

**PS-069 IN-HOSPITAL OUTCOMES FOLLOWING TRACHEOSTOMY IN INFANTS**

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**Background and aims** Tracheostomy is performed in infants with airway anomalies or requiring prolonged mechanical ventilation (MV). Risks and outcomes are described only in small studies. We report risk factors for mortality following tracheostomy in a large cohort of infants.

**Methods** We identified all infants discharged from 348 NICUs managed by Pediatric Medical Group who underwent tracheostomy between 1997 and 2012. We only included infants cared for at a single site. We performed multivariable logistic regression with random effects for site to evaluate association between death after tracheostomy and risk factors: diagnosis, gestational age, small for gestational age (SGA), age at tracheostomy, and days exposed to fraction of inspired oxygen >40%, inotropes and MV prior to tracheostomy.

**Results** 532 infants required tracheostomy (0.06% of infants). Median gestational age and birth weight were 26 weeks (IQR; 25, 30) and 780 g (610, 1400). The most common diagnoses were bronchopulmonary dysplasia, 465/532 (85%), airway anomalies, 237/532 (45%) and pulmonary anomalies, 88/532 (17%). Tracheostomy was performed on median postnatal age of 87 days (36,128). Of the 532 infants, 344 (65%) were weaned off MV prior to discharge at a median of 6 days (3, 12) after tracheostomy. Mortality was 14%. On multivariable regression, the following were associated with mortality: days of oxygen exposure, OR = 1.01 (95% CI; 1.00, 1.02); inotrope exposure, OR = 1.04 (1.00, 1.09); SGA, OR = 2.40 (1.32, 4.35).

**Conclusion** While tracheostomy is rarely performed, mortality after the procedure is high and is associated with increased by pre-tracheostomy oxygen and inotrope exposures and SGA status.

**PS-070 FUNCTIONAL ENDOSCOPIC SINUS SURGERY IN CHILDREN**

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The aim of the study was the optimisation of surgical treatment in children with chronic and recurrent [em1] rhinosinusitis. The work is based on comparative study of results after surgical treatment of 289 children with recurrent and chronic rhinosinusitis. The age of the children ranged between 3–15 years old, 188 males (65%) and 101 females (35%).

**Methods** Inconformity with the method of the treatment all the patients were divided in 2 groups. In the patients of the first group (84 children) the standard endoscopic sinus surgery was performed. This method includes: the relatively large ablation of all the anatomical structures from operation zone (processus uncinatus, ethmoid cells, ostium of sinus maxillary). In the patients of the second group (205 children) the minimally invasive endoscopic sinus surgery was performed. This modification

includes partial resection of processus uncinatus and limited ablation of all the anatomical structures of ostiomeatal complex.

**Results** The duration of the treatment in patients from the I group was  $6,15 \pm 0,24$  days, in the children from the II group it was  $4,26 \pm 0,25$  days, with statistic differences between the II and the I group ( $t = 7,15$ ;  $p < 0,001$ ). The patients were considered recovered if all the symptoms were absent over a period of 36 months. The good results were determined in 73,7% of the patients in group I and in 85,7% in the group II.

**Conclusion** The best results were obtained in patients who have undergone the minimally invasive endoscopic sinus surgery.

**PS-071 MODIFIED SURGERY IN CHILDREN WITH PERSISTENT AND RECURRENT OTITIS MEDIA**

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**Background and aims** The effectiveness of classical tympanostomy in persistent and recurrent otitis media (OM) with presence of mucous effusion during surgery is unclear. We elaborated the modified technique of surgery in order to improve the complete aspiration of viscous content from posterior part of tympanic cavity. This study was conducted to determine the effectiveness of the modified type of tympanostomy.

**Methods** A total of 67 children (134 ears) with OM and mucous viscous content during the myringotomy were included in Project. All cases were divided into two groups according to technique: simple (Group S) versus modified (Group M). Clinical and audio logical examination was performed every 3 months during 1 year after surgery. Otomicroscopical evaluation of ears was done under general anaesthesia in 12 months after tympanostomy, at the time of tube removal. Presence of retractions, adhesions, granulation tissue and effusion was noted.

**Results** Recurrence of OM was characteristic for 19% of ears from Group S and 2% of ears from Group M. Undulating hearing loss was recorded in Group S in 34% of cases, comparing to 7% of Group M. Attic retraction and adhesions in Group S were noted in 14%, in Group M – in 3% of cases.

**Conclusion** Modified technique of tympanostomy is more effective than simple one in preventing of hearing loss, formation of attic retraction, adhesions, recurrence of effusion and granulation tissue in children with persistent and recurrent OM and presence of mucous effusion during surgery.

**PS-072 ASSESSMENT OF FACTORS AFFECTING PRE-OPERATIVE ANXIETY AND COMPLIANCE TO ANAESTHESIA INDUCTION IN SCHOOL-GOING CHILDREN**

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**Background and aims** Effective pre-operative preparation program to address child's anxiety and thus improve the quality of anaesthetic induction would need to identify the factors that affect pre-op anxiety. The factors that influence pre-operative