

What is the treatment of esophageal stent migration in a schizophrenic patient?

Yucel Akkas, Baris Dogu Yildiz, Bulent Kocer

ABSTRACT

Introduction: In this case report, we describe surgical management of a schizophrenic patient who had a partially broken metallic stent which was placed for benign corrosive stricture. **Case Report:** We describe surgical management of a 39-year-old male schizophrenic patient who had a partially broken metallic stent which was placed for benign corrosive stricture. An endoscopy revealed that the stent was partially broken and slipped below the strictured segment of the esophagus. Laparotomy and transhiatal esophagectomy with anastomosis on the neck were performed. In order to protect the anastomosis, wounds, and drains the patient was kept intubated. **Conclusion:** Radical resection for benign strictures could prevent complications of repetitive stent placement in schizophrenic patients. Keeping the schizophrenic patient intubated under sedation could be a wise strategy to prevent inadvertent violation of the anastomosis.

Keywords: Benign stricture, Esophagus, Stent migration, Schizophrenia, Treatment

How to cite this article

Akkas Y, Yildiz BD, Kocer B. What is the treatment of esophageal stent migration in a schizophrenic patient? J Case Rep Images Surg 2017;3:6–8.

Article ID: 100037Z12YK2017

doi:10.5348/Z12-2017-37-CR-2

INTRODUCTION

Self-expandable metallic or plastic stents are more commonly used for the treatment of benign esophageal strictures as a minimally invasive technique. Unfortunately, this technique is not performed without morbidity or mortalities secondary to complications [1, 2].

In this case report, we describe surgical management of a schizophrenic patient who had a partially broken metallic stent which was placed for benign corrosive stricture.

CASE REPORT

A 39-year-old male schizophrenic patient had a self-expandable temporary metallic stent placement nine months ago after esophageal stricture secondary to corrosive ingestion in another center. The patient presented to our hospital with dysphagia. The patient was cachectic and malnourished. His complete blood count showed mild anemia and blood biochemistry showed low albumin level. Computed tomography scan showed that the stent was migrated to upper stomach (Figure 1).

An upper endoscopy revealed that the stent was partially broken and slipped below the strictured segment

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Received: 29 October 2016

Accepted: 03 December 2016

Published: 05 January 2017

of the esophagus. An attempt to remove the stent was undertaken but this was not possible because the broken parts of the stent were embedded inside the esophageal wall which posed the risk of perforation.

The patient was started with parenteral nutrition and when his nutritional status improved surgical intervention was decided with the consent of the family. Laparotomy and transhiatal esophagectomy with anastomosis on the neck were performed. This served both removals of the migrated stent and strictured, neoplasia prone esophagus. The stricture part of the esophagus was 6 cm (Figure 2).

In order to protect the anastomosis, wounds and drains the patient was kept intubated for one week in intensive care unit. On postoperative day-2, the patient had bilateral hemothorax and placement of chest tubes which were removed on postoperative day-5. The patient was extubated at the end of seventh day, started on oral feeds and drains removed. The patient was discharged on postoperative day-10 and after four months the patient has not any complications.

DISCUSSION

Esophageal stents (ES) are used for both malignant and benign conditions of the esophagus such as unresectable cancer, fistula, corrosive ingestion, iatrogenic perforation and anastomosis leaks [1, 3].

Esophageal stents can have early (chest pain, aspiration, bleeding perforation, or dysphagia) or late (obstruction, tumor ingrowth, tracheoesophageal fistula, etc.) complications [1, 3]. Fuccio et al. reported their rate of migration as 28.6% [4]. Esophageal stents mostly migrate to stomach or intestines causing perforation or obstruction and some are even passed out rectally. Our patient only had dysphagia. The patient was not aware of the symptoms due to the schizophrenia. In his history, we understand that the patient did not go to the hospital for esophageal stents controls because of this his esophageal stents was not removed on time.

Various techniques are available for removal of broken stents. In contrast to literature, the stent was partially broken in our patient which caused it to get embedded in the esophageal wall which necessitated surgical intervention. Our case is the 10th case in the review of literature [3].

Corrosive strictures were occurred 35.1% in healthy population after corrosive ingestion [5]. The diagnosis of psychotic disorders in all corrosive material ingestion rate is 3.7% [6]. Corrosive strictures of esophagus pose a 40% risk of malignancy after 20–50 years. This fact when added to the unease of endoscopic interventions in a schizophrenic patient made us decide on a radical surgical procedure [7, 8]. Keeping the patient intubated until patency of the anastomosis was verified could be considered as radical. But this was necessary as the patient could disrupt the anastomosis by inappropriate ingestion.

