

ABSTRAK

Latar belakang: Gerakan bola mata involunter selama prosedur operasi mata dengan anestesi umum menjadi tantangan klinis yang mengganggu visualisasi lapangan bedah dan dapat meningkatkan risiko komplikasi iatrogenik.

Tujuan: Penelitian ini bertujuan untuk mengevaluasi pengaruh pemberian rokuronium dosis rendah (0,1 mg/kg) pada anestesi umum terhadap frekuensi dan derajat gangguan posisi bola mata selama operasi mata singkat.

Metode: Penelitian ini menggunakan desain uji klinis acak terbuka pasien yang menjalani operasi *phacoemulsification* dan ECCE di RSUP Dr. Kariadi Semarang. Terdapat dua kelompok penelitian, yaitu kelompok A yang menerima sevofluran MAC 2 tanpa NMBA, dan kelompok B yang diberi sevofluran MAC 2 ditambah rokuronium 0,1 mg/kg secara intravena. Sampel penelitian terdiri dari pasien dewasa ASA I–II dengan IMT 18 – 26. Pasien yang memiliki riwayat alergi rokuronium dan gangguan neuromuskular dieksklusi dari sampel. Variabel yang dinilai adalah gerakan dan posisi bola mata selama prosedur, efek samping, dan skor kepuasan dokter mata. Analisis data dilakukan secara univariat dan bivariat, dengan uji Pearson *chi-square* untuk membandingkan perbedaan antar kelompok.

Hasil: Penelitian ini melibatkan 98 pasien. Kelompok rokuronium (n=49) tidak mengalami gerakan bola mata involunter dan seluruh pasien menunjukkan posisi bola mata medial. Pada kelompok kontrol (n=49), 59,2% mengalami gerakan bola mata ke arah inferior dan 40,8% ke arah superior ($p<0,001$). Skor kepuasan dokter berbeda bermakna antara kedua kelompok ($p<0,001$). Efek samping tidak berbeda signifikan antar kelompok ($p=0,570$).

Kesimpulan: Pemberian rokuronium dosis rendah (0,1 mg/kg) pada anestesi umum efektif mencegah gerakan bola mata involunter selama prosedur *phacoemulsification* dan ECCE.

Kata kunci: *extracapsular cataract extraction*, gerakan bola mata involunter, *phacoemulsification*, rokuronium, anestesi umum

ABSTRACT

Background: Involuntary eye movement during eye surgery under general anesthesia is a clinical challenge that disrupts the visualization of the surgical field and can increase the risk of iatrogenic complications.

Objective: This study aims to evaluate the effect of low-dose rocuronium (0.1 mg/kg) on general anesthesia on the frequency and degree of eye position disturbances during short eye surgeries.

Methods: This study uses an open-label randomized controlled clinical trial design involving patients undergoing phacoemulsification and extracapsular cataract extraction (ECCE) at RSUP Dr. Kariadi Semarang. Two study groups were formed: group A received sevoflurane MAC 2 without NMBA, and group B received sevoflurane MAC 2 plus 0.1 mg/kg rocuronium intravenously. The study sample consisted of adult ASA I-II patients with BMI 18–26. Patients with a history of rocuronium allergy and neuromuscular disorders were excluded. The variables assessed were eye movement, eye position during the procedure, side effects, and surgeon satisfaction scores. Data analysis was performed using univariate and bivariate tests, with Pearson chi-square to compare differences between groups.

Results: This study involved 98 patients. The rocuronium group (n=49) did not experience involuntary eye movements, and all patients showed a medial eye position. In the control group (n=49), 59.2% experienced downward eye movement, and 40.8% experienced upward movement ($p<0.001$). There was a significant difference in surgeon satisfaction scores between the two groups ($p<0.001$). Side effects did not differ significantly between groups ($p=0.570$).

Conclusion: The administration of low-dose rocuronium (0.1 mg/kg) during general anesthesia effectively prevents involuntary eye movement during phacoemulsification and ECCE procedures.

Keywords: extracapsular cataract extraction, involuntary eye movement, phacoemulsification, rocuronium, general anesthesia