Incidence of Carcinoma of Oesophagus in Cases of Dysphagia Undergoing Upper GI Endoscopy in Govt. Mohan Kumaramangalam Medical College and Hospital

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Abstract

Background: In India, squamous cell carcinoma of the oesophagus was common and it commonly found in males in the age group of > 50 years. Dysphagia was the Commonest complaint.

Aim: Aim of this study was to determine the presence of carcinoma in patients with complaints of dysphagia, and also to find out common location, histological Types and grading.

Method: A prospective study in patients with complaints of dysphagia who were undergoing upper GI endoscopy in Govt. Mohan Kumaramangalam medical college and hospital Salem (Department of General surgery) conducted over a period of 18 months from November 2017 to April 2019. Biopsy specimen processed and reported in pathology Department and histopathological confirmation done.

Results: Out of 50 patients of dysphagia who were undergone upper GI endoscopy In Govt. Mohan Kumaramangalam medical college and hospital Salem, 16 patients found to be having carcinoma of oesophagus.

Conclusion: carcinoma of oesophagus is the most important cause of dysphagia. Which should be diagnosed earlier. Males are more commonly affected than females, because of smoking, alcoholism and GERD. Patients with age of more than 50 are found to be affected by carcinoma of oesophagus. Squamous cell Carcinoma is more common than adenocarcinoma in our study and middle third of oesophagus is commonly involved. Regarding histological grading moderately differentiated tumors are common.

Keywords: oesophagus, carcinoma, dysphagia, endoscopy

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I. Introduction

Number of patients with ill look and complaint of difficulty in swallowing are increasing in OPD. When they are investigated and diagnosed as carcinoma of oesophagus, it is more worrying to the treating doctor than the patient by knowing that the patient had already passed the stages of curability. Case load either newly diagnosed or referred from other centers are in ascending curve in recent years. Aim of this study is to find out the incidence of carcinoma of oesophagus in patients with complaints of dysphagia undergoing upper GI endoscopy in general surgery Department Govt. Mohan Kumaramangalam medical college and hospital Salem. Squamous cell carcinoma and adenocarcinoma is the common type carcinoma oesophagus seen in Govt. Mohan Kumaramangalam medical college and hospital Salem. The endoscopic biopsy is processed and reported from Department of pathology in Govt. Mohan Kumaramangalam medical college and hospital Salem.

II. Aim

The main aim of this study is to find out the incidence of carcinoma of oesophagus in patients coming with complaints of difficulty in swallowing. Upper GI endoscopy used as a diagnostic tool and histopathological examination of the biopsy specimen done.

Primary objectives:
1. To find out the incidence of carcinoma of oesophagus in cases of dysphagia undergoing upper GI endoscopy in GMKMCH (Department of General surgery)
2. To find out the probability of carcinoma of oesophagus in dysphagia.

Secondary objectives:
1. To find out the common anatomical location of carcinoma of oesophagus in GMKMCH set up.

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2. To find out common histological type and grading of the tumor in GMKMCH set up.

III. Materials And Methods
This study was conducted for a period of 18 months from November 2017 to April 2019. About 50 patients from various units who underwent procedure of upper GI endoscopy for complaints of dysphagia in surgery department of Govt. Mohan Kumaramangalam medical college and hospital Salem were analyzed.

Patients with dysphagia over the age of 12 irrespective of thesex, are subjected to OGD scopy and followed through. The techniquemand importance of procedure are clearly explained to the patients and informed consent is obtained. Under all aseptic and safety measuresendoscope introduced, and visualized oesophagus, stomach, duodenum up to the 2nd part of duodenum. Any growth or lesions suspicious of Carcinoma, will be located and its anatomical situation assessed by calculating length of scope introduced. By using biopsy forceps, tissuesamples will be collected and sent for HPE.

Brush cytology will be collected for cases where tissue biopsy is not possible. Reports will be collected and maintained as a data. Patients with negative findings but with symptoms will be subjected for follow up scopy after 3 months.

