THE INFLUENCE OF DIFFERENT ANESTHETIC TECHNIQUES ON INTRAOPERATIVE BLEEDING DURING ENDORESECTION OF CHOROIDAL MELANOMA

Background and aims:
Intraoperative bleeding during endoresection of choroidal melanoma may impair not only the visibility of the surgical field, but, if excessive, can have an impact on postoperative permanent visual loss. This study presents the influence of different anesthetic techniques on bleeding during this procedure.

Patients and methods:
Nine consecutive patients under general moderate hypotensive anesthesia (target mean arterial pressure of 50-65 mmHg, MAP) were reviewed retrospectively. In six patients hypotensive anesthesia was based only on a combination of volatile anesthetics isoflurane or sevoflurane with opioids fentanyl or sufentanil. Three patients in addition received nitroglycerin (NTG) (n=1; 1 µg kg-1 min-1), urapidil (n=1; intravenous bolus of 12.5 mg) or esmolol (n=1; intravenous bolus of 1 mg/kg). MAP, heart rate (HR) and the Surgeon’s Scale for Quality of Surgical Field (bleeding score, BS) were analysed.

Results:
The target MAP was achieved in four patients (two with only volatile anesthetic and opioid; two NTG or esmolol). HR was reduced to ≤60 beats/min in four patients (three with only volatile anesthetic and opioid; one with esmolol). The patient with esmolol had the best bleeding score of 1.

CONCLUSION
The used technique of moderate hypotension and bradycardia with intraoperative β blockade was the most effective in reduction of intraoperative bleeding during choroidal melanoma endoresection in our case-series.

References: