

## H. İNGİLİZCE İSİM ve ÖZET:

### THE INCIDENCE of RESIDUAL CURARIZATION FOLLOWING THE INTERMEDIATE-ACTING MUSCLE RELAXANTS and RELATED FACTORS

**Purpose:** To evaluate the incidence of residual curarization in the early and late postoperative periods, and related risk factors in patients receiving intermediate-acting muscle relaxants under general anesthesia.

**Methods:** 208 American Society of Anesthesiologists (ASA) physical status I and II adult patients, aged 18-70 years, receiving the intermediate-acting muscle relaxants who underwent general anesthesia were included in this study. Patients' who transported to in Post Anesthesia Care Unit (PACU), heart rates, mean blood pressures, oxygen saturation levels, skin and tympanic temperatures, and Modified Aldrete Scores were recorded every 10 minute (min) by an educated PACU nurse. To defined the efficacy of residual muscle relaxant, the neuromuscular monitoring were performed and TOF ratios  $<90\%$  were regarded as residual curarization whereas TOF ratios  $\geq 90\%$  as adequate neuromuscular recovery. Age, duration of anesthesia, repeated doses and the intermediate-acting neuromuscular blocker agents were evaluated as the factors may influence the residual curarization. Binary Logistic Regression Analyses were performed for the 0<sup>th</sup> and 30<sup>th</sup> mins. in PACU.

**Results:** The risk of residual curarization was found to be 10,6 % in the early recovery period, and duration of anesthesia, repeated doses and using of reversal were defined as related factors for the early periods of recovery. However, the risk of residual curarization was found to be 2,9 % in the late recovery period, and repeated doses was defined as the only one effective factor for the late periods of recovery. There wasn't found to be any correlation between the Modified Aldrete Score and residual curarization.

**Conclusion:** The incidence of residual curarization following the intermediate-acting muscle relaxants is less frequent, whereas the risk of residual curarization increases with repeated doses.

**Key words:** Residual curarization, Train-of-four (TOF), intermediate-acting muscle relaxants, Post Anesthesia Care Unit (PACU).

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