Abstract: Hypopharyngeal foreign body are usually intraluminal. Extraluminal foreign bodies are rare and its removal needs expertise. Here we present a case of hypopharyngeal foreign body which was extraluminal in contrast to the usual intraluminal position. The foreign body was assessed, approached and removed using c-arm image intensifier.

Keyword: Hypopharynx, Foreign body, C-arm image intensifier

INTRODUCTION
Hypopharyngeal foreign bodies and its removal are known from historic ages. The technology has reached the peak of innovation, that foreign body removal were made precise and comfortable. Foreign body in aerodigestive tract is one of the emergency in ENT practise. 20% of the cases require surgical intervention. Oesophageal foreign bodies are usually intraluminal but extraluminal foreign bodies are reported in literature. Though they are rare occurrences, prompt diagnosis and early treatment should be instituted to avoid complications. Penetration and migration of the foreign body are common occurrences in extraluminal foreign bodies. This case report highlights mainly the challenges offered by the foreign body because of its position and the innovative technique used for its removal.

CASE REPORT
56, female presented to the out patient department, alleged to have ingested a metal wire accidentally with her dinner the night before. She had the complaint of foreign body sensation in the throat. There was no other complaints like drooling of saliva, Dysphagia, odynophagia, regurgitation, fever, cough, nausea and vomiting. On examination her vitals and systemic examination was normal. Oral cavity examination was normal. Indirect laryngoscopy was performed. oropharynx and laryngeal inlet was normal; there was no pooling of saliva in pyriform fossa. Examination of the neck revealed normal laryngeal crepitus. Routine blood hemogram and x-ray soft tissue neck AP and Lateral view was taken. Xray showed a linear radio opaque shadow at c4 –c5 level. There was no prevertebral soft tissue widening. The patient was explained about the procedure and consent obtained. She was shifted to the theatre and under general anesthesia, orotracheal intubation, routine hypopharyngoscopy and direct laryngoscopy done. The foreign body could not be visualized. Jacksons rigid oesophagoscopy was also performed by considering migration, but in vain. The posterior pharyngeal wall was inspected for any congestion or ulceration and palpated , suspecting extraluminal positioning. The foreign body position was rechecked using c-arm image intensifier in the theatre. It was in the same position as before. The upper and lower ends were marked and the incision was made in the posterior pharyngeal wall over the foreign body. It was intramural in position and the same removed. It measured around 2.8 cm. Complete hemostasis obtained. Patient recovered from
anaesthesia and was kept on nil per oral for 2 days. Post op period was uneventful and the patient was discharged. The patient was followed up and she was absolutely normal in her next visit, which was a week after surgery.

**DISCUSSION**

Foreign bodies in the aerodigestive tract are common in children, geriatric age group and in psychogenic patients. Oesophageal and hypopharyngeal foreign bodies are usually found intraluminally. There have been very few interesting reports of pharyngeal and oesophageal foreign bodies at sites other than the lumen. [1-3]. Transversely oriented foreign bodies are more prone to perforate the wall of the hypopharynx. Migrating pharyngeal extraluminal foreign bodies need careful evaluation. Patient may become symptom free after initial event of foreign body penetration or develop persistent symptoms due to foreign body lodgment per se or its complications thereafter. They may cause suggestive complications such as deep neck abscesses, mediastinitis [4] or vascular complications due to penetration of carotid artery, its branches and the internal jugular vein[5]. Commonly found objects include fish bones, chicken bones, pieces of glass, dental prostheses, coins and needle[2-10]. The morbidity of the impacted foreign objects relate to their size, shape and site of impaction. Although the majority of the small and round ones pass along the gastrointestinal tract spontaneously, the sharper and larger objects can lead to serious complications.

Perforation of the pharyngeal or oesophageal wall is possible and migration of the foreign body in the adjacent tissues can be facilitated by swallowing, coughing and oesophageal peristalsis[11], as well as by the weakening of the pharyngeal wall due to the local inflammation. Most authors agree that delayed diagnosis and retrieval is associated with an increased complication rate[12-14]. Pain in the form of odynophagia is the most constant symptom, although retrosternal pain and painful cervical contracture can also be observed[12,14]. Foul smelling expectoration and muffled voice are symptoms of abscess formation and subsequent clinical deterioration and is common in patients seeking late medical attention[14]. Diagnosis is based on history and symptoms, but visualization of the foreign body and evaluation of the possible complications often require the use of a variety of diagnostic procedures. Indirect laryngoscopy, soft tissue lateral neck X-rays, routine chest X-rays, oesophagography with gastrografin, barium swallow, CT scan and endoscopy through flexible and rigid endoscopes can be used, each one having advantages and disadvantages[14,15]. Since the majority of foreign bodies are impacted in the suprathyroid region[16], they are usually detected by indirect laryngoscopy alone and can be removed with local anesthesia in the outpatient setting. Plain radiography has the benefit of evaluating the deeper soft tissues and revealing potential complications.

The physician should look for abnormal calcifications in the cervical region, cervical or mediastinal emphysema, widening of the prevertebral soft tissue space and presence of soft tissue swelling in the region of the base of the tongue[14,17]. It is important to note that not all calcifications in the plain radiograph represent foreign bodies. Calcified normal structures, like the thyroid, cricoid and arytenoid cartilages, the styloid process and stylohyoid ligament, osteophytes and ossification of anterior longitudinal ligament, can mimic abnormal radio-opaque foreign bodies[17]. Thorough knowledge of the anatomy is crucial when interpreting the plain x-rays. On the other hand, CT scanning of the neck is considered the most accurate imaging modality for diagnosing the presence of any foreign body impaction, and superior to the plain radiogram [18,20]. Studies have shown that sensitivity and specificity of plain X-ray for the detection of fish bones ranges between 23.5%-54.8% and 86.3%-100% respectively[16,20] whereas CT has a sensitivity of over 90% and specificity of 100%(20). Some authors recommend its use in complicated cases, while others advocate that CT should be performed in all cases of suspected foreign body which cannot be visualized through laryngeal mirror or laryngeal fiberscope. The high radiation dose compared to plain radiography is a serious disadvantage of the CT scan and sound clinical judgment is required in order to be used in selected patients, under the "do no harm" principle. The nearest similar case to the present one is by Ramdas et al. Ramdas et al[21] reported a case of a migrating intramural foreignbody in the oesophagus. The patient gave history of a foreign body in the aerodigestive tract and radiologically open safety pin was found lying in the upper oesophagus. Endoscopy was done and was found to be normal. Use of 'C' arm image intensifier located the exact position of the foreign body which was found to be intramural at level of C-6/7 cervical vertebrae. The foreign body was removed by external cervical approach.

Beyer et al [22] reported a case of a retropharyngeal abscess caused by traumatic perforation of hypopharynx by a fish bone. Endoscopy in their case showed a bulge of the posterior pharyngeal wall. No foreign body was found. A cervical approach was made to drain the abscess and the foreign body was palpated and removed from the retropharyngeal area. Our patient did not reveal any abnormality in the hypopharyngeal or oesophageal area. There was no evidence of any perforating injury in the hypopharynx nor any evidence of any abscess.

**CONCLUSION**

The peculiarity of the case resides in the position and the technique used. Extra luminal position of foreign body though rare should always be suspected and prompt treatment should be instituted to avoid complication.

**REFERENCES**
