

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 patient with complaints of dysphagia who were Undergoingupper 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 InGovt.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 inswallowing are increasing in OPD. When they are investigated anddiagnosed as carcinoma of oesophagus, it is more worrying to the treating

doctor than the patient by knowing that the patient had already passed thestages of curability. Case load either newly diagnosed or referred fromother centers are in ascending curve in recent years. Aim of this study is to find out the incidence of carcinoma ofoesophagus in patients with complaints of dysphagia undergoing upper GIendoscopy in general surgery Department Govt.Mohan Kumaramangalam medical college and hospital Salem. Squamous cell carcinoma and adeno carcinoma is the commontype carcinoma oesophagus seen in Govt.Mohan Kumaramangalam medical college and hospital Salem.The endoscopic biopsy is processed and reported from Department ofopathology in Govt.Mohan Kumaramangalam medical college and hospital Salem.

II. Aim

The main aim of this study is to find out the incidence ofcarcinoma oesophagus in patients coming with complaints of difficulty inswallowing. Upper GI endoscopy used as a diagnostic tool andhistopathological 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.

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 the sex, are subjected to OGD scopy and followed through. The technique and importance of procedure are clearly explained to the patients and informed consent is obtained. Under all aseptic and safety measures endoscope introduced, and visualized oesophagus, stomach, duodenum upto 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, tissue samples 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

NO OF PATIENTS WITH COMPLAINTS OF DYSPHAGIA	CARCINOMA OESOPHAGUS	PERCENTAGE
50	16	32%

Endoscopic Findings observed in our study

FINDINGS	NO OF PATIENTS
Carcinoma oesophagus	16
GERD	26
Esophageal candidiasis	4
Esophageal webs	1
Esophageal varices	3

Sex distribution of carcinoma of oesophagus

NUMBER OF CARCINOMA OF OESOPHAGUS	MALE	FEMALE	MALE FEMALE RATIO M:F
16	12 (75%)	4 (25%)	3:1

Age specific distribution of carcinoma of oesophagus

AGE	NO. OF PATIENTS
11-20 years	nil
21-30 years	Nil
31-40 years	1
41-50 years	2
51=60 years	7
61 and above	6

Anatomical Site distribution of carcinoma oesophagus in our Study

SITE	PERCENTAGE
Upper 1/3 rd	1 (6.25%)
Middle 1/3 rd	9(56.25%)
Lower 1/3 rd	6(37.5%)

Histological types in our study

S.NO	HISTOLOGY	NO. OF CASES	PERCENTAGE
1.	Squamous cell carcinoma	15	93.75
2.	Adenocarcinoma	1	6.25
3.	Others	nil	0

Histological Grading

S.NO	HISTOLOGY GRADING	NO. OF PATIENTS
1.	Poorly differentiated	0 (0%)
2.	Moderately differentiated	12 (75%)
3.	Well differentiated	4 (25%)

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 40years 1

41 to 50years 2

51 to 60years 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 play 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 carcinoma of oesophagus (squamous cell carcinoma). Dilatation had been done for oesophageal webs. No other cases with hereditary factors like Tylosis seen in our study.

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 (Fluoro 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 .Transoesophageal oesophagectomy 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 . When these 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 males 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

- [1]. Sabiston Text Book Of Surgery-20 Edition-1049 To 1064.
- [2]. Bailey And Love's Short Practice Of Surgery 27th Edition.
- [3]. Devita, Hellman, Rosenberg- Cancer, Principles & Practice Of Oncology
- [4]. Oxford Textbook Of Surgery Edited By Morris And Malt.
- [5]. Recent Advances In Surgery- Edited By Roshan Lall Gupta.
- [6]. Rice Tw, Adelstein Dj, Zuccaro G, Et Al: Advances In The Treatment Of Esophageal Carcinoma. Gastroenterologist 1997;5:278–294.
- [7]. Hulscher Jb, Van Sandick Jw, De Boer Ag, Et Al: Extended Transthoracic Resection Compared With Limited Transhiatal Resection For Adenocarcinoma Of The Oesophagus. N Engl J Med 2002;347:1662–1669.
- [8]. Herskovic A, Martz K, Al-Sarraf M, Et Al: Combined Chemotherapy And Radiotherapy Compared With Radiotherapy Alone In Patients With Cancer Of The Oesophagus. N Engl J Med 1992;326:1593–1598.

