ORIGINAL RESEARCH PAPER

Volume-7 | Issue-3 | March-2018 | PRINT ISSN No 2277 - 8179

INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

ORO-PHARYNGO-LARYNGEAL FOREIGN BODIES:SOME RARE CASES SERIES

ENT

Dr. Shiv Kumar Professor and Head, Department of Otorhinolaryngology, Govt.Medical College, Kota Rajasthan

Dr. Harsh Sobhari* 2nd Year Postgraduate Resident Department of Otorhinolaryngology, Govt.Medical College, Kota Rajasthan *Corresponding Author

Dr. Jyoti Sobhari Dentist, Kota Rajasthan

ABSTRACT

Ingestion of variety of foreign bodies causing respiratory distress and/or dysphagia is worldwide among all age groups. Securing airway by tracheostomy is important and direct laryngoscopy provides immediate diagnosis. The importance of contributory history and its visualization is emphasized in the diagnosis and early management in the described five cases.

KEYWORDS

INTRODUCTION:-

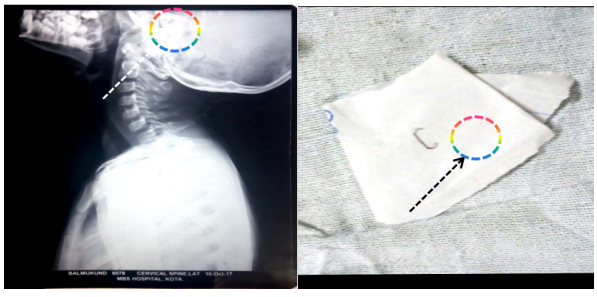
Children do have habit of taking everything into their mouth and inserting everything into their ear and nose.Common foreign bodies of oropharynx are fish bone,pins and needles,nails,button,glass pieces, denture,ear ring,chain and stem of vegetables all of which are mostly seen in adults.In children,Foreign bodies in mouth are easily detected by parents and are removed at home or they get stuck into hypopharynx and oesophagus.Occasional case reports have been there about oropharyngeal foreign bodies in children like tooth brush and pencil end. Foreign bodies lodged in nasopharynx and oropharynx are life threatning as these have risk of being aspirated if gets dislodged or have secondary infection to set in or may cause perforation if neglected or not detected at early stage.We present five case reports series of accidental foreign body ingestion in five different patients.

CASE REPORTS:-

CASE 1:-In one of our regular outpatient clinic of department of otorhinolaryngology of Govt. Medical college,kota an 6 year old boy was brought by his mother.She gave history that child was playing with a stapler 2 days back.While playing,He accidently removed a stapler pin from stapler and put it inside his mouth.His father tried to remove it from his mouth but was unable to found that stapler pin.Even after several attempts his relatives were unable to locate the stapler pin in his mouth. After this no more further intervention was done at home.He was taken to near by health care centre from where he was urgently referred to our hospital which is about 6-7 hr journey. Injection tetanus toxoid along with analgesics was given to that boy.His parents and relatives couldn't decide to move on that day. They thought that stapler pin has moved to the digestive tract and will pass with the stools.But the child was continuously trying to put his index finger inside his mouth and complaints of continuous pain in throat.He was brought to our hospital by bus on second day.

At our OPD,we examine his oral cavity and oropharynx.Whole tongue, hard palate,soft palate,both anterior pillars of tonsillar fossa were examined.Both tonsils and posterior pharyngeal wall was also observed with the help of tongue depressor and head light,but nothing was visualized and the examination was normal.The child was only complaining of throat pain and was comfortable,playful and showed no signs or symptoms suggestive of foreign body ingestion.An X-ray soft tissue lateral view neck was advised and showed foreign body (stapler pin) above the level of first cervical vertebrae.{fig.1}.

Under general anesthesia,the patient was lied in Rose position i.e. patient lies supine with head extended by placing a pillow under the head to stabilize it.Hyperextension should always be avoided.Under general anesthesia, laryngoscopic examination was done but no foreign body was seen.Then tonsillar boyle's davis mouth gag supported on draffin's bipods are applied and pharyngeal pack was applied. No foreign body was seen except a mucosal injury on the posterior pharyngeal wall.Soft palate and uvula was lifted with the help of tonsil dissector and anterior pillar retractor fortunetly glimpse of stapler pin was seen at right tonsillar pillar which was seen after retraction with tonsillar pillar retractor and removed with the help of otological micro alligator forceps. The patient was asymptomatic at the time of discharge other day after the operation.



