Awareness is the recovery of consciousness during general anesthesia. It occurs when patients under general anesthesia receive inadequate anesthetic medications to maintain unconsciousness during surgery. Equipment failure is a common cause of intraoperative awareness” Niu et al (2018).

Abstract:

RATIONALE: Awareness is the recovery of consciousness during general anesthesia. It occurs when patients under general anesthesia receive inadequate anesthetic medications to maintain unconsciousness during surgery. Equipment failure is a common cause of intraoperative awareness.

PATIENT CONCERNS: A 16-year-old boy, 85kg in weight, was admitted to our hospital for thyroglossal cystectomy under general anesthesia. Six minutes after the intubation, we noted that the Narcotrend index indicated a condition of light anesthesia and the patient was observed to be in tears.

DIAGNOSIS: Improper positioning of the syringe fixing clamp on the CP700TCI infusion pump caused equipment failure and light anesthesia.

INTERVENTIONS: Bolus of 50mg propofol and 2mg midazolam were administered manually by syringe, and inhalation of 2% sevoflurane was supplemented. Infusion pump was replaced.
OUTCOMES: The Narcotrend index of the patient returned to state of deep anesthesia following manual administration of the anesthetic medications. Following the surgery, the patient had an uneventful recovery, and did not present with evidence of awareness.

LESSONS: Users of the CP700TCI syringe pump should pay attention to the position of the syringe fixing clamp. Anesthesiologists should check all the equipment according to a defined checklist prior to anesthesia. Narcotrend monitor could help to detect light anesthesia and prevent potential awareness.

You may also be interested in...

- How to prepare intravenous drugs for infusion via a syringe pump
- Intravenous infusion pump design and testing reduces errors
- Case study comparing two intravenous infusion pump interfaces

Reference:

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