opioid usage (78.7% v. 21.7%, p=0.007) both decreased after rhizotomy. Conclusions: Using a novel conduction pathway, we have successfully been able to monitor radiofrequency rhizotomy in patients operated on under a general anesthetic, with promising preliminary results. Further work is needed to better evaluate this intervention.

HEADACHE

P.130

Secondary trigeminal autonomic cephalgia due to pituitary adenomas: systematic search of the literature and case illustration

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Background: Trigeminal autonomic cephalgias (TAC) have been implicated in a multitude of intracranial mass lesions, including pituitary adenomas. Treatment of the associated pituitary adenoma has been reported to result in resolution of the secondary TAC. Methods: We conducted systematic search of the literature in accordance with PRISMA guidelines using Ovid Medline, Pubmed, Scopus, and Web of Science for TACs with associated pituitary lesions. We searched for all the relevant cases to detail the epidemiology, clinical phenotype of TAC, characteristics of the associated pituitary lesion including its hormonal profile, type of clinical intervention, and outcome. Results: Together with our case, 50 cases are reviewed. Prolactinomas were the most common hormone-producing adenomas (n=35; 71%). Few cases were non-functioning (n=3; 6%). Macroadenomas were predominant (n=30, 70%). Cavernous sinus extension was frequent (n=21; 54%). Medical intervention was the most employed form (n=31; 63%). Surgical intervention was carried in several cases (n=18; 37%). The success rate of medical management was high (n=25/31; 81%). Dopaminergic agonist therapy was the most common medical intervention (n=28; 90%). Conclusions: Secondary TACs with associated pituitary adenomas tend to have debilitating symptoms. The pathophysiology of the association is not entirely clear. Identifying the cause and employing the proper intervention is important to avoid unnecessary suffering.

P.131

Acute subdural hematoma in obstetric patients following epidural anesthesia

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Background: Post-dural puncture headache is a known complication of neuraxial anesthesia and acute subdural hematoma has been associated with unintentional dural puncture. Notably, a significant number of unintentional dural punctures remain unidentified. We present two contrasting cases of subdural hematoma (SDH) following labour epidural anesthesia with no sign of dural puncture at time of anesthesia. Patient 1 presented with headache post-partum day (PPD) six, SDH was identified PPD23, and blood-patch treatment performed PPD35. Patient 2 presented with headache immediately, had SDH identified PPD3, and placement of blood-patch PPD4. Methods: The cases are presented and the literature was reviewed for prior cases. Results: Patient 1 developed significant bilateral SDH with severe headache and right abducens palsy. Headache resolved post blood patch however surgical evacuation was required and the abducens palsy persisted. Patient 2 experienced resolution of symptoms two days post blood patch, the small unilateral SDH was managed conservatively, and had no neurological deficits. Conclusions: Headache is common in the postpartum period. The majority are primary etiology and benign. SDH is a rare but serious complication of neuraxial anesthesia, and the consequences may be devastating. Rapid identification and early treatment are essential to avoid severe neurological sequelae.

NEURO-ONCOLOGY

P.136

Intraoperative 5-ALA fluorescence-guided resection of high-grade glioma leads to greater extent of resection with better outcomes: a systematic review

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Background: 5-aminolevulinic acid (5-ALA) enhances intraoperative high grade glioma (HGG) tissue visualization. Despite promising randomized clinical trial data suggesting survival benefit for 5-ALA-guided HGG surgery, patient outcome efficacy is not universally accepted. Methods: We performed a systematic review of the literature to evaluate whether there is a beneficial effect upon survival and extent of resection from the utilization of 5-ALA in HGG surgery. Literature regarding 5-ALA usage in HGG surgery was reviewed according to PRISMA guidelines. Results: 3,756 published studies were screened, 536 evaluated, and 45 included. Of studies that directly compared the use of 5-ALA to white light (28.9%), 5-ALA lead to a better progression-free survival (PFS) and overall survival (OS) in 88.4 and 67.5% of patients, respectively. 42.2% demonstrated that 5-ALA use was associated with less post-op neurological deficits, whereas 23.3% of studies showed that surgeries using 5-ALA lead to more deficits. 34.5% demonstrated no difference between 5-ALA and without. Conclusions: 5-ALA was found to be associated with a greater extent of resection and longer OS and PFS in HGG surgeries. Postop neurologic deficit rates were inconclusive when comparing 5-ALA groups to white light groups. 5-ALA is a useful surgical adjunct for HGG resection with preserved patient safety.