OESOPHAGEAL CARCINOMA IN JORDANIAN FIELD HOSPITAL IN AFGHANISTAN

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ABSTRACT

Objectives: Mazzar-I-Shariff in Afghanistan, is a poor wartorn city with only one gastrointestinal endoscopist in the region. It was noticed by previous gastroenterologists working in Jordanian Field Hospital in Afghanistan that oesophageal carcinoma is seen more frequant than that in Jordan. The objectives of the study were to determine the spectrum of upper gastrointestinal diseases in patients who undergone upper endoscopy in the Jordanian Field Hospital in Afghanistan and to estimat the incidence,age of diagnosis, clinical presentations and the endoscopic appearanace of the oesophageal carcinoma.

***Methods*:** Between 20 December 2003 and March 3, 2004, 289 gastroscopies were performed in Jordanian field Hospital/Afghanistan on patients aged 16 years or more. Biopsies were taken from any suspected lesion. Data for each patient were kept to correlate with the histopathological results.

Results: Thirty three (11.4%) endoscopies gave normal results. The most common major single findings in the other 256 were oseophageal carcinoma (22.5%) duodenal ulcers (13.5%), and oesophagitis (13%). About one third of the patients had more than one endoscopic finding. Oseophageal carcinoma was found in 22.5% of patients and it was more common in men than women. The most common presenting symptom for oseophageal carcinoma were dysphagia and weight loss. It was more frequent in age group of 60-72 years. The most common endoscopic findings were mass or ulcerative lesion.

***Conclusion*:** Oesophageal carcinoma is a common finding in patients who had upper endoscopy in the Jordanian Field Hospital in the north of Afghanistan.Mazzar-I-Sharif needs well equiped gastrointestinal unit and a multi disciplinary team (Gastroenterologist, Histopathologist,Surgeon and Dietitian) to deal with patients with oesophageal carcinoma and more research is needed to establish the possible etiology.

KEY WORD: Endoscopy, Oesophageal, Cancer, Afghanistan.

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INTRODUCTION

In the Western World the risk of squamous cell cancer is modestly increased with cigarette smoking or alcohol consumption, whereas Barrett's oesophagus is an important risk factor for adenocarcinoma of the oesophagus. Other medical conditions associated with an increased risk include achalasia and the Plummer-Vinson syndrome.[1-4] Many studies have suggested that diet is related to the development of esophageal cancer.[5] An inverse association between dietary fruits, vegetables, tea, and esophageal cancer has been reported[6] and consumption of overheated foods such as tea and soup may increase risk.[7] Nitrites are considered carcinogenic and their presence in preserved foods such as salted fish, smoked meat and pickles has also been associated with several forms of cancer, including cancer of the esophagus.[8-10]

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The changing epidemiology of esophageal cancer in developed countries is from squamous cell type to Aden carcinomas arising from Barrett's epithelium and the gastric cardia.[11] This has implications for management of this disease. Earlier diagnosis of cancer from screening high-risk patients with Barrett's esophagus is potentially possible, and mucosal ablation together with acid-suppressive therapies have been investigated to revert Barrett's epithelium in its premalignant stage. When a cancer has developed, the strategies of staging methodology and surgical approaches also differ from those applicable for squamous cell cancers located in more proximal locations of the esophagus. An overall increase in life expectancy has led to more elderly patients presenting with carcinoma of the esophagus.

Options for the treatment of esophageal cancer are very limited, with surgical resection and radiotherapy methods aimed at both cure and palliation and in those unfortunate patients with severe dysphagia, intubation with a plastic prosthesis to restore esophageal luminal potency.Progress in the management of this cancer in the past two decades includes refinement in surgical techniques and preoperative care, better radiological staging methods, enhanced means of planning and delivering radiotherapy, multimodality treatments, and better designs in esophageal prosthesis. For individual patients, a stage-directed therapeutic plan can be used. Long-term survival, however, remains suboptimal for this deadly disease.

Table-I: Major endoscopic finding in the 289 patients (%)

Finding	*Men (n=171)*	*Women (n=118)*	*Total (n=289(%))*
Normal	13	20	33 (11.4)
Oesophageal carcinoma	40	25	65 (22.5)
Duodenal ulcer	26	13	39 (13.5)
Oesophagitis	29	9	38 (13)
Hiatus hernia	14	16	30 (10.4)
Duodenal erosion	19	14	33 (11.4)
Gastritis	11	8	19 (6.6)
Gastric ulcer	10	3	13 (4.5)
Gastric erosion	5	7	12 (4)
Gastric carcinoma	4	3	7 (2.4)
More than one finding	109	73	92 (32)

Table-II: Clinical presentations of the 65 cases with Oesophageal carcinoma.

	No. of patients	*%*
Dysphagia	53	81.5
Weight loss	37	57
Heart burn	31	48
Epicastric pain	9	14
Haematamesis	3	4.6
Chest pain	13	2

We performed our study in Mazzar-I-Shariff/Afghanistan, which is a poor wartorn city with only one endoscopist in the region. The spectrum of upper gastrointestinal conditions and abnormalities were not known. We prospectively studied 289 gastroscopies to determine the spectrum of upper gastrointestinal diseases and correlate the indications with the endoscopy finding.

