SO-18

The Effect Of Intravenous Paracetamol On Emergence Agitation In Preschool-Aged Children Under Sevoflurane Anesthesia For Strabismus Surgery

Yeliz Kiliç[1], Haluk Hüseyin Gürsoy[2], Sema Şanal Baş[1], Ayten Bilir[1], Mehmet Sacit Güleç[1]

[1]Eskişehir Osmangazi University, Department of Anesthesiology and Reanimation
[2]Eskişehir Osmangazi University, Department of Ophthalmology

INTRODUCTION - PURPOSE: Emergency agitation (EA) is a complex disorder characterized by various negative behavioral disorders, and is more frequent in preschool-aged children. Paracetamol is often used in the management of postoperative pain due to low side effect profile, especially in pediatric patients.The effect of intravenous (IV) paracetamol on EA has not been clearly demonstrated, especially in preschool-aged population.The aim of this study was to evaluate the effectiveness and safety of IV paracetamol on EA in pediatric patients undergoing sevoflurane anesthesia for strabismus surgery

MATERIALS AND METHODS: A total of 27 pediatric patients were included in the study. The patients were classified as preschool-aged children aged 2-6 years (Group 1, n= 15) and children above 6 years (Group 2, n = 12.The two groups were then compared each other in terms of basic characteristics, FLACC and PAED scores. Postoperative pain level was measured by Face, Legs, Activity, Cry, Consolability (FLACC) scale. EA was assessed with Pediatric Anesthesia Emergence Delirium (PAED) scale.

RESULTS: Twenty seven pediatric patients with a mean age of 5.7 (2-11) years were enrolled in the study. There were 18 (66.7%) males and 9 (33.3%) females. The majority of patients had ASA 1 status (n= 22, 81.5%) while the remaining patients were classified as ASA 2 (n= 5, 18.5%). IV paracetamol was the single analgesic in the management of postoperative analgesia. The patients were classified according to age; Group 1 (n= 15) consisted of children aged 2-6 while children above 6 years included in Group 2 (n= 12). There were no significant differences in all FLACC and PAED scores between the groups ($p > 0.05$). The incidence of EA was also similar between the two patient groups ($p > 0.05$).

Comparison of FLACC scores, PAED scores, and MASs between the groups

	Group 1 (n=15)	Group 2 (n=12)	p
FLACC5	2.9±3.3 (0-8)	0.6±2.3 (0-8)	0.067#
FLACC10	2.2±2.9 (0-8)	0.9±1.9 (0-6)	0.374#
FLACC15	3.6±3.3 (0-10)	3.2±2.1 (0-6)	0.867#
FLACC20	3.1±4.0 (0-9)	2.0±2.1 (0-5)	0.876#
PAED5	5.2±6.0 (0-16)	1.0±3.4 (0-12)	0.059#
PAED10	5.0±5.7 (0-16)	0.8±2.8 (0-10)	0.085#
PAED15	7.8±6.6 (0-18)	5.9±4.5 (0-13)	0.456#
PAED20	5.1±6.7 (0-17)	5.4±6.7 (0-15)	1.000#
MAS5	5.4±1.7 (1-8)	5.6±1.0 (4-7)	0.867#
MAS10	6.5±2.3 (1-10)	6.7±1.4 (4-9)	1.000#
MAS15	7.6±2.7 (2-10)	8.4±1.2 (6-10)	0.867#
MAS20	6.2±3.0 (2-9)	8.1±1.3 (6-9)	0.295#
Time of MAS to reach 9 (minute)	18.8±6.7 (10-30)	17.4±6.6 (10-30)	0.548#

Statistically insignificant (p>0.05)

Comparison of emergence delirium between the groups

	Group 1 (n=15)	Group 2 (n=12)	p
Emergence delirium (5th minute)	3 (20%)	1 (8.3%)	0.605#
Emergence delirium (10th minute)	3 (20%)	1 (8.3%)	0.605#
Emergence delirium (15th minute)	5 (33.3%)	2 (16.6%)	0.408#
Emergence delirium (20th minute)	2 (13.3%)	1 (8.3%)	1.000#

DISCUSSION - CONCLUSION: IV paracetamol seems to be safe and effective in the management of postoperative pain and EA in preschool-aged children under sevoflurane anesthesia for strabismus surgery.

Keywords: Emergence Agitation, Intravenous(IV) Paracetamol, Pediatric Anesthesia, Sevoflurane