

PERIOPERATIVE MORBIDITY AND ASSOCIATED FACTORS IN PATIENTS WITH OBSTRUCTIVE SLEEP APNEA (OSA) IN A PEDIATRIC HOSPITAL IN BOGOTÁ-COLOMBIA.

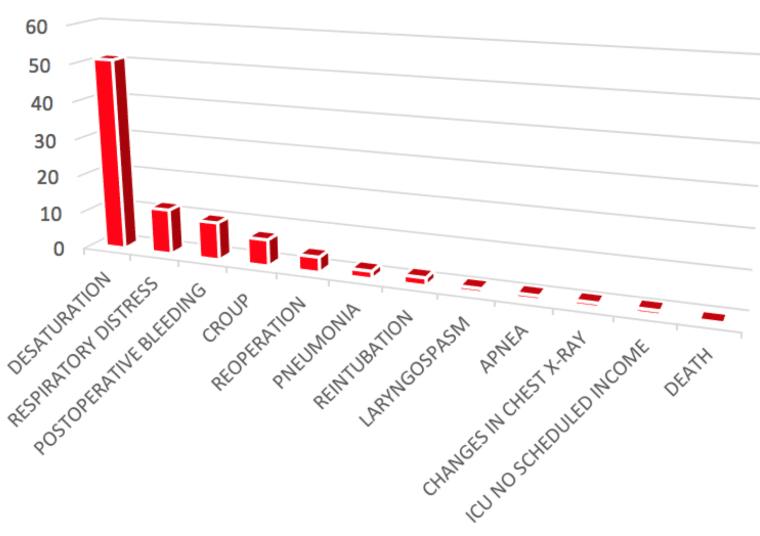


Garzón Federico, Amézquita Álvaro, Velásquez Juan José, Borrero Cristian

- **Background**: OSA surgical pediatric patients are in major part those undergoing adenotonsillectomy, presenting 20% more perioperative complications (1-3) like desaturation, respiratory distress, apnea, reintubation, bleeding; postoperative care site is important to diminish complications. Carefully analgesic management may avoid complications like apnea and desaturation (opioids) or bleeding (NSAIDs) (1-3).
- **Material and Methods:** The aim of this retrospective observational study is estimate incidence of postoperative complications and associated factors in OSA patients undergoing adenotonsillectomy in Hospital de la Misericordia of Bogotá Colombia, from October 2014 to October 2016. Clinical or polysomnographic criteria, echocardiogram, postoperative care site and intraoperative analgesic management were take in count.
- **Results:** 431 medical records were reviewed; 323 had polysomnogram, mild OSA 6.5% (n = 21), moderate 15.5% (n = 50) and severe 78% (n = 252); 66.4% (n = 286) had echocardiogram: 22.7% with (n = 65) pulmonary hypertension (56 mild, 8 moderate and 1 severe). 0.6% of patients were transferred to intermediate care unit , 16.5% to post anesthesia care unit and 0.5% to intensive care. ost common complications were: Desaturation (11,8%), Respiratory distress (2,8%) and Postoperative bleeding (2,3%), any patient presented more than one complication. Logistic regression found positive association between desaturation and: Down syndrome 46.7% vs 9.2% (p <0.05), hypothyroidism 52.6% vs 10% (p <0.05), neurodevelopmental delay 29.1% vs 9.3% (p <0.05) and high severity OSA (p = 0.001). No significant difference between desaturation and other comorbidities. Logistic regression evaluated bleeding and desaturation, with all analgesics; analgesic drugs were not related to the presentation of bleeding or desaturation.
- **Conclusions:** Postoperative complications incidence were low compared to reported in literature, maybe due strict postoperative care, desaturation is associated with Down syndrome, hypothyroidism, neurodevelopmental delay and high OSA severity, these patientes are at high risk an must go to specialized care unit. Use of common analgesics seems to be secure, multimodal management is profitable, taking in count care in opioids use diminishing usual doses.

1. Lumeng JC, Chervin RD. Epidemiology of pediatric obstructive sleep apnea. Proc Am Thorac Soc. 2008;5(2):242–52.

POSTOPERATIVE COMPLICATIONS



ANALGESIC	n	%
DEXAMETHASONE	380	88.2
DIPIRONE	375	87
TRAMADOL	302	70.1
ACETAMINOPHEN	121	28.1
DICLOFENAC	41	9.5
KETAMINE	15	3.5
MORPHINE	2	0.5
HYDROMORPHONE	0	0

^{2.} Brown KA. Outcome, risk, and error and the child with obstructive sleep apnea. Paediatr Anaesth. 2011;21(7):771–80.

^{3.} Tait AR, Voepel-Lewis T, O'Brien LM. Postsurgical behaviors in children with and without symptoms of sleep-disordered breathing. Perioper Med [Internet]. 2014;3(1):8.