epidural/SDH) and 26% required operations for acute convexity SDH. Three patients required operations for their IHSDH by inter hemispheric approach. By 10 weeks, 82% had a complete resolution of the IHSDHs. *Conclusions:* IHSDHs are often referred to as rare entities. Our results show they are common. Conservative management is often appropriate to manage even large IHSDHs, as most resolve spontaneously. This study will help document the occurrence of falx syndrome, as well as the management and outcomes of larger IHSDHs.

Functional Neurosurgery and Pain

P.083

Trigeminal neuralgia caused by an intra-axial glioma in a child: first surgical case report and systematic review

R Bokhari (Montreal) S Baeesa (Jeddah) A Sabbagh (Montreal) J Atkinson (Montreal) R Dudley (Montreal) J Farmer (Montreal)*

doi: 10.1017/cjn.2016.187

Background: Trigeminal neuralgia (TGN) is usually caused by arterial compression of the trigeminal nerve. There are very few cases caused by intra-axial brainstem masses. Little information is therefore available regarding the response to incomplete resection of offending lesions. We present one such case, and systematically review the published in the literature. *Methods:* Case report and systematic review of MEDLINE and EMBASE *Results:* Case report: A seven year-old girl is referred with typical TGN pain. MRI revealed a cervicomedullary tumor with no abnormalities of the pons or trigeminal nerve. Subtotal resection under neurophysiologic monitoring was achieved, leaving a small residual attached near the expected location of the trigeminal spinal nucleus and tract.Patient recovered well with resolution of her TGN pain. She is asymptomatic seven years postoperatively. Literature Review: We found no other published cases in children or secondary to gliomas. Among reviewed cases, only two underwent surgery. Both were adults with brainstem cavernomas and both reported substantial improvement despite incomplete resection. *Conclusions:* Our case as well as literature review both show that surgical resection is beneficial in such cases and, even if subtotal, can result in substantial pain relief. This suggests intra-axial compression of the trigeminal spinal nucleus and tract as the possible cause of TGN pain in such cases.

P.086

The clinical significance of trigeminal neuralgia nomenclature

SV Nolin, BSc (Winnipeg) L Barchet (Winnipeg) A Kaufmann (Winnipeg)*

doi: 10.1017/cjn.2016.188

Background: A diagnosis of trigeminal neuralgia (TN) may be broadly applied to many neuralgic facial pains, while more stringent criteria are required for management decisions, outcome assessment, and pathophysiological correlations. Our aim was to evaluate existing classification systems of facial pain. *Methods:* The study population was comprised of 534 Manitobans referred to neurosurgery for facial pain from 2001 to 2013. A retrospective chart review identified presenting features; pain distribution, nature, and duration. The recorded diagnoses (rDx) were then re-classified according to the International Classification of Headache Disorders (ICHD-3) and Burchiel System of TN1 and TN2. *Results:* There was complete correlation between rDx and ICHD-3 for typical TN (tTN) in 266(49.8%) patients, atypical TN (aTN) in 39(7.3%), and idiopathic facial pain (IFP) in 59(11%). Idiopathic trigeminal neuropathy (iTn) in 35(6.6%) was not classified in ICHD-3. Burchiel-TN1 included heterogeneous diagnoses including tTN (266), aTN (27), iTn (2) and IFP (8); Burchiel-TN2 included aTN (10), iTn (23), and IFP (15). Another 135(25.5%) had other facial pain diagnoses. *Conclusions:* Classification of TN is especially important when selecting and evaluating surgical treatments. Diagnostic criteria should clearly differentiate between unique conditions and ideally have basis on underlying etiology. The ICHD-3 nomenclature best satisfies these aims although should be expanded to include iTn.

P.087

RETRACTION - Low back pain relief with a new 32-contact surgical lead and neural targeting algorithm

J Pilitisis (Albany) G Barolat (Denver) J Rosenow (Chicago) J Brennan (Florence) A Bailey (Overland Park) J Epstein (Smithtown) B Hammond (Pensacola) C Metzger (Pensacola) D Huyett (Valencia) K Lechleiter (Valencia) N Mekel-Bobrov (Valencia)*

doi: 10.1017/cjn.2016.189

Background: Advances in surgical leads have been thought to potentially enable improved low-back pain relief using SCS. A recently introduced 32-contact surgical lead, which couples multiple independent current control and anatomically-based neural targeting stimulation algorithms, allows for patient-specific programming optimization. We present a real world study of this surgical lead. *Methods:* A multi-center, consecutive observational study of a new 32-contact surgical lead was carried out, using the Precision Spectra SCS System (Boston Scientific) in 100 subjects out to 12 months post-implant. We examined procedural information, programming parameters, and clinical outcomes including pain reduction (NRS), activities of daily living, and change in pain medications. *Results:* Surgical lead placement distribution was between T7 and L2, with most at top of T9 (26%). A mean reduction of 5.1 points (SD 2.15, $p<0.001$) from 7.8 (baseline) to 2.6 in overall pain was observed. A subset of subjects reporting low-back pain only exhibited a mean decrease of 6.0 points (SD 2.12, $p<0.001$) from 8.3 (baseline) to 2.2. Of these, 83.1% of subjects showed ≥50% back pain reduction. Increases in activities of daily living and reduction in pain medication usage were also observed in majority of subjects. *Conclusions:* Subjects implanted with a 32-contact surgical lead using a neural targeting algorithm demonstrated significant low-back pain reduction.