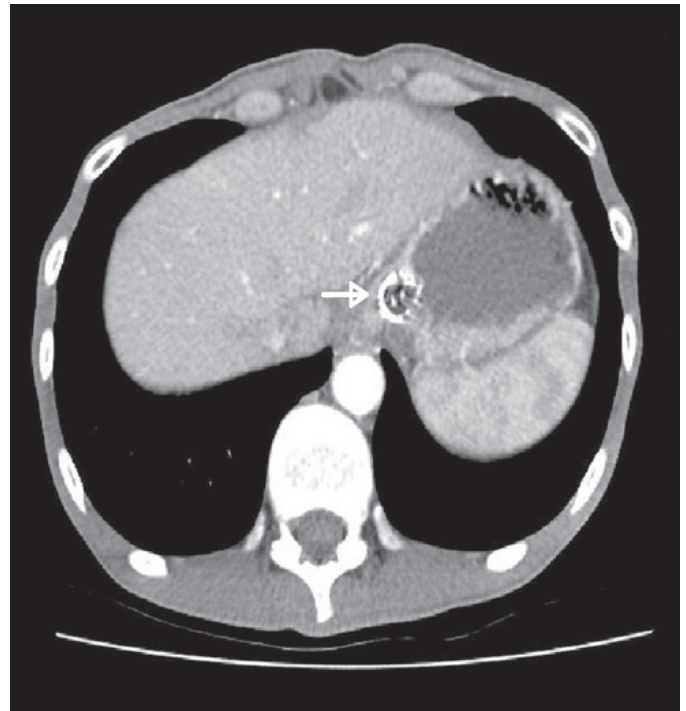


Figure 1: Computed tomography appearance of broken esophageal stent.

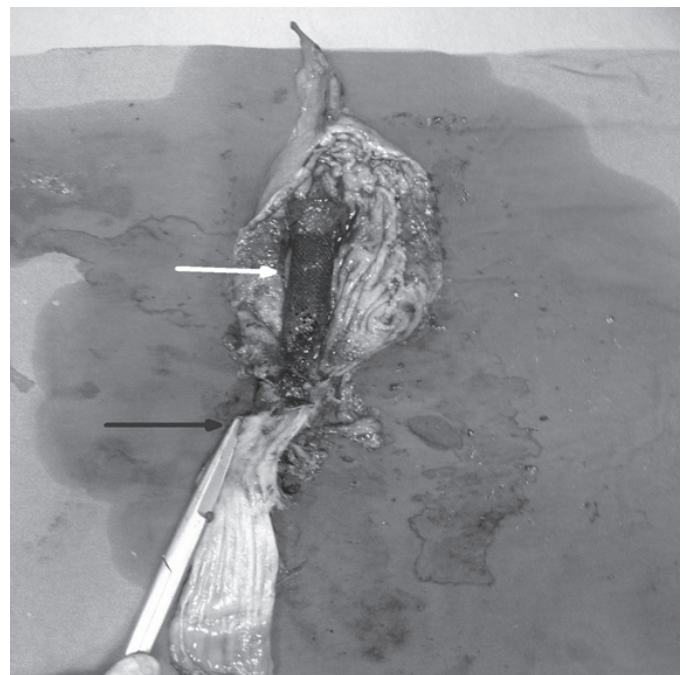


Figure 2: Surgical specimen showing the stent (white arrow) and strictured esophagus (black arrow).

CONCLUSION

Radical resection for benign strictures could prevent complications of repetitive stent placement in schizophrenic patients. Keeping the schizophrenic patient intubated under sedation could be a wise strategy to prevent inadvertent violation of the anastomosis.

This treatment method was our personal preference. Treatment approached should be multidisciplinary.

Author Contributions

Yucel Akkas – Substantial contributions to conception and design, Acquisition of data, Analysis and interpretation of data, Drafting the article, Revising it critically for important intellectual content, Final approval of the version to be published

Baris Dogu Yildiz – Analysis and interpretation of data, Revising it critically for important intellectual content, Final approval of the version to be published

Bulent Kocer – Analysis and interpretation of data, Revising it critically for important intellectual content, Final approval of the version to be published

Guarantor

The corresponding author is the guarantor of submission.

Conflict of Interest

Authors declare no conflict of interest.

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