POST-OPERATIVE CONFUSION AND THE PRACTICE OF PEDIATRIC ANESTHESIA

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INTRODUCTION: With the increasing use of potent and rapid acting inhalation agents, there seem to be an increased incidence of post-op confusion or emergence agitation in children (1,2). There is no single drug that is considered to be the drug of choice for preventing and/or treating this phenomenon (3,4).

METHODS: A standardized questionnaire was sent to 120 members of the Canadian Pediatric Anesthesia Society. Members were given 13 case scenarios involving 5 year old children with different medical condition. Each underwent a different surgery/procedure but emerged with the same post-op behavior. Members were asked to choose from the following treatment options: midazolam, fentanyl, propofol, or one other drug, if any, of their choice to treat post-op confusion.

RESULTS: 51 out of 120 replied. The results of our survey indicate that there is no agreement among pediatric anesthesiologists regarding the treatment of post-op confusion. No single drug was chosen by the majority (50%) of pediatric anesthesiologists to be the drug of choice in any of the 13 case scenarios.

CONDITION	midazolam	fentanyl	propofol	others
ASA I post head MRI for speech delay	23 (47)	3 (6)	11 (22)	12 (24)
Morbid obesity post MRI for headache	15 (32)	2 (4)	15 (32)	15 (24)
Ant mediastinal mass post chest MRI	22 (45)	1 (2)	11 (22)	15 (32)
Autistic post MRI for headache	8 (16)	5 (10)	13 (27)	23 (47)
Autistic post MRI for headache, premed	17 (35)	0 (0)	14 (29)	16 (33)
History of obstructive sleep apnea post T-A IM codeine 1 mg/kg intra-op	5 (10)	19 (39)	6 (12)	19 (39)
ASA I post T-A IM codeine 1.5 mg/kg intra-op	11 (22)	19 (39)	3 (6)	16 (33)
ASA I post T-A midazolam pre-op IM codeine 1.5 mg/kg intra-op	5 (10)	15 (31)	6 (12)	23 (47)
ASA I post inguinal hernia repair, caudal block, stable intra-op BP & HR	12 (24)	15 (31)	6 (12)	16 (33)
ASA I post hypospadias repair, caudal epimorph, stable intra-op BP & HR	10 (21)	17 (36)	9 (19)	11 (23)
Autistic post dental repair pre-op midazolam	5 (10)	9 (18)	9 (18)	26 (53)
ASA III, Fontan, post dental repair	3 (10)	11 (23)	4 (8)	30 (63)
Sickle cell disease, post BMT	11 (22)	11 (22)	5 (10)	19 (39)

Values displaced are responses (%)

DISCUSSION: Based on the result of our survey, further studies are needed to improve the diagnosis, prevention, and treatment of post-op confusion.

References:

- 1-Anesthesiology 1997; 87: 1298-300
- 2- Anesth Analg 2003; 96: 1625-30
- 3- Paed Anesth 2003; 13: 609-613
- 4- Anesthesiology 2004; 100: 1138-45