CARCINOMA OESOPHAGUS

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ABSTRACT
Objective: *To study the morbidity and mortality of carcinoma oesophagus.*
Study Design: *Case series.*
Setting & Duration: *Surgical Unit I, Chandka Medical College Hospital, Larkana from 2000 to 2008.*
Methodology: *Data was collected on a total of 32 patients who were diagnosed as having carcinoma oesophagus. All data was corrected prospectively. Patients in which involvement of the bronchus was seen were excluded from the study. Data was collected in specially designed proforma.*
Results: *Thirty two patients of carcinoma Oesophagus were diagnosed and managed at Chandka Medical College Hospital Larkana over a period of 9 years, the male female ratio was 1.2: 1. Dysphgia was seenn in 100% patients, 75% with weight loss, 50% with regurgitation and vomiting, 31.25% with pain upper abdomen. On barium swallow and endoscopy growth was at upper third of oesophagus in 6 patients (18.7%), middle third 14 patients, (43.7%), lower third 12 patients (37.5%). On histopathology 60% cases were reported as adenocarcinoma while 40% were of squamous cell carcinoma. Patients were managed with different surgical procedures post-operative complications were chest infection 13.1%, wound infection 12.5%, anastomatic leakage 9.3% mortality was 9.3%.*
Conclusion: *Carcinoma oesophagus carries poor prognosis. Early diagnosis, ICU facility and expertisen of oesophageal surgery can decrease morbidity and mortality.*

KEY WORDS: *Oesophagus Carcinoma Diagnosis Management Complications*

INTRODUCTION

Carcinoma oesophagus is the ninth most common cancer in the world. It is the disease of mid to late adulthood and carries a poor prognosis. World wide incidence of esophageal cancer is highly variable i.e. 20 per 100,000 in USA and Britain, 100 per 100,000 in south Africa and china; 540 per 100,000 in Gurier district of Kazakhstan. In Pakistan it is 8th commonest cancer in males and 5th in the females.[1] In Sindh it is the 4th commonest cancer in both sexes, while in NWFP 4th common in male and 3rd in female.[1] The life risk of this cancer is 0.8% for men and 0.3% for women.[2] The disease is world wide distributed and seems to be related to factors as excessive smoking, betal nut, paan, naswar, alcohol addiction and also gastro oesophageal reflux, Barrett's Oesophagus is responsible for adenocarcinoma which is more common in western countries.

The poor prognosis for cancer oesophagus is because its ability to spread; despite this understanding surgical management has not improved its survival rate. Less than 25% of patients show long term survival even after surgical resection.[3-4] Most of the patients presented in late stage because of lack of screening programme. In the area of high incidence early detection and with surgical resection the survival rate can be improved.

METHODOLOGY

The study was conducted from February 2000 to December 2008 at Chandka Medical College Hospital Larkana which is 1250 bedded peripheral teaching hospital of upper Sindh catering the patients from upper Sindh, Lower Punjab and Balochistan. Patients presenting with dysphagia, upper abdomen pain and with weight loss were admitted in the word data was collected

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on specilized proforma made. Detailed history was taken and clinical examination including ENT examination was carried by ENT consultants. Routine investigations like blood CP, ESR, Blood Sugar, Urea, Serum creatinine and X-ray Chest were done. Other specific investigations Barium Swallow was done to see the site of lesion and Oesophagoscopy to see the type of lesion and biopsy was taken. Bronchoscopy was done in those cases where tumor was in the middle third of the Oesophagus to exclude the involvement of Bronchus. After history clinical examination and all investigation 32 patients who were diagnosed carcinoma oesophagus were included in the study while diagnosed carcinoma oesophagus were included in the study while patients in which tumor involving the bronchus were included.

Ultrasound of the abdomen for secondaries in the liver CT scan of the chest was preformed in few patients but not all patients because of non availability in public sector. After biopsy reports all the patients were prepared for surgery by correcting the anemia fluid and electrolyte balance and nutrition status built up with Total Parentral Nutrition. Assessment of cardiac functions was done by cardiologist, Operative procedure including bypass feeding gastrostomy was explained to the patient and informed consent was taken.

RESULTS

Total number of patients was 32 out of which there were 18 males and l4 females. Male to female ratio 1.2: 1 the age ranged from 30 to 65 years, mean age was 53.6 years. Histopathology reports shows 20 patients (62.5%) had adenocarcinoma, 12 patients (37.5%) were diagnosed as having squamous cell carcinoma. Ultrasound of upper abdomen in 4 patients showed multiple secondaries in the liver. Out of 32 patients 4 patients were referred for chemo radiotherapy 28 were operated by different procedures.

16 patients Ivor Lewis operation	50%
8 patients left thoraco abdominal Approach	25%
4 patients with McKeown Procedure	12.5%

Post-operatively all patients received chemotherapy.

Table I. Symptomatology

Symptoms	No.	%
Progressive Dysphagia	32	100
Weight loss (weakness)	24	75
Regurgitation & Vomiting	16	50
Upper Abdominal Pain	10	31.25

follow up was poor, because most patients were not educated and belonged to remote areas, Even though 20 patients survived more than one year and had follow up for 1 year.

DISCUSSION

Carcinoma Oesophagus is one of the least studied and deadliest cancer world wide.[5] It is sixth leading cause of death world wide.[6] Less than 20% patients show long term survival even after surgical resection.[7-8] Surgical resection remains the cornerstone of treatment for carcinoma oesophagus.[9] Generally it is the predominantly a disease of elderly peoples, carrying poor prognosis. In this study middle aged patients are also affected i.e mean age is 53.6 years, younger than the study of Ries[10], that is mean age was 67 years and 63 years was in the study of Menke-Pluymers.[11] In this study male female ratio was 1.2:1, while in the study of Wang[12], the ratio was 3:1. All of our patients presented with dysphagia 100%, while in the study of MB Menke-Pluyners[11] 60%, Wang[12] 71%, and 74% in the study of Daly.[13]

A total of 31% of patients presented with upper abdominal pain which is comparable with the study of Wang[12], which also showed 31% with similar symptoms, 7.5% patients presented with weight loss it is more than the study of Enzinger.[5] Site of tumor is 31% in upper third of Oesophagus 43.7% middle third and 37.5% in the lower third while in the study of Wang[12], tumor location was 15% upper third, 52% middle third and 32.5% in the lower third. Histopathology report shows 62.5% tumor are adenocarcinoma and 37.5% of Squamous carcinoma. While comparing with the study of Wang[12], where squamous carcinoma is 89% which is more higher and adenocarcinoma is 7.5%.

Post-operative complications i.e. anastomic leakage 9.3% while 24 % in the study of Horstman[14] and 22.5% leakage was in the study of Triboulet[15], which were higher than in this study.

Chest infection were 13.1% in this study while study of Tanaka S, Hirabayasahi the chest infection rate was 15.3%.[16] Post-operative wound infection 12.5 % which is higher than the study of Tew.[17]

Table II. Site of lesion

Site of lesion	Number	Percentage
Upper third	6	31.7
Middle third	14	43.7
Lower third	12	37.5

Complication	No.	%
Chest infection	5	13.1
Wound infection	4	12.5
Anastomotic leakage	3	9.3
Mortality	3	9.3

Table III. Post-operative complications

CONCLUSION

Carcinoma of Oesophagus is common malignant tumor of alimentary tract in the world including in Pakistan and also in Sindh. It is 8th most common tumor, with high mortality and bad prognosis. An early diagnosis, ICU facility and with experience of esophagus surgery morbidity and mortality can be improved.

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