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Clinicopathological Study of Dysphagia

Authors
Balaji Swminathan[1], Prem Nivas[2], Rajesh Kumar[3]
[1]Reader, Department of ENT, Rajah Muthiah Medical College & Hospital, Annamalai University
[2]Lecturer, Department of ENT, Rajah Muthiah Medical College & Hospital, Annamalai University
[3]Postgraduate, Department of ENT, Rajah Muthiah Medical College & Hospital, Annamalai University

Abstract
The present study included 85 patients complaining of chronic dysphagia between the period of August 2013 and February 2015 who attended the ENT department Rajah Muthiah Medical College and Hospital. All patients complaining of chronic dysphagia were taken for study.
Keywords: *Dysphagia, Barium Swallow, Carcinoma oesophagus.*

Introduction

Dysphagia is defined as a sensation of 'sticking' or obstruction of the passage of food through mouth, pharynx or esophagus(1). It may involve any structures from the lips to the gastric cardia(2). Thus an otolaryngologist – head and neck surgeon should participate in the work up and management of any patient with swallowing difficulties involving the upper aerodigestive tract(3). Dysphagia can result from an abnormality at each stage of the swallowing process(4). The normal act of swallowing may be divided into oral, pharyngeal and esophageal stages(5). Taking a thorough history is the first step of dysphagia evaluation(6). A complete assessment of the upper aerodigestive tract is within the purview of the otolaryngologist – head and neck surgeon. Many swallowing problems are not easily curable or reversible, but most patients experience some improvement through the intensive efforts of a multidisciplinary team (7). Early detection of cause gives chance for cure by various modalities of treatment.

Aims and Objectives

To study the

(a) Common causes of chronic dysphagia in our centre.
(b) Age incidence.
(c) Sex incidence.
(d) Incidence of malignancy causing dysphagia.
(e) Various modalities of investigations to arrive at the diagnosis.
(f) Commonest histopathological diagnosis in malignancy causing dysphagia.
(g) Comparative findings between endoscopic studies and barium swallow studies.

Materials and Methods

The present study included 85 patients complaining of chronic dysphagia between the period of August 2013 and February 2015 who attended the ENT department Rajah Muthiah Medical College and Hospital.

Inclusion Criteria

All patients complaining of chronic dysphagia were taken for study.

Exclusion Criteria

Patients with acute dysphagia who had tonsillitis, pharyngitis, corrosive esophagitis, foreign body ingestion etc. were not included in the study. Neurological conditions like cerebrovascular accidents, motor neuron disease, multiple sclerosis etc. and muscular diseases like myopathies, polymyositis causing dysphagia were also not included in the study.

Methods

(i) History
(ii) Physical examination
(iii) Investigations

(I) History

A proper history regarding the onset, progression of the complaint, whether dysphagia was there for solids/ liquids or both and whether there was any associated history of heartburn, regurgitation, cough, hoarseness of voice, loss of weight, loss of appetite, aspiration pneumonia etc. was taken the patient was also enquired about his habits of smoking, alcoholism, beetle nut chewing, tobacco chewing etc.

(II) Physical Examination

A thorough general and local examination followed history taking. It included

a) Examination of the oral cavity especially the palate, tongue and tonsils.
b) Indirect laryngoscopic examination of the larynx and the hypopharynx
c) Examination of neck for any nodes or swellings.

(iii) Investigations

Apart from the routine blood and urine tests, specific investigations were taken in the following order as required.

a) X-ray from the routine blood and urine tests, specific investigations were taken in the following order as required.
b) X-ray chest PA view.
c) Barium swallow.
d) Endoscopy (Rigid/Flexible esophagoscopy/ Direct Laryngoscopy)
e) CT scan.

Discussion

The commonest age group affected in my study is between 51 – 60 years (32.9%). The age group between 61 – 70 years was next with 18.8%. No cases were reported in age groups less than 21. Ricardo L.Carrau and Thomas Murray points out that swallowing disorders are prevelant among the elderly between the age of 50-60 years.

