Case of the Week

SUCCESSFUL OESOPHAGEAL REPLACEMENT SURGERY IN A 5-YEAR-OLD CHILD

A 5-year-old male child with height/weight of 105cm/15 kg presented to Apollo Hospitals, Navi Mumbai with h/o accidental corrosive (acid) ingestion 1 year back. Endoscopic dilatation was attempted in his native country which resulted in perforation of the strictured oesophagus. He underwent right posterolateral thoracotomy with primary repair of esophageal perforation which failed and was then managed by mediastinal drainage and feeding gastrostomy. He presented to our hospital with complete dysphagia with drooling of saliva since 1 year.

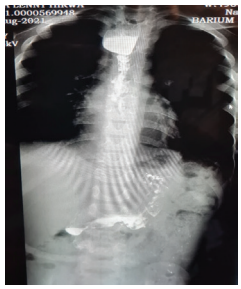
All relevant investigations were done and pre-operative evaluation was performed with barium swallow, upper GI endoscopy, contrast enhanced computed tomography (CECT) scan of chest and abdomen, and indirect laryngoscopy. Barium swallow showed long segment, high-grade narrowing with irregular margins involving the thoracic oesophagus. The upper end of the stricture is seen starting from the lower margin of D4 vertebra. UGI endoscopy showed pinpoint oesophageal stricture at 15 cm from incisors. CECT abdomen and thorax revealed normal vascular anatomy with stomach, and pylorus distending well after contrast. Indirect laryngoscopy showed normal vocal cords. The patient was diagnosed to have post corrosive (acid) oesophageal stricture with feeding gastrostomy in situ.

Given the above findings, the expert team have decided to perform oesophageal replacement surgery i.e. retrosternal gastric pull up with Heinke-Mikulicz pyloroplasty with feeding jejunostomy (FJ). The patient underwent this procedure under general and epidural anaesthesia.

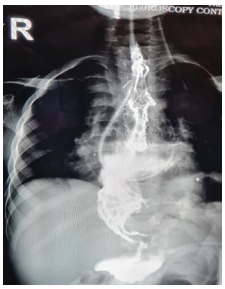
On post-operative day (POD) 1, the patient had one episode of fever spike. A chest X-ray was done and it revealed left side pneumothorax. So, a left ICD insertion was done under all aseptic precautions.

On POD 2, patient was started on FJ feeds. An oral Gastrograffin dye study was done on POD 7 and there was no anastomotic leak. Oral sips started on the same day and gradually shifted to soft diet by POD 12. ICD was removed on POD 8. The patient was hemodynamically stable, tolerated oral soft diets with minimal FJ feed support and discharged on POD 14.

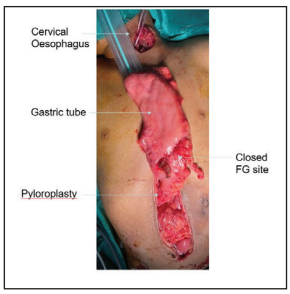
Conclusion: This is the 1st successful Oesophageal Replacement Surgery in paediatric age group at Apollo Hospitals, Navi Mumbai. The child was treated successfully with minimal complications despite presenting with unique challenges like age (5 years), weight (15 kg), and previously failed surgery in his native country.



Before Procedure - long segment mid and lower esophageal stricture with minimal trickling of contrast into stomach



Follow up - POD 7 oral contrast passing freely with no e/o leak or aspiration



Intra OP

SURGERY AT APOLLO HOSPITALS IS SAFE

CLINICAL TEAM

Dr. Ketul Shah
Consultant, HPB & Liver Transplant Surgery
Apollo Hospitals, Navi Mumbai

Dr Amruth Raj
Consultant, HPB & Liver Transplant Surgery
Apollo Hospitals, Navi Mumbai

Dr Priya E
Consultant, Thoracic Surgery
Apollo Hospitals, Navi Mumbai

Dr. Ambreen
Consultant, Anaesthetist
Apollo Hospitals, Navi Mumbai