Dual causes for post coloplasty dysphagia: An interesting case report

J M V Amarjothi, J Jeyasudhahar, Senthil Kumaran G R, O L Naganath Babu

ABSTRACT

Interposition coloplasty is a procedure for dysphagia involving intractable corrosive strictures of the oesophagus. We wish to present a case of dysphagia which occurred in a patient after such coloplasty. The cause of the dysphagia was a stricture at the oesophagocolic anastomotic site causing dilation of the native oesophagus forming a oesophagocele just above the proximal limit of the stricture which then caused extraneous compression on the transposed colon. This case report illustrates the practical importance of the oesophagocolic anastomosis to be just above the strictured oesophageal site to prevent formation of oesophagocele of the native oesophagus above the proximal limit of the corrosive stricture.

Keywords: Coloplasty, Oesophagocele, Post coloplasty dysphagia, Stricture

INTRODUCTION

Interposition coloplasty is the procedure of choice for long term management of intractable oesophageal corrosive strictures. Paradoxically, patients may present with dysphagia after surgery for the very symptom for which they had curative surgery in the first place. The causes of dysphagia are many including anastomotic stricture at the oesophago-colic anastomosis.

CASE REPORT

Eighteen year old male patient presented with dysphagia to liquids and to solids immediately after intake with increasing intensity for two months. He had history of corrosive acid ingestion four years back. As patient developed complete stricture at 19 cm, oesophagocoloplasty was done three years back. Patient was asymptomatic for a year and then he insidiously developed dysphagia which had increased in intensity over the past two months. Clinical examination revealed midline laparotomy scar with a feeding jejunostomy in situ. Laboratory findings were within normal limits.

Barium swallow done showed dilated distal oesophagus (oesophagocele) and extrinsic compression of the interposed colon (Figure 1). Oesophagoscopy showed dilated native oesophagus with complete stricture at 19 cm. Oesophago-colic anastomosis was narrowed and could not be negotiated. Patient was planned for cervical exploration along the previous left cervical incision. Intraoperatively, oesophago-colic anastomosis had anastomotic narrowing and native esophagus below the anastomosis was dilated causing extrinsic compression on the interposed colon with complete stricture at end of native oesophagus (Figure 2). Oesophago-colic anastomosis was dismantled and oesophagocele was transected. The distal end of the native oesophagus above
the stricture was closed with 2-0 vicryl. End to end oesophago-colic anastamosis done with 2 o vicryl (Figure 3). Post-operative barium showed clear flow of contrast across the oesophagocolic anastomosis (Figure 4).

The dysphagia in this patient was due to two causes: a) anastomotic stricture b) extrinsic compression of the oesophagocele on the interposed colon especially when eating (Figure 5). Patient made prompt recovery and is on follow-up (Figure 6).

**DISCUSSION**

Interposition coloplasty is done for intractable corrosive strictures of the oesophagus where a segment of colon is used to bypass the diseased and strictured oesophagus to the stomach. The interposed colon can be either the left or right colon and can be routed through the retrosternum, presternum or orthoptically through the mediastinum. Generally, a retrosternal route is usually preferred. Interposition coloplasty may be associated with various complications. Re-surgery after colon interposition may be warranted in 15–30% of cases [1, 2]. Dysphagia is a complication which may occur either early or late after surgery. Early dysphagia may be primarily

---

Figure 1: Barium swallow with distal oesophageal dilation (oesophagocele) (blue arrow) and extrinsic compression on interposed colon (yellow arrow) with stricture of oesophagocolic site (red arrow).

Figure 2: Intraoperative picture showing distal interposed colon (blue arrow), proximal oesophagus (black arrow) and transected.

Figure 3: Completed oesophagocolic anastomosis (black arrow).
due to mechanical causes like kinking or angulation of the axis of the interposed colonic graft. Colonic redundancy is the most common late complication causing dysphagia after surgery [3]. It may also be associated with obstruction at the sternal inlet causing compression of the transposed colon. The incidence of colonic redundancy is underestimated by the patient and may vary between 8–21% of operated cases [4–7].

However, the dysphagia in this case was due to primary anastomotic stricture leading to native oesophageal dilation causing extrinsic colonic compression. The above problems can be circumvented to some extent but are not totally preventable. Allowing adequate time for corrosive stricture formation to occur is variable which may take usually six months to one year after corrosive intake. Delay in surgery is believed to cause decrease of the already smouldering fibrosis in the native oesophagus and reduce the probability of anastomotic stricture in the first place.

To our knowledge, this is the first such reported case of such a unique complication after interposition coloplasty.

CONCLUSION

This case is presented to emphasize that coloplasty should be attempted six months to a year after corrosive ingestion and that the distal native oesophagus should ideally be transected above the site of complete corrosive stricture. Also, the oesophagocoloplasty anastomosis should be wide and just above the corrosive stricture so that a dilation of the native oesophagus does not occur and cause complications.

REFERENCES


*********

Author Contributions
J M V Amarjothi – Conception of the work, Design of the work, Acquisition of data, Drafting the work, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

J Jeyasudhahar – Conception of the work, Interpretation of data, Drafting the work, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Senthil Kumaran G R – Conception of the work, Design of the work, Analysis of data, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Oliver Naganath Babu – Conception of the work, Acquisition of data, Analysis of data, Interpretation of data, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Guarantor of Submission
The corresponding author is the guarantor of submission.

Source of Support
None.

Consent Statement
Written informed consent was obtained from the patient for publication of this article.

Conflict of Interest
Author declares no conflict of interest.

Data Availability
All relevant data are within the paper and its Supporting Information files.

Copyright
© 2019 J M V Amarjothi et al. This article is distributed under the terms of Creative Commons Attribution License which permits unrestricted use, distribution and reproduction in any medium provided the original author(s) and original publisher are properly credited. Please see the copyright policy on the journal website for more information.
Submit your manuscripts at
www.edoriumjournals.com