

Factors Influencing Patients' Ability to Recall Information about Pain Treatment and Perceived Participation in Treatment Decisions following Orthopaedic Surgery: A Pain – Out Registry Based Study

Jasote Liva^{1,2}, Golubovska Iveta^{1,2}, Zadoroznijs Sergejs², Miscuks Aleksejs^{1,2}

¹ Hospital of Traumatology and Orthopaedics, Riga, Latvia

² University of Latvia, Riga, Latvia



UNIVERSITY
OF LATVIA



Background

Effective communication about postoperative pain management is essential for optimizing patient outcomes. Sedative and anxiolytic premedication, advanced age and anaesthesia techniques may influence cognitive function, memory, and perception.

Methods

This multicenter, registry-based observational study included 1,285 adult patients undergoing orthopaedic surgery. Patients reported whether they received information about pain treatment options and rated their perceived involvement in treatment decisions. Continuous variables were tested for normality of the distribution and were presented as mean (\pm SD) or median (+ IQR). Kruskal-Wallis test was used for continuous variables. For categorical variables the Chi-Square test was used. All statistical analyses were performed using IBM SPSS Statistics version 29.0

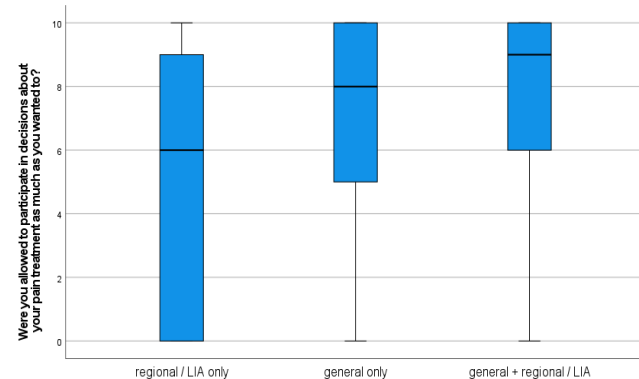
Results

There were no statistically significant differences in recall of pain treatment information between genders or age groups, although older patients showed a non-significant tendency to report receiving less information.

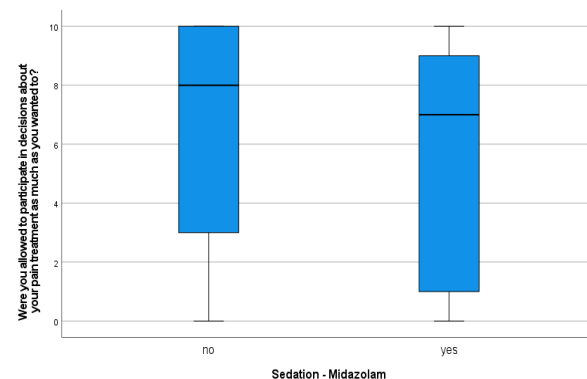
Among patients receiving midazolam, 63% reported that they received information about pain treatment options, compared with 73% in patients not receiving midazolam ($p=0.002$). Similarly, 63% of patients receiving gabapentin reported not receiving information, compared with 72% of patients without gabapentin premedication ($p=0.02$). Patients who received general anaesthesia with or without regional anaesthesia more frequently reported receiving information compared with those who received regional anaesthesia only (79% vs. 76% vs. 65%, $p < 0.001$).

Although the association between anaesthesia type and reported receipt of information reached statistical significance, the effect size was small (Phi coefficient $\phi = 0.10$), indicating that anaesthesia modality explains only a limited proportion of the variability in patients' reports.

Patients receiving general anaesthesia with or without regional anaesthesia reported significantly greater involvement in decision-making compared with those receiving regional anaesthesia (median 9 vs. 8 vs. 6; $p < 0.001$).



Patients who received midazolam premedication reported lower involvement in their treatment (median score 7), than those without (median score 8) ($p=0,03$).



Conclusions

Premedication and anaesthesia technique significantly influence patients' recall of pain treatment information and their perceived participation in care. Ensuring consistent communication practices across anaesthesia modalities may help promote a more uniform patient-centred experience.

PAIN OUT is an international, multicentre quality-improvement study and perioperative pain registry designed to evaluate and enhance postoperative pain management. The main aim of the PAIN OUT project is to identify gaps in pain treatment, compare outcomes across institutions, and implement strategies that improve patient comfort and recovery after surgery. The registry has involved hospitals and research centres from numerous countries worldwide, with collaborative data reported from at least 17 countries across Europe and beyond.