Our Experience with Oesophageal Replacement with Colon for Oesophageal Pathology in University of Benin Teaching Hospital

***Okugbo S, *Efobi CA, *Osemobor K, *Omoregbee B, *Setemi PA**

**Department of Surgery, University of Benin Teaching Hospital, Benin City, Nigeria.*

Correspondence
Dr. S Okugbo
Department of Surgery
University of Benin Teaching Hospital,
Benin City, Edo State
Nigeria.
E-mail: ukadikeokugbo@yahoo.com

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INTRODUCTION

Oesophageal replacement with colon is the preferred method for reconstruction of the oesophagus in the cardiothoracic unit of the University of Benin Teaching Hospital. The colon has a number of characteristics that makes it an excellent option for oesophageal replacement. Advantages include long length, acid resistance and typically excellent blood supply.

However, colon interposition for oesophageal diseases remains a demanding and time-consuming operation. Although we are a relatively low volume center with regards to oesophageal surgeries in Africa, we have noticed a close similarity of our documented indications and outcome with other centers in Africa.

The objective of the study was to document our experience with a particular form of oesophageal replacement as a basis for future audit references.

MATERIALS AND METHODS

Patients who had colon interposition for oesophageal diseases, colon replacement/ bypass, were studied retrospectively over a 21 months' period. Information was gleaned from the case notes and the unit's theatre record book. Period of study was from February 2014 to March 2016. Excluded from the study were patients who had gastric pull up, patients who had other forms of palliative care e.g. oesophageal stenting, gastrostomy, etc.

RESULTS

8 patients with aged 2 to 68years had colon interposition for various oesophageal pathology over the period in consideration. Male: Female ratio of 1:1 with mean age of 30.9years. Resection of the native oesophagus was done for 50% of all cases. No resection was done for any case of oesophageal cancer. Seventy-five percent had retrosternal route with only one through the native bed.

One case was abandoned procedure after mobilization of colon due to adhesion in the retrosternal and native bed)

Mortality was 12.5%(one) from sepsis, other complications included cervical anastomotic leak in 25% and abdominal wound dehiscense in 25%. All patients had good swallowing following the surgery

Table 1: Indications for colon interposition

Indications for colon replacement	n (%)
Corrosive stricture	4 (50.0)
Oesophageal cancer	2 (25.0)
Iatrogenic oesophageal injury	1 (12.5)
Advanced achalasia	1 (12.5)

Table 2: Route of interposition

Route	Frequency
Subcutaneoous	0
Retrosternal	6
Native bed	1

Table 3: Complications and Outcome

Variable	Frequency
Complication	
Oesophagocolic anastomotic leak	2
Anastomotic stricture requiring revision	0
Wound dehisence (abdominal wound)	2
Post operative death (Cause of death sepsis)	1
Outcome	
Good post operative outcome and patient started swallowing	6

CONCLUSION

Colon interposition provides a durable oesophageal replacement with good functional result.

Undilatable strictures from corrosive burn is the most common indication for oesophageal replacement with colon interposition in University of Benin Teaching Hospital.

Oesophago - colic anastomotic leaks is still the most frequently experienced complication, it is the commonest (25%) in this study.

Although most of our patients were lost to long term follow up, relief of symptoms was noted in all patients with high patient's tolerance while under supervision.

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Conflict of interest

The authors declare that they have no conflicts of interest.

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