Correspondence

Oculocardiac reflex - peribulbar block or opioid-relaxant anaesthesia

To the Editor:

The Oculocardiac reflex (OCR) can be induced by traction on the extraocular muscles. It usually manifests as bradycardia, nodal rhythm, ectopic beats, ventricular fibrillation and asystole. The reported incidence of OCR during general anaesthesia (GA) varies from 56 - 67%. This study was designed to compare the effects of peribulbar block (LA) and opioid- relaxant anaesthesia on the incidence of OCR in 30 patients undergoing surgery for retinal detachment. Traction of 400 g was applied to all extraocular muscles using a spring balance.

Patients in group I underwent surgery using peribulbar block. In group II patients received conventional opioid-relaxant anaesthesia. Intraoperative monitoring included SpO₂, P_{ET}CO₂, heart rate, and arterial pressure every 5 min. The ECG, lead II, was recorded prior to anaesthesia, and during and after traction of each extraocular muscle. OCR was considered positive if there was 10% decrease in heart rate. Analysis was with chi-square and student's t test.

There was a decrease in heart rate following traction on the rectus muscles (P < 0.0005) and oblique muscles (P < 0.005) during GA (Table). The maximum change in heart rate was observed for inferior rectus. There was no decrease in heart rate, using local anaesthesia, for muscle. There were no alterations in arterial pressure under LA or GA. The incidence of dysrhythmias was 20% under GA and 6.67% under LA. These

results demonstrate that the incidence of OCR during GA (63.3%) is higher than during LA (14.4%).

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REFERENCES

- 1 Welhaf WR, Johnson DC. The oculocardiac reflex during extraocular muscle surgery. Arch Opthal 1965; 73: 43-5.
- 2 Dewar KMS, Wishart HY. The oculocardiac reflex. Proc R Soc Med 1976; 69: 373-4.

Severe interactions with classic and selective monoamine oxidase inhibitors

To the Editor:

Withholding antidepressant MAOI treatment before anaesthesia may lead to relapse but the new MAOIs are considered safe in surgical patients.^{1,2} We report two cases of pharmacological interactions with different MAOI drug types.

A 21 yr old, lightly depressed, woman had knee arthroscopy under spinal anaesthesia. She developed hypotension and bradycardia was treated with

TABLE Mean drop in heart rate before and during traction under local and general anaesthesia

	Group I		Group II	
Muscle	Mean HR before traction (± SEM)	Mean HR during traction (± SEM)	Mean HR before traction (± SEM)	Mean HR during traction (± SEM)
IR	81.67 (4.28)	79.47 (4.39)	71.60 (4.12)	53.60 (3.03)**
MR	82.13 (4.08)	78.60 (4.64)	68.20 (3.35)	56.27 (2.45)**
LR	82.20 (4.18)	80.67 (4.22)	70.60 (3.89)	57.33 (3.06)**
SO	82.33 (4.10)	79.60 (4.68)	67.53 (3.21)	60.60 (3.70)*
IO	82.27 (4.36)	80.87 (4.71)	67.00 (3.69)	61.53 (3.63)*

SR: Superior rectus; IR: Inferior rectus; MR: Medial rectus; LR: lateral rectus; SO: Superior oblique; IO: Inferior oblique ** P < 0.0005, * P < 0.005