PATIENTS AND METHODS

Between December 20, 2003 and March 3, 2004, 289 gastroscopies were performed on an outpatient's basis in Jordanian field Hospital-Afghanistan on patients aged 16 years or more. Two hundred eleven (73%) subjects were previously healthy, and 78 (27%) patients had one or more chronic diseases for example, 16 patients had ischaemic heart disease. The main indications were epigastric pain (182 patients), dysphagia (87 patients), and weight loss (42).

Endoscopies were done in the theater, which is a tent with limited equipments. Pharyngeal lignocaine spray were used as local anesthesia to overcome the gag reflex. No sedation was used.

All the proccedures were done by a single endoscopist with a fibro-optic endoscope. Biopsies were taken when needed, and sent for histopathology in the govermental hospital in Mazzar-I-Sharif because of non avaliablity of histopathologist in our hospital. When the histopatholpgy result came back with positive diagnosis of oseophageal carcinoma, we looked back at the records to collect more data about the age, presenting symptoms, and the endoscopic findings.

Table-III: Age of diagnosis for the 65 cases with Oesophageal carcinoma.

	Number of patients	%
20-29	1	1.5
30-39	3	4.6
40-49	6	9.2
50-59	19	29
60-72	36	55

RESULTS

There were 119 women and 178 men with mean age of 29.4 years (range 16-72). All the endoscopy proccedures were smooth and not associated with any complications. Most of the patients had more than one endoscopic finding. Thirty three (11.4%) endoscopies gave normal results. The most common major single findings in the other 256 were oseophageal carcinoma (22.5%), duodenal ulcers (13.5%) and oesophagitis (13%) as shown in Table-I.

For those 65 (22.5%) patients diagnosed as oseophageal carcinoma, it was more common in men (13.8%) than women (8.7%).The most common presenting symptom were dysphagia and weight loss. Other presenting symptoms are shown in Table-II. The most common age group of diagnosis was between 60-72 years as shown in Table-III.The most common endoscopic findings were mass or ulceraltive lesion (Table-IV). Two patients had oseophageal carcinoma arising from short segment Barrett's, which is un usual finding.

DISCUSSION

Gastroscopy was safe and well tolerated by the Afghan patients who never complain, may be because of the life hardness and poverty. There were no endoscopy related complications. Normal findings were found in 33 (11.4%) examinations, which is a low percent in an open-access endoscopy services. This may the explained by the fact that the patients who come to visit the Jordanian Field Hospital in Afghanistan usually have a genuine complaints.Gastroscopy was reported abnormal in 197 patients, with a single finding in 105 (53%) cases and 92 (47%) of more than one abnormal findings. The most interesting finding was the frequent diagnosis of esophageal carcinoma among patients endoscoped for dysphagia, which explained according to different studies,[9,10] that this region is in the Iran-China belt (The highest in incidence of carcinoma of esophagus in the world). This endoscopy finding was disappointing to us as no help was offered to this group as stents, surgery, radio or chemotherapy were not available in Afghanistan. The rest of the findings as peptic ulcer disease and reflux esophagitis were amenable to drug treatment, and subjective improvement was achieved in most of the cases. The most common complaints that brought the patients to the hospital were; epigastric pain, nausea, vomiting, dysphagia and deterioration in the state of health. The best symptoms predicting endoscopic finding for oesophageal carcinoma was dysphagia.

Table-IV: Underline Endoscopic Findings for the 65 cases diagnosed with Oesophageal carcinoma.

	Number of patients	%
Mass lesion	39	60
Ulcerative lesion	17	26
Short segment Barrett's	2	3
Long segment Barrett's	3	4.6
Stricture	3	4.6
Achalasia cardia	1	1.5

The most common endoscopic finding for oesophageal carcinoma were mass or ulcerative lesion. In two patients endoscopic finding showed oseophageal carcinoma arising from esophagus, the risk of associated carcinoma has increased between 30-125 short segment Barrett's (SSBE), which is rare when classical Barrett's folds.[6,11,12] There are an increasing number of reports of a close association between SSBE and the development of adenocarcinoma.[13,14] It is important to identify the endoscopic features of early adenocarcinoma in SSBE because this cancer is related to gastroesophageal reflux disease (GERD)[15] and the number of patients with GERD is thought to be increasing.[16] Because it is difficult to make an accurate endoscopic diagnosis of mucosal adenocarcinoma or dysplasia in Barrett's mucosa, it is currently advised that an extensive, four-quadrant biopsy should be taken from the

area of the abnormal mucosa, if Barrett's mucosa is found during a routine upper endoscopy.[17,18]

According to our results the incidence of developing oseophageal carcinoma is increasing with age and it is most common between 60-72 years,may be because it is common in this age worldwide, or those who came for gastroscopy at our hospital in Mazzar-I-Sharif, non of them was more than 72 years of age. We do not know whether the survival in Afghanistan is not as that in different parts of the world or there is no good care for the elderly, or if there are difficulties in bringing elderly people to the hospital which was far from the city about 10 kilometers.

Even the number of patients diagnosed as oesophageal carcinoma was high (22.5%), but we can not be sure that this indicate the prevelance, as our hospital was not dealing with an ideal community sample of the north of Afghanistan.

In conclusion in an area like Mazzar-i-Sharif with a frequant diagnosis of esophageal carcinoma, the indications for gastroscopy should not be too strict. Gastroscopy should be regarded as a useful and safe examination in patients who have upper gastrointestinal complaints. Mazzar-I-Sharif needs gastrointestinal unit and a multi disciplinary team to deal with major problem of carcinoma of esophagus and more research is needed to establish the possible etiology.

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