

Clinical and Endoscopic Study of Dysphagia: A Prospective Crosssectional Study at a Tertiary Care Centre at North- Eastern India

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Abstract: *Aim:* This prospective Crosssectional study was designed to evaluate the various pathological conditions leading to dysphagia in north-eastern India.

Materials And Methods: From August 2010 till June 2014, data of patients presenting with dysphagia were recorded in prospective manner. Data included age, sex, and duration of dysphagia. And then the patients were subjected to Upper Gastrointestinal Endoscopy (UGIE) under Local Anesthesia (LA) as an Out Patient basis.

Results: A total of 220 patients were subjected for upper GI endoscopy. There were 140 males and 80 females. The final diagnosis was carcinoma esophagus in 125, 22 Carcinoma gastro esophageal junction, 19 Carcinoma oropharynx, 10 superficial esophagitis, 8 benign stricture, 5 Gastro esophageal reflux, 4 esophageal varices, 5 esophageal diverticulum, 2 cases of Achalasia and 20 with normal findings.

Conclusion: Malignancy of the esophagus and stomach are the most common cause for dysphagia in this part of the country.

Keywords: Dysphagia, Upper GI endoscopy, Causes of dysphagia.

I. Introduction

Dysphagia refers to difficulty in swallowing, as a result of disruption in the swallowing process. It may be caused by various upper GI pathologies. It is an alarming symptom, and it needs to be investigated on an urgent basis to establish a diagnosis early in the course of the patient management and to rule out any ongoing serious pathology such as a neoplastic process. A detailed medical history and clinical examination is the key to rule out various causes of dysphagia. [1]

Upper GI endoscopy is an effective and an appropriate tool for the evaluation of patients presenting with dysphagia. Early UGIE should be considered, particularly in male patients > 40 years old with dysphagia which often leads to the therapeutic intervention even in quite frail subjects. [2]

In a study of 913 patients with dysphagia, esophagus was abnormal in 678 cases (74%) and biopsies were taken in 428 patients (47%). Superficial esophagitis, Barrett's esophagus, esophageal cancer, and esophageal ulcer were main histological findings. [1]

We evaluated all the patients presenting with dysphagia with upper GI endoscopy to find out the various etiologies of dysphagia in this part of the country, where malignancy of upper GI tract is of great concern.

II. Materials And Methods

North Eastern Indra Gandhi Regional Institute of Health and Medical Sciences (NEIGRIHMS) Shillong, Meghalaya is one of the Premier Institute and center of excellence in Medical Science and Patient care. It caters patients for treatment from entire north-eastern states. The study was conducted from August 2010 to June 2014 during which period 220 cases of dysphagia were evaluated. A detailed clinical history and a thorough physical was done. The cases were subjected to Upper Gastrointestinal Endoscopy (UGIE) with/without biopsy under local anesthesia as an office procedure, findings were noted. The final diagnosis was made after reviewing the Histopathological Examination (HPE) reports.

III. Results

A total of 220 patients were included in the study, 140 males and 80 females. The detail demographic characteristics of the patients are given in Table 1. Highest number of cases (40.9%) were seen in the 61-70 yrs age group. Clinically significant weight loss was seen in 38 patients.

Carcinoma esophagus was the commonest cause of dysphagia in our study accounting for 56.8% (125), followed by carcinoma GE junction & carcinoma Oropharynx 10% and 8.63% respectively. Endoscopic biopsy was done in 166 patients and all were positive for malignancy. No abnormality was detected in 20 (9%) patients. Other various causes of dysphagia are enumerated in the table 2.

IV. Discussion

Dysphagia needs to be investigated on an urgent basis to establish an early diagnosis, in the course of the patient management and to rule out any malignant pathology. A detailed medical history and clinical examination is the key to rule out various causes of dysphagia. Several diagnostic investigations are available to evaluate dysphagia, like upper gastrointestinal endoscopy, contrast imaging studies. Most patients with dysphagia referred to the surgical clinics have esophageal causes, and therefore, an endoscopic examination of the upper GI tract (Upper gastro intestinal endoscopy; UGIE) as first line examination will be required in these cases.^[3]

Varadarajulu Shyam et al.^[4] performed UGIE as the initial test to evaluate dysphagia in 1649 patients with dysphagia (mean age 56.7 years, standard duration 16.4, M: F = 3:2). Abnormal findings at UGIE were found in 70% (1150) of the patients and a major pathology was seen in 54% (898). Cancer was found in 4% (70) of the patients and was predicted by male gender, age and weight loss. The esophagus was normal in 29% (483) of patients. They concluded that the UGIE is an effective and appropriate tool for the initial evaluation of patients presenting with dysphagia.

Nafees A Qureshi et al. reported esophagus was abnormal in 678 cases (74%) and biopsies were taken in 428 patients (47%). Superficial esophagitis, Barrett's esophagus, esophageal cancer, and esophageal ulcer were main histological findings.^[1]

Gupta et al. reported in a survey of 100 consecutive endoscopies on elderly patients with suspected obstructive dysphagia. Seventy eight patients had positive findings. Benign stricture of the esophagus was the commonest finding. Fifteen patients had upper GI malignancy (12 esophagus and three stomach). Six patients with negative endoscopies had established by other means and in 14 no cause was not identified.^[5]

In our study, malignancy of the upper GI tract is the commonest cause of dysphagia (Carcinoma esophagus 125, Carcinoma GE junction 22, and Carcinoma Oropharynx 19). In 20 patients (9%) no abnormality were detected, superficial esophagitis in 10 patients, Corrosive stricture in 8 patients, GERD in 5 patients, four Grade-III&IV esophageal varices, hiatus hernia in 5 patients and three Achalasia of esophagus. The high prevalence of upper GI tract malignancy in this part of the country may partly be attributed to the different lifestyle and food habits of the people. RK Phukan et al in a study, reported 3720 cases of all types of cancer and 590 new cancer of the esophagus over a two year study period. Betel nut chewing with or without tobacco has been shown to be independently associated with the development of oesophageal cancer in Assam and there are clear dose-related responses that indicate a causal effect.^[6] The limitation of our study is that, it's a Crosssectional study to know the various causes of dysphagia not really ascertaining the exact prevalence of esophageal carcinoma

V. Tables

Table I: Patients demographics and clinical findings.

Parameters		
Male/Female	140/80	220
Age (years)		
21-30	13	
31-40	22	
	51-60	32
	61-70	90
>70	36	
Significant weight loss/	38/220	
No weight loss		

Table II: Endoscopic findings and its correlation with HPE.

	Biopsy & HPE		Final Diagnosis	Total
	Done	Not done		
Carcinoma of esophagus	125		125	125
Carcinoma of stomach (GE junction)	22		22	22
Superficial esophagitis		10	10	10
Corrosive stricture		8	8	8
Esophageal varices Gr-III&IV		4	4	4
Carcinoma oropharynx	19		19	19
GERD		5	5	5
Achalasia		2	2	2
Normal study		20	20	20
Pharyngeal pouch/Hiatus Hernia		5	5	5
Total	166	54		220

VI. Conclusion

Esophageal carcinoma, followed by stomach and oropharyngeal carcinoma are the common causes of dysphagia in the north eastern region of the country. Although other less common causes are also seen and should be kept in due consideration while evaluating a dysphagia patient.

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