

# Dysphagia Lusoria in Twins

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Four-year-old female twins presented to the hospital with chief complaint of vomiting which was immediate post-intake of solid foods. The symptoms started when they were six-month-old. Both of them had increasing intolerance to solid foods and were on semi-solid diet. They were referred to KEM Hospital, Mumbai, Maharashtra, India, for further work up because of history suggestive of a structural anomaly.

The twins were monozygotic and were weaned unsuccessfully at four months of age with semisolids. The first set of investigations included indirect and direct laryngoscopy, upper oesophago gastroduodenoscopy and oesophageal barometry but all test results were inconclusive. Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) were also done and found to be inconclusive. Echocardiography was done to rule out any cardiac defects and was found to be normal. Finally, barium oesophagogram showed constant narrowing of the oesophagus at the level of the aortic arch without any evidence of mucosal irregularity. The narrowing had an oblique orientation from inferior left to superior right on the posterior aspect of the oesophagus. This was consistent with extrinsic compression by a retro-oesophageal aberrant right subclavian artery in both the patients [Table/Fig-1a,b]. Based on the above findings, operative repair was advised.

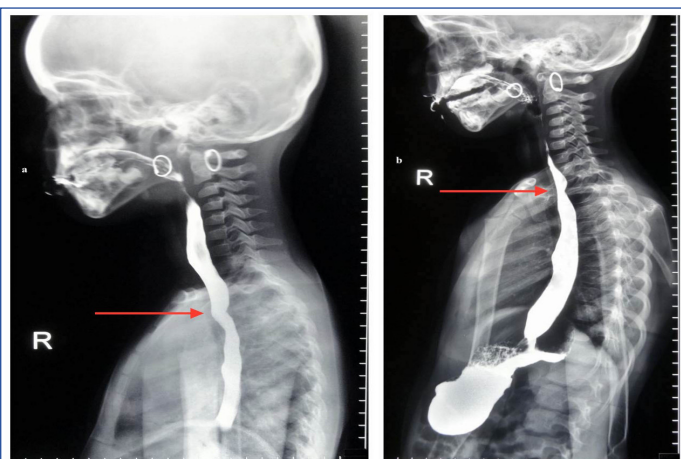
A reconstructive bypass surgery was performed with a single supra clavicular incision. The subclavian artery was divided 1 cm distal to the aortic arch. The distal portion was then anastomosed to the carotid artery. Both the children had an uneventful follow-up at one month.

## DISCUSSION

An aberrant right subclavian artery, which occurs in 0.5% to 1.8% of the population, is one of the most common embryological abnormality [1]. Thus, dysphagia lusoria is not uncommon however it has never been shown to co-occur in twins to the best of our knowledge. Most cases are asymptomatic but may become symptomatic when a “ring” completely encircles the trachea or the oesophagus leading to dysphagia lusoria [2-4]. This report exemplifies the diagnosis of this condition with minimum investigations and limited radiation exposure. Any beak like posterior oesophageal wall indentation on oesophagogram unless proven otherwise should be considered vascular in origin [5]. This case also highlights the incidence of co-occurring anomalies in twins along with the genetic preponderance of vascular anomalies like dysphagia lusoria. Patients with dysphagia lusoria, that is uncomplicated by aneurysm can be successfully treated by surgery with a single supraclavicular approach. In conclusion, diagnosis of dysphagia lusoria can be managed properly with positive long-term results.

## REFERENCES

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**[Table/Fig-1a]:** Spot film from barium oesophagogram showed constant narrowing of the oesophagus at the level of the aortic arch without any evidence of mucosal irregularity. The narrowing had oblique orientation from inferior left to superior right on the posterior aspect of the oesophagus. This was consistent with extrinsic compression by a retro-oesophageal aberrant right subclavian artery.

**[Table/Fig-1b]:** Spot film from barium oesophagogram in other twin showing similar finding consistent with aberrant right subclavian artery.

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