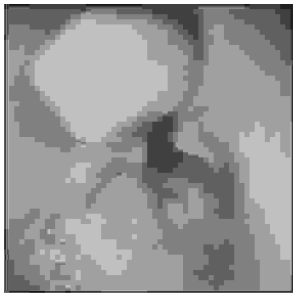
ORIGINAL **PROF-951**

CARCINOMA OESOPHAGUS;
COMPARISON OF VARIOUS TREATMENT MODALITIES



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ABSTRACT... Objective: To compare various modalities of treatment in management of carcinoma oesophagus with particular stress on relief of dysphagia due to ca. **Design:** Descriptive, retrospective study. **Setting:** Surgical department CMH Rawalpindi. **Period:** From 1996 to 2000 (4 years). **Patients & Methods**. The study subjects included 33 patients with histopathological diagnosis of carcinoma oesophagus (including criteria), 28 patients were operated upon (curative 18, palliative 10) with 17.5% operative mortality, 4 merited solely on chemo/radiation therapy (advance stage tumor), while 01 patent opted for chemo/radiation despite being favorable candidate for surgery. **Results:** Of the 33 cases, 29 were operated out of which 11 were subjected to Ivor-lewis procedure, 15 were operated upon through transhiatal approach while in the remaining cases, palliative bypass procedures were done. **Conclusion:** Surgery (transthoracic + tans hiatal approach) proved to be the only reliable mode of treatment whether supplemented by adjuvant therapy or not, Chemo/radiation as a sole mode of treatment had drastic results.

Key words: Management of carcinoma oesophagus, Treatment modalities.

INTRODUCTION

Oesophageal carcinoma has proved to be a gruesome milestone with incidence greater than was initially thought in our country. The brunt of the diseases seemed to be borne by males (28 out of 33) presenting between 50-70 years of age group with main complaints of dysphagia dehydration and weight loss.

Incidence of carcinoma oesophagus is 1% of all cancers in human body and is exceeded by carcinoma in bronchus, stomach, colon, prostate and pancreas. In United States it varies form 4-5 persons per 100,000 (ref Bailey and Love). Blacks have a higher incidence in any geographical area as compared to whites and male to female ratio is 4:1.

AIM/PURPOSE

Apart from determining the best modality of treatment every effort was made to find out new angular dimensions in all aspects to broaden the horizon at par with Western studies in relation to our own region, cullture and religion. We laid special emphasis on relief of dysphagia which was prime mode of distress for patients utilizing every possible palliative mode of surgery to date.

MATERIAL & METHODS

A retrospective study of 33 cases of carcinoma

oesophagus was carried out under supervised guidance of Maj Gen ® Asad Mahmud Malik from Mar 1996 to Jan 2000. C M H Rawalpindi is a base headquarters hospital equipped with latest diagnostic facilities with multiple surgical units (three major and five minor) for management of all sorts of surgical cases.

Inclusion criteria

Patients of all ages, sex or occupation primarily diagnosed in out patients department and later confirmed by radiological /histopathological reports were included in the study.

Exclusion criteria

Patients excluded from study were;

1. Where multiple concurrent tumors were found on CT scan in other parts of GIT.
2. Patients who were bound to be lost in follow up due to military service.
3. Patients insisting on having treatment from abroad.

Special features

Patients of all age groups were included in study including serving and retired army personnel, alongwith families and parents. A detailed history with special reference to dysphagia, weight loss and past history in relation to oesophagus was taken in all cases.

A careful local and general physical examination along with routine investigations (blood complete picture, urine examination, chest x-ray) were done. Electrocardiography, liver functiontests, blood urea and electrolytes were done to assess the function of vital organs (heart, liver and kidneys). They were supplemented by endoscopy and barium swallow in all cases and bronchoscopy in limited cases to assess tracheobronchial infiltration. Management outcome of all patients were also recorded in terms of potentially curable and palliative, as well as mortality.

RESULTS

Of the total 33 patients, 28 patients were male and 5 were females. Carcinoma oesophagus was found to be uncommon before the age of 50 years. Maximum incidence was recorded in 6th and 7th decades of life, Almost all patients presented with dysphagia. History of weight loss and generalized weakness could be elicited in all cases. Time of presentation in most cases was between four and six months of onset of symptoms. Our study was unable to determine any significant etiological factor, however smoking and craving for hot beverages remained highlighted in 22 of 33 patients.

Sites for carcinomas were as follows;

1. Middle third 48%
2. Lower third 30%
3 Upper third 21%.

Resected specimens proved fungating appearance to be the commonest (75%) followed by ulcerating and diffuse types. The histopathological report from AFIP (Armed Forces Institute of Pathology) confirmed 85% of resected specimens to be squamous cell carcinoma. The remaining were adeno carcinomas. Laboratory test findings remained insignificant. Preoperative buildup by parenteral nutrition with aminoval and intralipid remained predominant (23 of 33 patients).