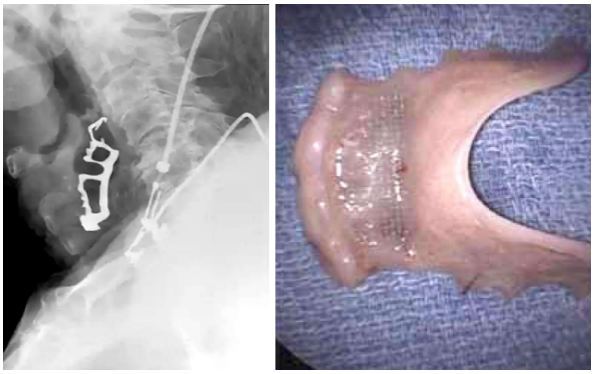
(A) (B)

Fig.1(A)Skiagram lateral view neck showing stappler pin at nasopharyngeal isthmus area above the level of 1st cervical vertebrae. (B) Photograph of removed stappler pin.

CASE 2:-A 39 year old male was hospitalized with pain and difficulty in swallowing for both solid and liquid foods and difficulty in respiration.He was very apprehensive and uncomfortable.Patient has no stridor and other vital signs were normal.Only history was significant of accidentally ingesting a fish bone while eating roasted fish a day before to the development of symptoms.On Indirect laryngoscopic examination,no foreign body was visualized but the pharyngeal mucosa and valleculae,tonsils were found congested, edematous and showed traumatic abrasions.An X-ray soft tissue lateral view of neck and chest was advised but showed no evidence of fish bone or other foreign body in the larynx or tracheobronchial tree. He couldn't afford for CT scan.Under general anesthesia,Direct laryngoscopic examination was done with no foreign body detected but at last the patient was taken in Rose position and boyle davis mouth gag was introduced and held in place by draffin's bipods.With the help of tonsillar pillar retractor soft palate and tonsillar pillar region,fossa was inspected.At last a fish bone(rib) was found embedded in the soft tissue of posterior pharyngeal wall which was seen by retracting the right posterior tonsillar pillar and was removed with the help of laryngeal forceps.The patient was asymptomatic at the time of discharge other day after the operation.

CASE 3:- A 57 year-old male presented with history of acute dysphagia and difficulty in breathing. History revealed that his upper removable complete denture had slipped accidentally into his throat while he yawned.He had similar episodes in the past but had not complied with the advice to get well fitting dentures.The denture was removed with the help of magill's forceps under general anesthesia by

laryngoscopy. Repeat clinical examination including direct laryngoscopy revealed no significant oropharyngeal injury. The patient did not follow up further.(Fig.2)

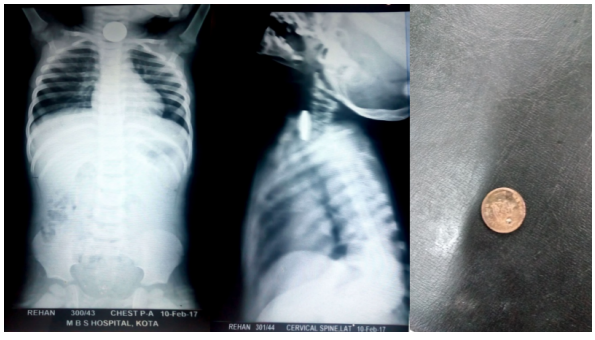


(A) (B)

Fig.2(A)Skiagram lateral and PA view neck showing denture impacted. (B)Photograph showing removed denture.

CASE 4:-

A 5 year old child presented with history of foreign body(corrosive metallic body) ingestion 6 hours before presentation at our ENT OPD. The child has repeated episodes of nausea and vomiting. An X-ray soft tissue lateral view and PA view neck was advised and showed foreign body(round diameter disc like) at the level of laryngopharnx C6-C7 cevical vertebrae.{Fig.3}.Patient was immediately taken to the emergency OT and oesophagoscopy was performed and corrosive metallic body was removed with the help of hypopharyngoscope and forceps. The corrosive metallic body was just seen below the cricopharyngeal sphincter.As these metallic bodies are corrosive in nature so immediate action was necessary for its removal.



