelitis. *Methods:* Between 2007 and 2014, we experienced 176 cases of spine infection

including discitis, osteomyelitis and epidural abscess. Retrospective review of the clinical data and radiological findings was performed. Among 176 cases, 80 patients had epidural abscess. They were divided to two groups, one with septic joint and the other with discitis and osteomyelitis. *Results:* 23 patients were found to have septic joints with epidural abscess based on the MRI findings. Mean age was 45.5. 15 of 23 patients (65%) required surgery and all treated with laminectomy. 78% had a good neurological outcome.

57 patients had epidural abscess with discitis and osteomyelitis. Mean age was 54. 51% required surgery. Only 62% was treated with laminectomy alone. Good neurological outcome was seen in 67% of the patients. *Conclusions:* Infected facet joints are not as rare as generally believed. The patients with septic joints are younger. Surgery was done more often and laminectomy provided better neurological outcome

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Epidemiology of spine infection in patients with history of IV drug use and HIV infection. Possibility of the secondary prevention

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doi: 10.1017/cjn.2016.234

Background: One of the major risk factors for spine infection is IV drug use and HIV infection. An increase in these risk factors has coincided with increased rates of spinal infection in Saskatchewan. However, the exact incidence and the clinical significance of spine infection associated with high-risk behavior is poorly understood. *Methods:* A retrospective review was completed for adult patients with discitis, osteomyelitis, or epidural abscess admitted to the Royal University Hospital, University of Saskatchewan over the last eight years. *Results:* This study included 176 patients consisting of 41% with discitis, 69% with osteomyelitis and 45% with epidural abscess. Overall mortality was 3% and 16% of patients developed severe disability. 40% of patients were intravenous drug users, 45% were hepatitis C positive and 12% were HIV positive. For the initial four years of our study we experienced 72 patients. We experienced 91 cases over the past four years. Geographical analysis showed high incidence areas within the city of Saskatoon. *Conclusions:* High rates of IV drug use, Hepatitis C, and HIV have important implications in terms of what measures would assist in prevention of this condition. Secondary prevention or early identification of patients may reduce the number of patients who require lengthy admission, surgery and long term care for disability.

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Type III odontoid fracture with C1 and C2 distraction injury manifesting as a variant of occipital-cervical dissociation

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doi: 10.1017/cjn.2016.235

Background: Isolated odontoid type III fractures are usually stable with surgical fixation reserved for significant fracture displacement or inability to maintain alignment with external immobilization. We present a rare but important pattern of injury involving a C2