in approximately 50%, decreases brain blood flow by directly acting on post-synaptic α_2 receptors, decreases CSF pressure without ischemic suffering and effectively decreases brain metabolism and intracranial pressure and also able to decrease injury caused by focal ischemia. **Materials and Methods:** A prospective randomized study was done on 50 patients (ASA grade 1, 2) scheduled for intracranial tumor surgeries were divided into study or control group (25 each). Both group received Midazolam (0.02 mg/kg) iv, Glycopyrrolate (0.005 mg/kg) iv, Inj Fentanyl (2 μ g/kg) iv and group D received dexmedetomidine 0.8 μ g/kg iv in 20 ml saline over 10 mins and group C received 20 ml Normal saline iv for same time period without dexmedetomidine in Premedication. Patients were induced with inj. Propofol (iv) after giving test drug and dose was calculated by BIS values between 40-60, followed by inj. Vecuronium 0.1 mg/kg after recording hemodynamic measurements. Patients were ventilated with 100% oxygen for 180 seconds. Hemodynamic measurements were recorded two minutes before test drug and placebo, two minutes before and one minutes after induction and just after and one minutes, two minutes, five minutes and 10 minutes of intubation. Change in intraocular pressure with the help of schiotz tonometer is also noted during this period. The groups were compared with heart rate, systolic blood pressure, and diastolic blood pressure and mean arterial pressure, IOP and IV dose of Propofol requirement for induction. **Results:** Groups were well matched for their demographic data ($P > 0.05$) and preoperative vitals. Heart rate and mean arterial blood pressure decreased significantly in patients of group D (Dexmedetomidine group) compared to group C (placebo group) ($P < 0.05$), and patients were more hemodynamically stable before induction, and at T-1, T-2, T-5, T-10 minutes after induction in group D (P value < 0.05). The total propofol requirements for induction is more in patients of group C than in patients of group D (128.6 ± 15.5 mg vs. 91.8 ± 20.41 mg, $P < 0.05$). The intraocular pressure in right eye and left eye decreases significantly from pre-induction value of 21.97 ± 4.75 mm Hg and 22.08 ± 4.94 mm Hg to 18.02 ± 4.30 mm Hg at intubation and 17.78 ± 4.15 mm Hg one minutes after intubation in both the eyes in group D after the test drug. In Group C IOP at pre-induction, intubation and one minute after intubation are 20.96 ± 3.80 mm Hg, 26.55 ± 4.08 mm Hg and 25.99 ± 3.78 mm Hg in right eye and 21.05 ± 3.72 mm Hg, 26.38 ± 4.14 and 25.90 ± 3.75 mm Hg in left eye respectively and the difference is statistically significant between the groups. Bradycardia and hypotension incidences were higher in group D. **Conclusion:** Dexmedetomidine is an excellent drug when used as an adjunct to general anesthesia for attenuation of pressor response. It not only decreased the magnitude of stress response to intubation but also decreased the

intraocular pressure and induction dose requirement of propofol.

22. Role of Intravenous Magnesium sulphate in spinal surgery for hypotensive anesthesia

M . Somani, S. Sachdev, V. Mathur, D. D. Jethava, D. Jethava

Department of Anaesthesiology and Critical Care, Mahatma Gandhi Medical College, Jaipur, Rajasthan, India

Background: This randomized, double-blind placebo controlled study was undertaken to evaluate effect of intravenous magnesium sulphate for hypotensive anesthesia in patient for spinal surgery. **Materials and Methods:** Sixty patients undergoing spinal surgery were included in two parallel groups. The magnesium group (M) received magnesium sulphate 40 mg/kg as a bolus before induction of anesthesia and 10 mg/kg/hr by continuous infusion during operation through out surgery. The control group (C) as above received isotonic saline solution both as bolus and infusion at the same rate. **Result:** The surgical time was reduced in magnesium group [170 (40) minutes] vs. [180 (45) minutes] in control group. The anesthetic requirements (fentanyl, vecuronium, isoflurane), mean arterial pressure ($P < 0.005$) and heart rate ($P < 0.005$) were also significantly reduced. However, the anesthetic time was longer as observed thus a prolongation in emergence from anaesthesia. **Conclusion:** Intravenous magnesium sulphate led to a significant decrease in mean arterial pressure, heart rate, and duration of surgery. It also alters anesthetic dose requirements.

23. Intraoperative management of cerebral arteriovenous malformations: Our experience

Harshal Dholke, Mohan Rao, Manas Panigrahi

Department of Anaesthesia and 'Neurosurgery, Krishna Institute of Medical Sciences. Secundrabad, Andhra Pradesh, India

Background: To discuss the institutional experience in the intraoperative management of symptomatic patients of cerebral AVM surgery. **Materials and Methods:** It is a retrospective descriptive study done in patients with cerebral AVMs who were managed by surgery at KIMS hospital between January 2010 to July 2013. Totally 20 patients are included in this study. **Results:** Of the total patients who underwent surgery there were equal no of patients who had bleeding and who did not. Of the