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PALLIATIVE THERAPY OF MALIGNANT DYSPHAGIA BY SELF EXPANDABLE METALLIC STENT: A RETROSPECTIVE STUDY.

Oncology/Radiotherapy

Aadil Najeed MD Resident, Department of Radiation Oncology, SKIMS, Srinagar, India.
Asim Ahmad Dar MD Resident, Department of Radiation Oncology, GMC, Srinagar, India.
Nazia Nuzhatu Sabba Senior Resident, Department of Radiation Oncology, SKIMS, Srinagar, India.

ABSTRACT

Esophageal cancer is the most common malignancy in valley of kashmir as it is a part of Caspian cancer belt. Majority of patients present in late stages of disease with dysphagia being a predominant symptom. These patients are usually not candidates for radical procedures. Therefore, self-expandable metallic stent becomes the favourable option for palliation of malignant dysphagia. In between January 2020 and January 2022, 80 patients received SEMS of which 60% were males and 40% were females. Dysphagia was present in all 100% of the patients, 72% had history of weight loss and 40% complained of vomiting. 47.5% of lesions were in distal third, 32.5% in middle third and 20% at gastro esophageal junction. 92.5% had squamous cell carcinoma and 7.5% had Adenocarcinoma. SEMS was successful in 96.2% of patients with mortality of 1.2%. Pain was most frequent complication seen in 52.5% followed by reflux 11.25%, globes sensation 8.75% and stent migration in 2.5%. All the patients had relief in dysphagia.

KEYWORDS

SEMS, Dysphagia, Esophagus, Palliative.

INTRODUCTION:

Esophageal cancer is the 9th most common cancer overall and 6th most common cause of cancer death globally (1). However, in mainland India, esophageal cancer is 6th most common cancer with an incidence of 5.04% and seen predominantly in males (2). The highest incidence is seen in Assam followed by Mizoram and Sikkim (3).

The Valley of Kashmir which is landlocked by Himalayas with its distinct culture and food habits and lies on the border of high risk " esophageal cancer belt" consisting of former Soviet Union, southern China and Iran (4), has extremely high incidence of carcinoma esophagus. In kashmir esophageal cancer is the most common malignancy (5). It accounts for 42.9% of all cancers with male to female ratio of 1.5:1 (6). Such a scenario may be due to the fact that majority of risk factors that have been associated with esophageal cancer are present in kashmir, such as salted tea (noon chai) (7), pickled food, high rice diet, spicy food, excess chilly consumption and intake of food at high temperature (8).

However, despite all the modern advancements in diagnostic and therapeutic methods, esophageal cancer remains a leading cause of cancer deaths with 5-year survival less than 10% (9). In addition to it the patients tend to present late in the course of disease when it is usually inoperable either due to local invasion or distant metastasis. (10). The delay in diagnosis is mainly due to late development of symptoms in view of distensible nature of esophagus (11).

Additionally, most esophageal cancer patients are elderly often with severe underlying co morbidities (12). As a result, the patients are usually not medically operable and treatment remains restricted to palliation (13). Of all the symptoms affecting esophageal cancer patients, dysphagia remains the most common and debilitating, severely affecting the quality of life (14). Hence palliation of dysphagia remains a top priority, however since the lesions are usually inoperable, stenting remains treatment of choice (15).

This study reports the experience of a single institution in treatment of malignant dysphagia.

MATERIAL AND METHODS:

A retrospective study of esophageal cancer patients in whom SEMS was placed between January 2020 to January 2022.

RESULTS:

Among 80 patients who received SEMS within the selected time frame were 32 females and 48 males. The age range was 44 to 76 years, all patients had presented with dysphagia, 58 with weight loss, 32 with vomiting or regurgitation, 16 with chest pain and 12 with nausea. Malignancy was confirmed by histo-pathological in all 80 patients, with 74 being squamous cell carcinoma and remaining 6 had adenocarcinoma.

All the patients reported improvement in dysphagia and were able to tolerate stent diet.

In terms of post stenting complications, pain was most common symptom with 42 patients complaining it, 7 had globes sensation, 3 developed hematemesis and malena and were managed conservatively of which 1 patient expired due to tumour bleed. In 2 patients the stent had migrated and had to be removed endoscopically. Acid reflux was predominantly noted in patients in whom stent was placed at gastro esophageal junction, 9 out of 16 gastro esophageal junction patients complained about reflux, which was managed by proton pump inhibitors, pro kinetics and antacids.

Table 1.

Symptoms	n%
Dysphagia	80(100)
Weight loss	58(72.5)
Vomiting	32(40)
Chest pain	16(20)
Nausea	12(15)

DISCUSSION:

The incurable nature and high mortality among esophageal cancer patients is well known. The predominant presenting symptom being dysphagia, which is a problem for both the patient and physician (16). Out of several treatment modalities available like esophageal dilatation, ablative laser therapy, external beam radiotherapy and brachytherapy, stenting is the most common treatment technique used (17). SEMS provides good palliation for malignant dysphagia (18), with studies reporting immediate improvement with a success rate of 70 to 100% (19).

In our study SEMS was successful in 96.2% of patients, the associated mortality was 1.2%. Despite significant improvement in dysphagia, our study demonstrated that 67% of patients developed some sort of complications. As 52.5% developed post procedure pain, 11.25% developed reflux, 8.75% had globes sensation and stent migration seen in 2.5%.

Over all the results from the study are similar to the ones that have been previously reported.

CONCLUSION:

In conclusion, stenting in esophageal cancer has been proven to effectively and quickly improve dysphagia but is still associated with certain complications. It does not increase the overall survival but improves the patient's quality of life.

Limitation:

The limitations of the study are those inherent to a retrospective analysis. More importantly the lack of data on post stenting dysphagia score and survival.

Table 2.

Patients	n%
Sex	
Male	48(60)
Female	32(40)
Histology	
Squamous Cell carcinoma	74(92.5)
Adenocarcinoma	6 (7.5)
Site	
Middle third	26(32.5)
Distal third	38(47.5)
Gastro esophageal junction	16(20)

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