Surgical Approach	Trans-thoracic Approach	Trans-hiatal Approach
Total Oesophagectomy	0	15
Partial Oesophagectomy	6	0
Roux-en-y Oesophagojejunostomy	7	0
Total	13	15

Out of the 33 cases, 29 were operate able out of which 18 were selected for curative surgery while 10 were candidates for palliative resection and one refused surgery. In 11 of 18 cases of curative resection local resection of tumor was complete (naked eye appearance). In remaining 8 cases transhiatal

oesophagectomy was done. More stomach was resected in distal third cases as compared to middle and upper third. In all cases stomach tube was used as oesophageal substitute.

There was no unanimity of opinion on preference for various procedures. In our series total thoracic oesophagectomy (Ivor-Lewis) was performed followed by transhiatal oesophagectomy with anastomosis in neck.

Post operative complications remained few. Minor anastomotic leaks responded to conservative treatment while major anastomotic leak was detected in 01 case, which was re-explored and fixed. Other complications that is hemorrhage, pneumothorax, wound infections and DIC were treated as merited. Operatively mortality was 17.2% (05 patients). In follow-up out of 28 patients of surgery 05 died within 01 month of surgery (advanced stage of tumour). Of the remaining 23, only 15 patients reported in surgical out patient department for follow up. A few had still not completed the recommended tenure. In most patients swallowing was restored and quality of life improved remarkably. One patient who refused curative resection was administered chemo/radiotherapy. Her condition deteriorated and she died miserably after 03 months.

Sex	**28 males and 5 females**
Age	Maximum incidence in 6^{th} and 7^{th} decades of life
Signs/symptoms	Dysphagia + weight loss+generalized weakness
Time of presentation	Max between 4 and 6 months
Etiology	Smoking + hot beverages susceptibility
Sites for Ca	Middle 1/3rd = 48%, Lower 1/3rd =30% Upper 1/3rd = 21%
Morphological appearance	Functioning 75%, Ulcerating 20%, Diffuse 4%
H/P results	Squamous cell Ca 85%, Adeno Ca 14.3%
Mode of treatment	Operable cases 29, Adjuvant therapy 04

DISCUSSION

COMPARISON WITH WESTERN STUDIES

It was unanimously agreed after results that surgery proved to be the best option in most cases, may it be curative or palliative. Despite high operative mortality in our study an aggressive approach is still recommended because of restoration of swallowing capacity and less side effects which was contradictory to western studies where stress is laid on adjuvant therapy. Pre-operative radiotherapy worsened the cases and is strongly not recommended which is concurrent with our Western counterparts.

Recommended mode as per staging of disease

Currently recommended mode of surgery in our set-up is transhiatal for lesions at either end of oesophagus. This approach is also recommended for localized tumours and for patients with poor cardiopulmonary reserve. Trans-thoracic is recommended for patients with tumours of middle third of oesophagus. Mc-Keown three stage oesophagectomy is used only when the whole oesophagus is to be resected. As most of our patients reported with stages III and IV tumours so further deliberation of subject was not possible. The most dangerous complication in our study was anastomotic leak. Stapling, thought considered safe, was not practiced in our study.

Other modes of treatment

Adjuvant therapy (use of pre-operative/post-operative radiotherapy or chemotherapy) was administered to 05 patients after curative resection with satisfactory results

to date. It was also used as a palliative measure in some cases with poor results. In unresectable cases, by pass procedures using stomach, jejunum or colon was done. Atternative procedures, that is radiotherapy and intubations ended with grave prognosis. In set up more stress was laid on relief of dysphagia. Advances are being made in diagnostic and curative arenas, although dawn for break through remains to be seen.

Limitations

Strict military rules and regulations in addition to disciplinary governance were a constant hurdle in managing all aspects. Similarly constant turnover of military personnel in addition to restriction of patients to army personnel and dependents only also created a negative impact on various variables.

CONCLUSIONS

After exhaustive review of literature and research carried out at C M H Rawalpindi for four years, it was concluded that;

1. It is monographically evident that surgery is the only modality of curative/palliative treatment for effective relief of dysphagia.
2. Surgery is much superior to adjuvant modes of treatment
3. The over all perspective remains multi disciplinary and relief of dysphagia remains the prime concern.
4. The evaluation of effectiveness of adjuvant therapy is based on accurate histological sampling and extent of procedure performed.
5. Surgery for carcinoma oesophagus remains a fertile territory for eager volunteers with hot pursuits for a better and bright future.
6. Adjuvant modes of treatment when applied of solo ended in disaster.
7. Even palliative modes of treatment were a great help in relieving distress of patients to some extent.

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