

Unpredictable Response Of Intra Muscular and Subcutaneous N-M Blockade

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Abstract

Subcutaneous and intramuscular injection of neuromuscular blocking agents results in variable absorption rate resulting in delayed onset of action and delayed recovery.

CASE REPORT

A 58 yr old female was operated in the elective surgery OT for choledocholithiasis. CBD exploration was done under GA. In the preparation room i.v. cannula was inserted.

Injection midazolam 1mg i.v. was given. The patient was taken to operation theatre. After connecting all the monitors patient was premedicated with inj. Ondansetron .1mg/kg and Inj. Butorphanol 30mcg/kg. Inj. Propofol 1.5mg/kg was given as induction dose. As the patient was sedated already and did not respond to command injection Vecuronium bromide 0.1mg/kg was given i.v. after checking effective mask ventilation. Even after ventilating for 3min the patient was having very good spontaneous respiratory effort. The patient was again ventilated for 2min more. Still then patient had spontaneous respiratory effort.

Then patency of i.v. cannula was checked which was inserted in the antecubital vein as there was difficulty in finding vein in the flexor surface of forearm. There was swelling in the arm proximal to i.v. cannula which was missed before as it was covered with OT dress of the

patient. It was confirmed that the cannula was not in the right place and all drugs given before were in subcutaneous or intramuscular space. A new intravenous cannula was inserted and patient was intubated with inj. Scholine 1.5mg/kg.

Intraoperatively no other muscle relaxant was given. There was no spontaneous respiratory effort during operation. The patient was not reversed and sent to ICU for elective mechanical ventilation. Duration of operation was 150 minutes. The patient was ventilated with SIMV-VC mode. 2hrs after operation the patient was found to have spontaneous respiratory effort but tidal volume was not adequate. 7hrs after operation the patient was found to have adequate tidal volume and respiratory rate and was extubated.

References

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