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- [9]. Kelsen Dp, Ginsberg R, Pajak Tf, Et Al: Chemotherapy Followed By Surgery Compared With Surgery Alone For Localized Esophageal Cancer. *N Engl J Med* 1998;339:1979–1984.
- [10]. Fiorica F, Di Bona D, Schepis F, Et Al: Preoperative Chemoradiotherapy For Oesophageal Cancer: A Systematic Review And Meta-Analysis. *Gut* 2004;53:925–930.
- [11]. Adler Dg, Baron Th: Endoscopic Palliation Of Malignant Dysphagia. *Mayo Clin Proc* 2001;76:731–
- [12]. Jemal A, Murray T, Samuels A, Ghafoor A, Ward E, Thun Cancer Statistics, 2003. *Ca Cancer J Clin* 53:5–26, 2003 90
- [13]. Lambert R: Diagnosis Of Esophagogastric Tumors. *Endoscopy* 34:129–138, 2002
- [14]. Shaheen Nj, Provenzale D, Sandler Rs: Upper Endoscopy As A Screening And Surveillance Tool In Esophageal Adenocarcinoma: A Review Of The Evidence. *Am J Gastroenterol* 97:1319– 1327, 2002
- [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
- [16]. Pottern Lm, Morris Le, Blot Wj, Ziegler Rg, Fraumeni Jf: Esophageal Cancer Among Black Men In Washington, D.C. I. Alcohol, Tobacco, And Other Risk Factors. *J Natl Cancer Ins* 67:777–783, 1981
- [17]. Rex Dk, Rahmani Ey, Haseman Jh, Lemmel Gt, Kaster S, Buckley Js: Relative Sensitivity Of Colonoscopy And Barium Enema For Detection Of Colorectal Cancer In Clinical Practice *Gastroenterology* 112:17–23, 1997
- [18]. Hosokawa O, Tsuda S, Kidani E, Watanabe K, Tanigawa Y, Shirasaki S, Et Al.: Diagnosis Of Gastric Cancer Up To Three Years After Negative Upper Gastrointestinal Endoscopy. *Endoscopy* 30:669–674, 1998
- [19]. Lambert R, Rey Jf: Endoscopy And Early Neoplasia: Better But Not The Best. *Endoscopy* 33:348–352, 2001
- [20]. Younes M, Henson De, Ertan A, Miller Cc: Incidence And Survival Trends Of Esophageal Carcinoma In The United States: Racial And Gender Differences By Histological Type. *Scand J Gastroenterol* 12:1359– 1365, 2002 91
- [21]. Graham Dy, Schwartz Jt, Cain Gd, Gyorkey F: Prospective Evaluation Of Biopsy Number In The Diagnosis Of Esophageal And Gastric Carcinoma. *Gastroenterology* 82:228–23, 2 El-Serag Hb, Mason Ac, Petersen N, Key Cr.
- [22]. Epidemiological Differences Between Adenocarcinoma Of The Oesophagus And Adenocarcinoma Of The Gastric Cardia In The Usa. *Gut* 2002;50:368–372.
- [23]. Brown Lm, Devesa Ss. Epidemiologic Trends In Esophageal And Gastric Cancer In The United States. *Surg Oncol Clin North Am*2002;11:235–256.
- [24]. Pohl H, Welch Hg. The Role Of Overdiagnosis And Reclassification In The Marked Increase Of Esophageal Adenocarcinoma Incidence. *J Natl Cancer Inst* 2005;97:142-146.
- [25]. Schwartz Lm, Woloshin S, Welch Hg. Trends In Diagnostic Testing Following A National Guideline For Evaluation Of Dyspepsia. *Arch Intern Med* 1996;156:873–875.
- [26]. Benhamiche Am, Faivre J, Tazi Am, Couillault C, Villing Al, Rat P. Time Trends In Diagnostic Strategy, Treatment, And Prognosis Of Gastric Cancer In The Elderly: A Population Based Study. *Eur J Cancer Prev* 1997;6:71–77.
- [27]. El-Serag Hb. The Epidemic Of Esophageal Adenocarcinoma. *Gastroenterol Clin North Am* 2002;31:421–440, Viii.92
- [28]. Botterweck Aa, Schouten Lj, Volovics A, Dorant E, Van Den Brandt Pa. Trends In Incidence Of Adenocarcinoma Of The Oesophagus And Gastric Cardia In Ten European Countries. *Int J Epidemiol* 2000;29:645–654.
- [29]. Ekstrom Am, Signorello Lb, Hansson Le, Bergstrom R, Lindgren A, Nyren O. Evaluating Gastric Cancer Misclassification: A Potential Explanation For The Rise In Cardia Cancer Incidence. *J Natl Cancer Inst* 1999;91:786–790.
- [30]. Blot Wj, Devesa Ss, Kneller Rw, Fraumeni Jf. Rising Incidence Of Adenocarcinoma Of The Oesophagus And Gastric Cardia. *Jama* 1991;265:1287-1289.
- [31]. Kim R, Weissfeld JI, Reynolds Jc, Kuller Lh. Etiology Of Barrett’s Metaplasia And Esophageal Adenocarcinoma. *Cancer Epidemiol Biomarkers Prev* 1997;6:369-377.

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