

ANESTHESIA IN PEDIATRIC ONCOLOGIC PATIENTS UNDERGOING RADIOTHERAPY

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Introduction: Pediatric oncological patients undergoing radiotherapy require immobilization.

Objectives: This study investigated the drugs administered and vital signs of these patients.

Methods: Our study included 38 patients with mean age 29.40 ± 3.94 months, weight mean 14.64 ± 0.55 kg, height 90.47 ± 14.71 cm undergoing anesthesia for radiotherapy immobilization purpose.

Results: All patients received sevoflurane 8% for induction and anesthesia maintenance and procedure period was 32.62 ± 2.41 minutes.

Measured vital signs before anesthesia were: systolic arterial pressure 101.38 ± 2.05 , diastolic arterial pressure 53.28 ± 1.80 , heart rate 116.14 ± 1.80 , respiratory rate 23.12 ± 0.93 and body temperature 36.01 ± 0.19 .

Vital signs after anesthesia were: systolic arterial pressure 96.00 ± 2.02 , diastolic arterial pressure 49.20 ± 2.88 , heart rate 111.63 ± 2.80 , respiratory rate 23.51 ± 1.10 , body temperature 36.43 ± 0.82 and oxygen saturation $97.74\% \pm 1.00$.

Emergence agitation related to the use of sevoflurane was observed in 84.21 % (32) patients.

Either propofol 0.5 - 4.4 mg/kg or nalbuphine 0.1-0.15 mg/kg or fentanyl 2-3.6 mg/kg controlled agitation after sevoflurane in 43.75% (14) patients.

Flumazenil 0.02 mg/kg given to 5.26% (2) patients and haloperidol 1.44 mg/kg administered to 10.53 % (4) and enhanced the agitation after sevoflurane.

Conclusion: There were no significant difference between vital signs measured before and after anesthesia with sevoflurane. Emergence agitation due to the use of sevoflurane was observed.

The use of benzodiazepines antagonist and neuroleptics should be evaluated in emergence agitation due to sevoflurane.