

**Introduction:** This article describes a novel method of searching PubMed database using Google search algorithm. Google search operators “site:,” “intext:” and- “intitle” were used in the following fashion-*Site:https://ncbi.nlm.nih.gov/PubMed intext:Keywords -intitle:PubMed Results*. A survey was conducted to establish validity of this method by comparing it with PubMed Basic search. **Methods:** Single blinded survey of residents from three medical specialities was conducted to compare PubMed Basic search and Google search methodologies, using keywords dictated by participants. First 10 articles collected from both search methods were compiled and rated by participants on a scale of 0-10. **Results:** Google search method provided significantly higher overall mean relevance scores ( $6.14 \pm 1.56$  vs.  $4.85 \pm 2.06$ ) and higher number of useful articles per participant ( $7.32 \pm 1.97$  vs.  $5.12 \pm 2.55$ ) ( $P < 0.001$ ). **Conclusion:** The novel method described herein provides more sensitive and specific search results for same keyword string than PubMed Basic search. This method could prove useful for the average researcher providing both accurate and exhaustive coverage from a single search.

#### ISNACC-S-14

**Comparison of intravenous (propofol) and inhalational (sevoflurane) anaesthetic agent on cerebral oxygenation assessed by SjVO<sub>2</sub> in patient undergoing surgery for traumatic brain injury**

**R. Chauhan, N. B. Panda, H. Bhagat, N. Kalaria, S. L. Soni**

Department of Anaesthesia and Intensive Care, Division of Neuroanaesthesia, PGIMER, Chandigarh, India

**Introduction:** Anaesthetic agents may produce deleterious effects on the compromised brain. There is lack of clinical data regarding the superiority of one anaesthetic agent over the other. The levels of serum Interleukin-6 serves as pro-inflammatory marker are increased with severity of brain injury. This study was conducted to evaluate the effects of propofol and sevoflurane on cerebral oxygenation, brain relaxation, systemic hemodynamic parameters and levels of IL-6 in patients with Traumatic brain injury. **Methods:** A prospective randomized comparative study was conducted on forty-two patients undergoing surgery for Traumatic brain injury. Patients were randomized into 2 groups, patients in Group P received Propofol while patients in Group S received Sevoflurane as agent for maintenance of anaesthesia. In all, anaesthesia was induced with propofol, intubation was facilitated by vecurorium and analgesia was maintained with Fentanyl. Anaesthesia was maintained with propofol or sevoflurane keeping entropy 40-60. Effect of these agents on cerebral oxygenation was assessed by

jugular venous oxygen saturation (SjVO<sub>2</sub>) and various parameters derived from SjVO<sub>2</sub> and ABG values. Intra and postoperative hemodynamic changes and quality of intraoperative brain relaxation were assessed. The effect on level of serum biomarker IL-6 (a pro-inflammatory cytokine) at the end of surgery compared to baseline value. **Results:** In both the groups SjVO<sub>2</sub> values were comparable and on higher normal level. Mean arterial pressure (MAP) was found to be significantly lower in Group P compared to those in Group S ( $P < 0.05$ ). Brain relaxation score were comparable between the groups. A significant difference was found between the baseline value and value at the end of surgery in group S ( $P = 0.040$ ). **Conclusion:** Cerebral oxygenation measured by SjVO<sub>2</sub> and brain relaxation was comparable when anaesthesia was maintained with propofol or sevoflurane. Significant reduction in MAP by propofol needs attention in patients with TBI. Decrease in level of IL-6 at the end of surgery compared to baseline value may suggest neuroprotective potential of sevoflurane.

#### ISNACC-S-15

**Anaesthetic management of intracranial aneurysm in patient with coarctation of aorta**

**A. Choudhary, V. Parashar, P. Gupta, K. L. Agarwal**

Department of Anaesthesiology and Critical Care, Santokba Durlabhji Memorial Hospital, Cum Medical Research Institute, Jaipur, Rajasthan, India

**Introduction:** Intracranial aneurysms are more often found in patients with coarctation of aorta (COA) than in general population. Aneurysm rupture occurs much earlier in these patients. Here, two cases of ruptured cerebral aneurysms associated with COA are presented. The aneurysms were successfully clipped in acute stage prior to correction of coarctation. Patients with COA should have screening for early diagnosis of cerebral aneurysms. Ruptured aneurysm should be treated as early as possible. Unruptured aneurysm should also be treated before aortic repair, if general condition of patient allows. **Case Summary:** Case 1: 14 year old boy presented with sudden onset headache followed by loss of consciousness. BP was 210/100 mm of Hg, very feeble femoral pulses. Contrast CT scan brain revealed ruptured distal anterior communicating artery aneurysm. Aortogram revealed total obstruction in descending thoracic aorta distal to origin of left subclavian artery. Clipping of aneurysm was planned first, followed by COA repair. Patient was discharged after complete recovery. Case 2: 15 year old boy presented with sudden onset headache, vomiting, one GTCS episode. BP was 180/130 mm of Hg. Cerebral CT angiography revealed saccular aneurysm from anterior