(A) (B) (C)

Fig.3 Skiagram PA view(A) and lateral view(B) neck showing rounded radio-opaque foreign body at cricopharyngeal sphincter level (vertebrae level C6-C7).(C)Photograph of removed metallic corrosive rounded foreign body.

CASE 5:-

A 54 year old male presented with severe throat pain,dysphagia, difficulty in respiration.He was very apprehensive and uncomfortable. Patient has no stridor and other vital signs were normal.Only history was significant of accidentally ingesting a fish bone while eating roasted fish.On I/L examination only slough was seen above the level of epiglottis in the aerodigestive tract.An X-ray soft tissue lateral and PA view was advised and foreign body was seen(fig.4).Under general anesthesia,laryngoscopy was performed slough was removed by suction.After removal of slough fish bone was seen tightly engaged from the nasopharyngeal isthmus,behind left posterior tonsillar pillar and left pharyngo epiglottic fold.It was removed with the laryngeal forceps by firstly pushing gently caudally down the impaction and then pulling it cranially.Due to the presence of such impaction there was presence of posterior pharyngeal wall injury so to prevent the risk of mediastinitis,perforation and infection in posterior pharyngeal wall, the patient was kept 'Nil by mouth' for 36 hours and feeded by ryle's tube. After 48 hours the patient was asymptomatic and was discharged.

(A)

Fig.4(A)Photograph showing removed fish bone.

DISCUSSION:-

Accidental swallowing of a foreign body and it's impaction in the aerodigestive tract is common in infants and children between 6 months and 3 years of age most probably due to tendency to put anything in the mouth while playing or eating is another factor, uncordinated swallowing,absence of molars for proper chewing. However it is not uncommon in adults particularly having loose dentures and adults frequently having fish meal.Our patients were 2 children having 5 years and 6 years of age and 3 adults aged 39 years,54 years and 57 years.The foreign body may be vegetative inanimate (seeds,grains,peas,peanuts,etc.),vegetative animate (insects,etc.) or non-vegetative(fish bone,denture plates, beads, coins, safety pins,etc.). This was also evident in our patients as well.Early and sure shot removal of the foreign body is imperative to prevent complications of hoarseness,stridor,dyspnoea, odynophagia, haemoptysis or respiratory obstruction.Thus history of foreign body ingestion is very important in early diagnosis and it's management as in our every case.However, in up to 5–50% cases contributory history may not be forthcoming. This particularly appears true in case of children who do not comprehend the impending consequences and out of fear may not disclose about this until complications develop. Specific nature of symptoms will obviously be helpful in localizing the foreign body.The foreign bodies in the larynx cause dysphagia, dyspnoea,cough, wheezing,stridor or acute respiratory obstruction causing a sort of panic for both parents and the child.On the other hand pharyngo-oesophageal foreign bodies present with dysphagia and sense of something stuck in the throat that may be alarming for the parents but the child remains less confused.More or less these features were present in our patients and were helpful in early diagnosis.While large size foreign bodies such as coin,disc batteries,denture plates may be visualized and removed immediately on direct examination of oropharynx or larngopharynx or by oesophagoscopy as in our case 3 and 4.Presence of posterior pharyngeal wall injury,laceration,edema or ulceration on examination of oropharynx as in our case 1 and 2 confirms presence of foreign body but was found hidden and explorated by rose position,tonsillar pillar retractor.X-ray soft tissue of the neck(antero-posterior and lateral view) is important to diagnose and locate a foreign body in suspected case as in our case 1,3,4 and 5.However plain radiographs may miss a fish bone or foreign bodies which are not radiopaque as in our case 2 had a fish bone(rib) impacted and embedded in the posterior pharyngeal wall and its view was obscured by the tonsil.Such obscured observation were also Honda et al. and plausible explaination was deep insertion of the fish bone in the narrow post cricoid mucosa where its visualization is difficult owing to overhanging larynx limiting the operative field. CT scan is considered to be diagnostic tool of choice in such cases but its cost may be a constraint in resource limited settings.Direct laryngoscopy microscopic and endoscopic examination has been advocated by some reserchers to visualize and remove a foreign body.Tracheostomy may be needed in patients presenting with stridor due to foreign body in the trachea. This will also prevent slipping of foreign body further into the bronchus.

