

relating to transitioning from pediatric to adult care were identified: (1) Poor communication; (2) Uncertainty relating to living life as an adult with hydrocephalus; (3) Anxiety and fear regarding navigating a new health care environment; (4) sadness in the loss of the relationship with the pediatric health care team. Conclusions: We identified a general dissatisfaction with the transitioning process for hydrocephalus. Common themes and concerns identified may form the basis of an improved transitioning model for youth with hydrocephalus as they become adults.

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### **Tissue plasminogen activator in addition to twist drill drainage as a treatment for chronic subdural hematomas – a descriptive analysis**

*A Dickinson (Saint John)\* A leRoux (Saint John) G Kolyvas (Saint John) D El-Mughayyar (Saint John) N Ghallab (Saint John) E Bigney (Saint John) E Richardson (Saint John) A Vandewint (Saint John), N Attabib (Saint John)*

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**Background:** Current literature provides little consensus on universal guidelines for first-line treatment of chronic subdural hematomas (cSDH). However, administration of local tissue plasminogen activator (tPA) may enhance the traditional method of twist drill drainage (TDD). The study aims to explore the efficacy of TDD with and without tPA, at achieving clinically relevant drainage (200mL) and reducing recurrence of cSDH. **Methods:** A retrospective review of patients (N=34) with cSDH is presented. Patients who received TDD with tPA (n=17) were identified and matched, based primarily on age and hematoma volume, to a control group (n=17), TDD without tPA. Variables of interest include initial hematoma volume, volume drained, length of stay, and recurrence rates. Descriptive analysis was run. **Results:** Average age for patients was 74.6 with 76% male. Mean drainage volumes for the tPA cohort was 381.6mL and TDD without tPA cohort was 151.3mL. The addition of tPA resulted in drainage volumes nearly double (1.9x) the clinically relevant amount and had low recurrence rates (12.5%). TDD without tPA failed to result in clinically relevant drainage and had a recurrence rate of 52.9%. Average length of stay differed by two days (9.71 tPA; 7.71 control). **Conclusions:** TDD with tPA was effective at treating cSDH in our population.

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### **Intradural-extramedullary spinal cavernoma with nerve root association: a case report and review of the literature**

*SA McQueen (Toronto)\* F Haji (Vancouver) E Lucar Figueroa (London) Y Sallam (London) L Ang (London), N Duggal (London)*

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**Background:** Although 5% of cavernomas occur in the spine, intradural-extramedullary cavernomas are exceptionally rare. We

present one such case of cavernoma associated exclusively with a nerve root, and review the literature for similar lesions. **Methods:** Case Report. A 45-year old male patient presented with a six-month history of numbness and paresthesia affecting his lower extremities bilaterally. MRI demonstrated a 16mm intradural-extramedullary lesion at T3-4, compressing the cord. The lesion was surgically removed en-bloc, requiring root sacrifice. The patient's symptoms completely resolved post-operatively, and he remained asymptomatic at 3-month follow up. **Results:** Including the present case, 71 cases of intradural-extramedullary spinal cavernoma have been reported, including 50 with confirmed nerve root involvement. Patients most frequently presented between the ages of 40-59 (41%) with lesions at the lumbar level (54%). Confirmed subarachnoid hemorrhage was present in 14% at presentation, although 23% presented acutely. 49% presented with longstanding/progressive symptoms, and 11% with mixed acute-on-chronic presentation. 37% presented primarily with radiculopathy, 21% with myelopathy, and 11% with pain. Good postoperative recovery was documented in 80% of cases. **Conclusions:** Intradural-extramedullary spinal cavernomas may demonstrate a propensity for radiculopathy at presentation and exhibit substantial subarachnoid hemorrhage risk. Literature review supports the role of surgical resection.

## P.172

### **Work-up and management of asymptomatic extracranial traumatic vertebral artery injury**

*MA MacLean (Halifax)\* CJ Touchette (Sherbrooke) T Dude (Hamilton) A Almojuela (Winnipeg) D Bergeron (Montreal) Kameda-Smith (Hamilton) AR Persad (Saskatoon) N Sader (Calgary) J Alant (Halifax), SD Christie (Halifax)*

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**Background:** Extracranial traumatic vertebral artery injury (eTVAI) is common following non-penetrating head and neck trauma. Most cases are initially asymptomatic with an increased risk for stroke. Consensus is lacking regarding screening, treatment, and follow-up of asymptomatic patients with eTVAI. Our objective was to investigate national practice patterns reflecting these domains. **Methods:** An electronic survey was distributed via the Canadian Neurological Sciences Federation and Canadian Spine Society. Two case-based scenarios featured asymptomatic patients with eTVAI. Case 1: non-displaced cervical lateral mass fracture; angiography stratified by luminal diameter reduction. Case 2: complex C2 fracture; angiography featuring pseudoaneurysm dissection. **Analysis:** descriptive statistics. **Results:** Response Rate: 108 of 182 participants (59%), representing 20 academic institutions.

Case 1: 78% of respondents would screen using CTA (97%), immediately (88%). Most respondents (97%) would initiate treatment, using aspirin (89%) for 3-6 months (46%).

Case 2: 73% of respondents would screen using CTA (96%), immediately (88%). The majority of respondents (94%) would initiate treatment, using aspirin (50%) for 3-6 months (35%). Thirty-six percent of respondents would utilize endovascular therapy.