

Extended Abstract

Paediatric Aero digestive Foreign Bodies: 10 Year Retrospective Study in a Tertiary Care Hospital

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Abstract

Foreign bodies in the aerodigestive tract in children pose serious challenge to an otolaryngologist. Clinical assessment, proper instruments ,early intervention , surgical skill are the key words for success.

A retrospective study was done in the otolaryngology department, North Bengal Medical college, Darjeeling between 1st October 2008 to 30th September 2018.

Inclusion Criteria : All children below 12 years of age , with history of suspected foreign body ingestion or inhalation.

Foreign bodies of posterior nares, hypopharynx oesophagus, tracheobronchial tree were included.

Exclusion criteria were foreign bodies of Tonsil, oropharynx and anterior nasal space

Results of 160 patients were analysed with reference to age, sex investigation ,atypical presentation, retrieval and complications.

In the present study Mean age was 3.8 yrs, Male: Female ratio was 5:3. Common sites of Foreign body impaction were Oesophagus 112 (70%), Tracheobronchial tree 20(12.5%) . In digestive tract COIN was the commonest foreign body 96 (78.6%). Pea nut was the commonest in tracheobronchial tree 6(30%). Virtual Bronchoscopy CT scan was helpful in 4 case of Bronchoscopy. Oesophagoscopy was done in 108(67.5%) cases. Rigid Bronchoscopy was done in 19(11.8%). Atypical presentations included one 11 month old child with two pieces of chicken bone one in the GLOTTIS, another in the OESOPHAGUS, was treated successfully. A case of broken tracheostomy tube in the right bronchus was removed by bronchoscopy.

A metal piece in the subglottis of a 2 yr old child with stridor, was removed by bronchoscopy.Chicken bone in the glottis of a two year old child was successfully removed.

Successful retrieval was done in 150 (93.7%) cases. COMPLICATIONS included TRACHEAL INJURY 1(0.62%), OESOPHAGEAL RUPTURE 1(0.62%) DEATH 2(1.25%)cases. Foreign body lodgement in aero-digestive tract is a common surgical emergency presenting to the department which contributes to high morbidity and occasional mortality. Severity of symptoms depends

upon the site, size, composition, and the period for which the foreign body has been present. Aim of our study was to analyze the event following foreign body aspiration in aerodigestive tract regarding-demographic characteristics of patients, history of event, type and site of foreign body, anaesthetic management and complications. Method: 65 cases of foreign body in aero-digestive tract (50 in food passage and 15 in airway), treated over one year period (prospectively) were reviewed. Foreign body retrieval was done by invasive procedures like laryngoscopy assisted / rigid endoscopy assisted under general anaesthesia. All the cases were done under controlled ventilation with muscle relaxant. In trachea-bronchial cases intermittent positive pressure ventilation via jet ventilation most commonly used technique. Results: The incidence of foreign body ingestion - in food passage 56% of patients were below 6 year of age, 30% between 3-6 years of age followed by 20% between 1-3 years. While in case of airway 53.33% were between the age group of 1-3 years. Most common site of lodgment of foreign body was cricopharynx (44%) in food passage and right main bronchus (53.33%) in airway. Most common foreign body found was coin (56%) in digestive tract, while vegetative foreign body (73.33%) in airway. In food passage most common symptom was dysphagia (82%) while in airway cough (66.66%) and difficulty in breathing (80%) were common findings. Conclusion: Foreign bodies in aerodigestive tract constitute a serious and potentially fatal situation usually occurring in pediatric population. Controlled ventilation with muscle relaxant is the preferred anaesthetic technique.