Males are affected more commonly than females showing a ration of 1.9:1 in the present study. Ashok verma and sathish metha's study shows the incidence is more common in males.[8]

About 37.5% of patients with dysphagia due to malignant causes are between the age group of 51 – 60 years in this study. Age group between 41-50 followed next with 20.3%. B.S Tuli and K.K. Gupta have shown that 5^{th} – 6^{th} decade of life (63.64) has the maximum incidence of malignancy of the upper aerodigestive tract.[9]

Males are more commonly affected again the ration being 2:1. Bhaben Chowdary has shown a male female ratio of 1.3:1.[10]

75.3% patients with dysphagia in the present study is due to malignancy ($x2 = 27.2$, $p < 0.001$) Hesam A.Saleh indicates that progressive chronic dysphagia is more common in neoplasia.[11]

Among the malignant causes, Ca osesophagus is the most common malignancy involved in my study. Bhaben Choudhury's analysis of upper aero digestive tract malignancies shows that 30.48% of cases are due to oesophageal maligancy.[12]

In my study 53 patients (82.8%) belonged to the low-socio economic status. B.S.Tuli had 58.18 of cases from poor socioeconomic status and majority of them were farmers.[13]

Majority of the patients in my study belonged to stage III (43.8%) and stage IV (32.8%).

Among the nodal metastasis, 34.4% of patients had N1 staging.

Smoking appears to be the most common risk factor in my study(56.3%)Maya Sharma in her study shows smoking (88%) to be the commonest risk factor.[14]

Lower 1/3 of the oesophagus is involved in 54.3% of patients with carcinoma esophagus in the present study. James C. Chou & Frank G.Gress in their description on esophageal tumors have mentioned that 50% of esophageal malignancy occurs in the middle third.[15]

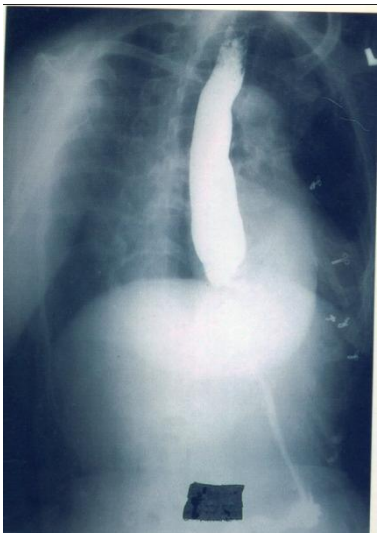
In my study, 36.8% of hypopharyngeal malignancies involve the post-cricoid region.

Posterior one-third tongue growth was most commonly involved (71.4%) in oropharynx.

HPE of 95.3% of patients with malignant causes of dysphagia was squamous cell carcinoma. 2 patients had adenocarcinoma and one lymphoma. Maya Sharma in her study has shown that 98% of malignancy has squamous cell carcinoma as the histopathology. [16]

The relative sensitivity of barium swallow in my study is 81.25%. Vikas sinha's study that relative sensitivity of barium swallow is only 76%. [17]

X-ray barium swallow - RAO view filling defect middle1/3 oesophagus



X-ray barium swallow - RAO view filling defect Lower 1/3 oesophagus

Summary and Conclusions

The commonest age incidence in conditions causing dysphagia is between 51-60 years (32.9%) with a mean age of 51.8 and standard deviation of 13.2 years.

Age (in Years)	Number of Cases	Percentage
0-10	-	-
11-20	-	-
21-30-	4	4.7
31-40	15	17.6
41-50	15	17.6
51-60	28	32.9
61-70	16	18.8
71-80	7	8.2
Total	85	100

- Males are commonly affected with dysphasia than females, the ratio being 1.9:1.
- The duration of symptoms are usually between 3-4 months (29.4%).
- The age group of 51 – 60 is again the most common group affected with malignancy (37.5%).
- Males are commonly affected with malignancy leading to dysphasia, the ratio being 2:1.
- Malignancy is the most common cause (75.3%) for dysphagia followed by benign causes.
- Malignancy was prevalent among the people with low socioeconomic status (82.8).

- Anaemia is commonly associated with malignancy (34.4%).
- Most of the people with malignancy presented in Stage III (43.8%) followed by Stage IV (32.8%).
- Malignancy was prevalent among the rural population (67.2%)
- 34.4% of people with malignancy presented in N1 nodal stage.
- There was no correlation between malignancy and occupation in my study.
- Among the malignant causes, carcinoma oesophagus is the commonest (53.7%).
- Lower 1/3 of the oesophagus is commonly (54.3%) involved in malignancy of oesophagus.
- Among the malignancy of hypopharynx, post – cricoids region is most commonly involved (36.8%).
- Posterior one third of tongue is most commonly involved among the oropharyngeal malignancies (71.4%).
- Smoking is the commonest risk factor of malignancies (56.3%).
- Gastro oesphageal reflux disease is the most common non-malignant cause of dysphagia (64.7%).
- Squamous cell carcinoma is the commonest histopathological diagnosis (93.85%)
- The relative sensitivity of barium swallow in my study is 81.25%.

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