Exclusion criteria
– Children under the age of 12
– Pregnant women
– Patients with epilepsy who are in irregular treatment.

Inclusion criteria
– Patients of both sex over the age of 12 with the complaints of dysphagia.
– Chronic GERD patients.

IV. Results
Observation:
Incidence of carcinoma of oesophagus in patients with complaints of dysphagia in our study as follows

<table>
<thead>
<tr>
<th>NO OF PATIENTS WITH COMPLAINTS OF DYSPHAGIA</th>
<th>CARCINOMA OESOPHAGUS</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>16</td>
<td>32%</td>
</tr>
</tbody>
</table>

Endoscopic Findings observed in our study

<table>
<thead>
<tr>
<th>FINDINGS</th>
<th>NO OF PATIENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carcinoma oesophagus</td>
<td>16</td>
</tr>
<tr>
<td>GERD</td>
<td>26</td>
</tr>
<tr>
<td>Esophageal candidiasis</td>
<td>4</td>
</tr>
<tr>
<td>Esophageal webs</td>
<td>1</td>
</tr>
<tr>
<td>Esophageal varices</td>
<td>3</td>
</tr>
</tbody>
</table>

Sex distribution of carcinoma of oesophagus

<table>
<thead>
<tr>
<th>NUMBER OF CARCINOMA OF OESOPHAGUS</th>
<th>MALE</th>
<th>FEMALE</th>
<th>MALE FEMALE RATIO M:F</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>12 (75%)</td>
<td>4 (25%)</td>
<td>3:1</td>
</tr>
</tbody>
</table>

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Age specific distribution of carcinoma of oesophagus

<table>
<thead>
<tr>
<th>AGE</th>
<th>NO. OF PATIENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-20 years</td>
<td>nil</td>
</tr>
<tr>
<td>21-30 years</td>
<td>Nil</td>
</tr>
<tr>
<td>31-40 years</td>
<td>1</td>
</tr>
<tr>
<td>41-50 years</td>
<td>2</td>
</tr>
<tr>
<td>51=60 years</td>
<td>7</td>
</tr>
<tr>
<td>61 and above</td>
<td>6</td>
</tr>
</tbody>
</table>

Anatomical Site distribution of carcinoma oesophagus in our Study

<table>
<thead>
<tr>
<th>SITE</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper 1/3 rd</td>
<td>1 (6.25%)</td>
</tr>
<tr>
<td>Middle 1/3 rd</td>
<td>9 (56.25%)</td>
</tr>
<tr>
<td>Lower 1/3 rd</td>
<td>6 (37.5%)</td>
</tr>
</tbody>
</table>

Histological types in our study

<table>
<thead>
<tr>
<th>S.NO</th>
<th>HISTOLOGY</th>
<th>NO. OF CASES</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Squamous cell carcinoma</td>
<td>15</td>
<td>93.75</td>
</tr>
<tr>
<td>2.</td>
<td>Adenocarcinoma</td>
<td>1</td>
<td>6.25</td>
</tr>
<tr>
<td>3.</td>
<td>Others</td>
<td>nil</td>
<td>0</td>
</tr>
</tbody>
</table>

Histological Grading

<table>
<thead>
<tr>
<th>S.NO</th>
<th>HISTOLOGY GRADING</th>
<th>NO. OF PATIENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Poorly differentiated</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>2.</td>
<td>Moderately differentiated</td>
<td>12 (75%)</td>
</tr>
<tr>
<td>3.</td>
<td>Well differentiated</td>
<td>4 (25%)</td>
</tr>
</tbody>
</table>

V. Discussion

In our study there are 16 out of 50 cases of dysphagia are diagnosed as carcinoma of oesophagus. Male female ratio is 12:4 i.e. 3:1

Global male female ratio is 3:1 for the cases of squamous cell carcinoma.