*Ingestion of disc batteries is becoming common because of their widespread use in hearing aids,toys,calculators and other electronic devices. They contain sodium hydroxide,potassium hydroxide and mercury which leaks through them to cause oesophageal injury. Prolonged exposure at one place causes complications like stricture,

perforation,tracheo-oesophageal fistula,mediastinitis and death.It is observed that a disc battery causes damage to mucosa in 1 hr,muscle coat in 2-4 hr and perforation of the oesophagus in 8-12 h,therefore it should be removed promptly from the oesophagus.So,the disc batteries should be removed as early as possible as in our case 4.

*Rose position and use of boyle's davis mouth gag and tonsillar pillar retractor is also useful tool as it provide essential area to be explorated as in our case 1 and 2.

*Use of otological alligator forceps helps us to hold such fine foreign bodies such as stapler pin as in our case 1.

*Use of pharyngeal pack,as in our case 1 and 2 prevents the chance of foreign body to get dislodge or slippage from our instrument from oropharynx to lower aerodigestive tract during removal.It also prevents blood to get trickle in lower aerodigestive tract and prevents chances of aspiration.

CONCLUSION:-

#Parents and other caregivers of children should be cautioned about leaving small objects where young children may find them and place them into their mouths. This is especially common at times of unusual activity, such as parties, holidays, when visitors are present in the home, or during travel.

#Button batteries have become an increasingly common source of morbidity and even mortality as their use has increased in recent years. Special care must be exercised around their use in toys and other objects to which children have access, when they are discarded, and when stored around the home.

#Most patients with oropharyngeal or laryngeal foreign bodies require to be managed in a planned manner without panic. A contributing history and detailed clinical examination are imperative for clinical diagnosis in suspected cases. When breathing is hampered securing of airway by tracheostomy is of utmost importance.We feel that direct laryngoscopy under general anaesthesia will provide immediate diagnosis in all suspected cases and foreign body can be removed with ease.

REFERENCES:-

1. Sarkar S, Roychoudhury A, Roychoudhury BK. Foreign bodies in ENT in a teaching hospital in eastern India. Indian J Otolaryngol Head Neck Surg. 2010;62:118–120. doi: 10.1007/s12070-010-0040-6.[PMC free article] [PubMed] [Cross Ref]
2. Panigrahi R, Sarangi TR, Behera SK, Biswal RN. Unusual foreign body in throat. Indian J Otolaryngol Head Neck Surg. 2007;59:384–385. doi: 10.1007/s12070-007-0110-6. [PMC free article][PubMed] [Cross Ref]
3. Honda K, Tanaka S, Tamura Y, Asato R, Hirano S, Ito J. Vocal cord fixation caused by a impacted fish bone in hypopharynx: report of a rare case. Am J Otolaryngol Head Neck Med Surg. 2007;28:257–259. [PubMed]
4. Kansara AH, Shah HV, Patel MA, Manjunatharao SV. Unusual case of laryngeal foreign body.Indian J Otolaryngol Head Neck Surg. 2006;59:63–65. doi: 10.1007/s12070-007-0019-0.[PMC free article] [PubMed] [Cross Ref]
5. Ellan M. Tracheo-bronchial foreign bodies: Otolaryngologic. Clin North Am. 2000;33: 179–185.[PubMed]
6. Connolly AA, Birchall M, walsh-Waring GP, Moore-Gillon V. Ingested foreign bodies: patient guided localization is a useful tool. Clin Otolaryngol Allied Sci. 1992; 17:520–524. doi:10.1111/j.1365-2273.1992.tb01710.x. [PubMed] [Cross Ref]
7. Shu MT, Leu YS. Microscopic removal of an embedded foreign body from hypopharynx: report of two cases. Ear Nose Throat J. 2001;80:889–890. [PubMed]
8. Lim CW, Park MH, Do HJ, Yeom JS, Park JS, Park ES, et al. Factors Associated with Removal of Impactted Fishbone in Children, Suspected Ingestion. Pediatr Gastroenterol Hepatol Nutr. 2016 Sep. 19
9. Riddlesberger MM Jr, Cohen HL, Glick PL. The swallowed toothbrush: a radiographic clue of bulimia.Pediatr Radiol. 1991. 21(4):262-4.
10. Silverberg M, Tillotson R. Case report: esophageal foreign body mistaken for impacted button battery.Pediatr Emerg Care. 2006 Apr. 22(4):262-5.