OESOPHAGEAL PERFORATION TREATED NON-OPERATIVELY IN AN HIV/AIDS POSITIVE PATIENT: CASE REPORT

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Abstract

Oesophageal perforation is a rare condition that causes significant morbidity and may be fatal. A successful outcome is obtained by prompt recognition of the diagnosis, aggressive resuscitation and institution of conservative measures, before rushing for specific surgical intervention.

Oesophageal stricture is one of the complications which occur in HIV/AIDS patients due to oesophageal candidiasis, cytomegalovirus and herpes zoster lesions. The treatment is conservative and consists of dilatation endoscopically; the procedure also carries a risk of perforation or tear at the stricture site.

Keywords: Oesophageal stricture, HIV/AIDS Oesophageal perforation and non-operative treatment.

Introduction

Oesophageal perforation is a relatively uncommon problem, but one that requires immediate attention and appropriate surgical intervention.[1, 2, 3, 4]

There are many common causes of oesophageal perforation and in order of decreasing frequency are as follows: Iatrogenic (during procedures), barotrauma, traumatic, malignancy and infection (TB, HIV/AIDS and Syphilis).[1] HIV/AIDS patient have a high risk of developing stricture and malignancy of the oesophagus due to candidiasis, Cytomegalovirus, herpes zoster oesophagitis and decreased immunity.[2, 3]

Patients with thoracic oesophageal disruption most often complain of severe pain of the chest, back or epigastrium. The diagnosis of oesophageal perforation should be made promptly as the associated morbidity and mortality increase significantly with delays in diagnosis and treatment. Estimated mortality within 24 hours of injury ranges from 10% to 20% in most published series and after 24 hours the rate jumps to 40% to 60%.[1, 4, 5,6,7,8]

The current treatment depends on the site of perforation, etiology, patient condition and time interval between perforation and diagnosis. Approximately 25% of all patients with oesophageal perforation may be treated conservatively,[1] hence the author presents a case report of HIV/AIDS patient who had oesophageal stricture and perforation.

Case Report

P.M. is a 35 years old male, was diagnosed to have AIDS and started on anti-retrovirus medications before presenting to our surgical clinic with history of dysphagia, weight loss and regurgitation.

He was investigated and found to have HB of 8 g/dl, ESR – 32 mm/ hour, CD4 count of – 7 and barium swallow revealed narrowing at distal oesophagus. He underwent fiberoptic upper gastro- intestinal endoscopy which revealed oesophagitis, candidiasis of the whole oesophagus and narrowing (stricture) at 37 cm from the upper incisor teeth. Biopsies were taken which revealed chronic inflammation with no malignancy.

Oesophageal dilatation under general anaesthesia using a rigid oesophagoscope and Gilliard – Salvary dilators was recommended. He had two successful dilatations at three months interval which gave him some relief for his dysphagia. However when he came back for the third session, he had severe dysphagia and a third dilatation was attempted which was traumatic and ended up with a tear at the stricture site as on the fifth postoperative day he complained of severe chest pain, dyspnoea, fever and weakness.

On examination, he was weak, febrile, dyspnoeic with stony percussion note and reduced air entry on the right side of the chest plus tender abdomen. The diagnosis of right sided pleural effusion was reached and an aseptic aspiration revealed 10 ml of yellow coloured fluid which was the juice he was taking orally post dilatation.

Patient was informed of the complication and underwater seal thoracostomy tube drainage was inserted in the 6th intercostal space mid axillary line, 4 litres of yellow coloured fluid was drained and the tube secured and retained for about four weeks.

He was also put on I.V fluids and antibiotics (metronidazole 500 mg 8 hly and ceftriaxone 1 gm daily for 14 days), and kept nil orally. Feeding gastrostomy using Calluson gastrostomy tube was put on the next day through a minilaparotomy upper midline incision enabling the patient to be fed and given medications.

Progress in the ward was done by keeping records of the chest tube drainage, medications, intravenous fluids and care of the wounds at the minilaparotomy, gastrostomy and chest tube sites. The chest tube was removed after twenty one days (i.e. three weeks) when the drainage has decreased to less than 100 ml in twenty four hours. On the twenty eighth day (i.e. fourth week) in the ward, the patient was discharged home with the gastrostomy tube for feeding and medications (anti-retrovirus) and to attend our surgical outpatient clinic in three weeks time.

He was seen at the clinic on the third week after discharge and reported to be doing well as he has started taking liquids orally without any leak but was counselled to retain the gastrostomy tube for a long time so that it can be used for feeding in case the stricture recur.

Discussion

Oesophageal perforation is a rapidly fatal condition if not diagnosed promptly. The overall mortality rate ranges from 25% to 50% and is influenced by the site of perforation and type of repair.[1] In the past operative debridement with primary repair was the main mode of treatment, however, currently non-operative measures are

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recommended.[2,3,4] This case was treated non-operatively based on the general condition of the patient and physiological derangements he had in terms of effusion, severe wasting, low immunity and past medical history of being on anti-retrovirus and other medications to prevent opportunistic infections.

Other studies[3,4,5] reported similar outcome on treating oesophageal perforation and believe that the cornerstones of a successful outcome are prompt recognition of the diagnosis, aggressive resuscitation and institution of conservative measures, then a patient specific treatment option can be provided rather than rushing to theatre for operation

The resuscitative measures include nil orally, intravenous fluids, broad spectrum antibiotics and chest tube drainage. In this case a feeding gastrostomy was placed and the antibiotics given which were Ceftriaxone 1g IV and Flagyl 500 mg IV 8 hourly daily for two weeks. The condition resolved on non- operative management after four weeks.

Other studies[1,2] have reported that 25% of all patients with oesophageal perforation may be treated conservatively, generally, non-operative management of oesophageal perforation may be applied in; instrumental perforation, perforation due to sclerosis of oesophageal varices or dilatation necessitated by achalasia, peptic or corrosive strictures and perforation diagnosed several days after injury with minimal symptoms at presentation.

The challenge for this case which differs from the rest of all papers published is that this patient was HIV/AIDS Positive with a very low CD4 count for which recovery was not expected.

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