

**P.124****Assessing the fragility index of randomized controlled trials on carotid artery stenosis: systematic review**

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**Background:** The fragility index (FI) is the minimum number of patients whose status would have to change from a nonevent to an event to turn a statistically significant result to a non-significant result. We used this to measure the robustness of trials comparing carotid endarterectomy (CEA) to carotid artery stenting (CAS). **Methods:** A search was conducted in MEDLINE, Embase, and PubMed on RCTs comparing CEA to CAS. The trials need to have statistically significant results and dichotomous primary endpoints to be included. **Results:** Our literature search identified 10 RCTs which included 9382 patients (4734 CEA, 4648 CAS). The primary end points of all included trials favoured CEA over CAS. The median FI was 9.5 (interquartile range 2.25 - 21.25). All of the studies that reported lost-to-follow-up (LTFU) had LTFU greater than its fragility index, which raises concern that the missing data could change the results of the trial from statistically significant to statistically insignificant. **Conclusions:** A small number of events (FI, median 9.5) were required to render the results of carotid artery stenosis RCTs comparing CEA to CAS statistically insignificant. All of the studies that reported LTFU had LTFU greater than its fragility index.

**P.125****Cerebral AVM recurrence post gamma knife obliteration: a 20 year single centre retrospective analysis and review of literature**

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**Background:** Pediatric arteriovenous malformations (AVMs) are rare, but represent the leading cause of intracranial hemorrhage in children. These are traditionally understood to be congenital lesions, however AVMs recurrence within previously unaffected tissue challenges this understanding. Recurrence after microsurgery and endovascular treatment have been studied in greater detail, but little literature exists surrounding recurrence after Gamma Knife Radiosurgery (GKRS). **Methods:** We performed a retrospective chart review of all pediatric AVMs treated with GKRS at our centre. Charts were assessed by two reviewers to identify cases of AVM recurrence after angiographically confirmed obliteration. To contextualize our institutional patterns, we also performed a structured literature review of published data reporting pediatric AVM recurrence after GKRS. **Results:** Our institutional review revealed two cases of AVM recurrence after angiographically proven cure, and our review of literature identified nine retrospective reviews and three case reports, which in total reported 22 individual cases of recurrence. The recurrence rate in the retrospective reviews ranged from 0 to 18%. **Conclusions:** The current work illustrates that while

AVM recurrence is rare, it is a possible complication of GKRS. There was also a qualitative suggestion that embolization prior to CT increased risk of recurrence. Both these facts should be included in decision-making and patient counselling.

**OTHER MULTIDISCIPLINARY****P.126****An unlikely impersonator of primary brain tumours: Illustrative case report and literature review of primary angitis of the central nervous system**

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**Background:** Primary angitis of the central nervous system (PACNS) is a rare inflammatory condition affecting the parenchymal and leptomeningeal vessels of the CNS. PACNS presenting as a solitary mass lesion (ML-PACNS) constitutes a rare subtype of this pathology. Herein we present the first case reported in Canada of ML-PACNS, presenting with clinical and radiographic findings consistent with a high grade glial neoplasm, as well as a review of the literature on ML-PACNS. **Methods:** Review of the literature from 1987-2023 was conducted using PubMed to identify features of ML-PACNS and possible treatment paradigms. **Results:** A number of case reports of ML-PACNS were identified, as well as 6 retrospective analyses of a total of 67 patients. Features such as faster rate of symptom onset, and investigations such as MRI vessel-wall imaging and MR spectroscopy were suggested for identification of ML-PACNS. Treatment was highly variable, but followed guidelines for other neuroinflammatory disorders. **Conclusions:** Preoperative differentiation between ML-PACNS and CNS neoplasms is difficult due to their similar clinical and radiographic features. However, making this distinction is crucial as PACNS mass lesions can regress entirely with immunosuppressive therapy, potentially obviating the requirement for surgical intervention. Beyond diagnostics, further research is required to establish and validate a treatment paradigm.

**P.127****Quality of life (QoL) using EORTC QoL-C30 and BN20 among patients who underwent brain tumor resection in a tertiary hospital in Saudi Arabia**

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**Background:** Quality of life (QoL) is the awareness of individuals' well-being in life in physical, personal, mental and social