Age distribution of carcinoma of oesophagus in our study is as following

- 31 to 40 years 1
- 41 to 50 years 2
- 51 to 60 years 7
- >60 years 6

No cases were diagnosed as carcinoma of oesophagus before the age of 40 years in our setup. It is more common after 5th decade of life. All the cases of squamous cell carcinoma are from low socioeconomic status. Invariably all male cases are smokers and alcoholics. They are users of either or any one of them on regular basis. In case of aetiology of squamous cell carcinoma smoking and alcohol consumption alone plays a major role. Vitamin and mineral deficiency are much prevalent in people of low socioeconomic status and are prone to develop carcinoma of oesophagus. One case of Plummer-Vinson syndrome was present with anaemia and oesophagus (squamous cell carcinoma). Dilatation had been done for oesophageal webs. No other cases with hereditary factors like Tylosis seen in our study.
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Site of lesion
Most of the cases were in the middle third of oesophagus
Cases with involvement of

Upper 1/3rd ------- 1
Middle 1/3rd------- 9
Lower 1/3rd------- 6

Histological grading
Most of the cases in our study are belonging to histological grade of moderately differentiated squamous cell carcinoma.

Squamous cell carcinoma
Poorly differentiated -------- nil
Moderately differentiated ---11
Well differentiated --------- 4

Adeno carcinoma
Poorly differentiated nil
Moderately differentiated 1
Well differentiated nil

Exact staging of the malignancy is not possible just only by endoscopic analysis, as all the staging systems are mainly on the basis of involvement of depth into the wall of oesophagus and nodal involvement. Ct chest and abdomen, PET-FDG (Fluro Deoxy Glucose) scan, endoscopic ultrasound are gives more accurate and additional information for staging of the disease.

Therapeutic activities
All patients were treated by chemotherapy. Transoesophagealoesophagectomy done for one case. Palliative stenting had been done for 5 patients in our set up. Oesophageal stenting is the procedure in which self retaining expansible metallic or non expansible stents are introduced to oesophagus through endoscope to fix in the position so that it can bypass the obstructed lumen of oesophagus. In case of advanced malignancy of oesophagus in patients whom operability is not possible, stenting is the procedure which improves nutritional status of the patient by improving the food intake. Assessing the exact location and length wise extension of the lesion are important for stenting and it had been done by endoscopy before stenting in our patients.

VI. Conclusion
In our series of 50 patients with dysphagia referred to our tertiary care hospital for endoscopic investigation, 16 cases were found to have Carcinoma of Oesophagus. Out of the 16 cases of carcinoma of oesophagus, 15 were squamous cell carcinoma and one was adenocarcinoma. Whensethese patients with dysphagia came to our hospital, it is found that already 50% of the lumen had got obstructed by growth in case of carcinoma of oesophagus. Regarding the sex distribution, it is found that 12 out of 16 patients are male and 4 out of 16 cases were females. The high incidence in male was due to their smoking and drinking habits causing high incidence of GERD in them. Regarding the age distribution, the patients above 50 years were commonly affected. Among the anatomical sites of carcinoma of oesophagus the middle third of oesophagus was commonly involved followed by lower third of oesophagus. Squamous cell carcinoma was the commonest histological type of carcinoma of oesophagus seen in our series. From our study we conclude that Carcinoma of the oesophagus should be ruled out in all cases of dysphagia.

Bibliography
[3]. Devita, Hellman, Rosenberg- Cancer, Principles & Practice Of Oncology
[5]. Recent Advances In Surgery- Edited By Roshan Lall Gupta.
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[15] El Serag Hb, Mason Ac, Petersen N, Key Cr: Epidemiologica Differences Between Adenocarcinoma Of The Oesophagus And Adenocarcinoma Of The Gastric Cardia In The Usa Gut 50:368–372, 2002


Dr. V. Jayaprakash Ms. “Incidence of Carcinoma of Oesophagus in Cases of Dysphagia Undergoing Upper GI Endoscopy in Govt. Mohan Kumaramangalam Medical College and Hospital.” IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), vol. 18, no. 5, 2019, pp 47-51.