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Esophageal carcinoma:Twelve years experience

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Esophageal carcinoma is one of the malignant disease commonly found in the South of Thailand. This report is a retrospective study of esophageal carcinoma in one referal center of the Northeast of Thailand.

A total 55 cases of esophageal carcinoma were treated at our unit between August 1982 and December 1994. Among these patients, the ratio between male and female was 3.2 to 1 and the average age was 59.2 years. All of the patients were advanced stage (III, IV).

The common sites of tumor were in the mid thoracic esophagus (34.5%). The pathological findings were squamous cell carcinoma (27 cases), adenocarcinoma (12 cases) and no record 16 cases. Fifty three cases were operated and 2 cases were treated only by radiotherapy. In the operated group, 8 cases died (15%) from sepsis and acute myocardial infarction. The long term follow up (39/55 cases) showed that 2 cases survived for 5 years or more and the others survived between one month and twelve months

Surviving surgical patients who were treated by resection or by pass operation (39/53 or 73.5%) can by supported by oral nutrition by themselves. Surgical treatment by skillful surgeon and complete tumor resection should be the proper management of esophageal carcinoma even in advances cases.

Index : Esophageal carcinoma, cancer

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Esophageal cancer is a virulent malignancy with poor long-term survival. It is predominantly a disease of old age patients. This condition is of high incidence in the "esophageal cancer belt" extending from the Caspian Sea through Iran, Brittany and the native Bantu of South Africa.

In Thailand the crude incidence of esophageal carcinoma in 1982 was reported to be 1.2 per 100,000. The southern region had the highest annual incidence of 2.94. In our hospital, 780 in-patient beds, there were only 9 esophageal cancer pateints from 2,034 cancer cases (0.44%) in 1985. Even though this disease is uncommon and there were small number of patients, we tried hard to improve our therapeutic outcome.

This study is the review of esophageal cancer about presenting symptoms, clinical findings, treatment and results.

Material and Method

From August, 1982 to December, 1994 55 patients with esophageal cancer were admitted to the cardiovascular and thoracic unit of Srinagarind Hospital, the patients ranged in age from 38 to 80 years with a mean of 59 years. The ratio between male(42) and female (13) was 3.2 to 1. All of the patients lived in the northeast region. The majority of the patients were farmers. (Fig. 1)

Dysphagia was the predominant chief complaint (62%). The other symptoms were vomiting, weight loss, horseness, chest pain, substernal burning sensation and hemoptysis. (Fig. 2) Cachexia status was found in 28 patients (53%).

Evidence of distant metastasis from physical examination was cervical lymph nodes enlargement (14 cases, 25%) and a positive rectal shelf (2 case, 3.6%).

Abnormalities of preoperations investigation were anemia (40%)hypoalbuminemia (56%) and tracheo-esophageal fistula (8%).

Associated diseases commonly found were 2COPD, 2 UTI, 2DM, 2 cirrhosis, 2 pneumonia, 2 heart block, 2 pulmonary TB, and gall stones, hemorrhoid, indirect inguinal hernia, thyroid nodule, mitral regurgitation, and duodenal ulcer one each. Applying the current staging system of UICC (Internationale Contre le Cancer) for esophageal cancer, the carcinoma was in stage IIb 2 patients (4%), stage III 32 patient (58%) and stage IV 21 patients (38%).

The tumor was located in cervical part in 9 patients (16%), upper thoracic 7 (13%), mid thoracic 19 (34%), lower thoracic 9 (16%), intraabdominal part 11 (20%).

In 21 patients, there was an evidence of distant metastasis to the supraclavicular lymphnode (14/21), celiac lymph node (3/21), peritoneum (2/21), and in each one to the lung, liver and bone.

Operations were performed in 53 patients by resection (36/53, 68%), bypass surgery (11/53, 21%) and gastrostomy (6/53, 11%) (Fig. 3)

In one patient of the gastrostomy group an intraluminal intubation was tried. Another 2 patients were treated by external radiation alone. In the surgical treatment group, 8 patients had adjuvant post operative radiation 30-60 Gy.

Chemotherapy was given postoperatively in 2 patients for 2 courses because they could not tolerate the side effect of the drugs.

Organ substitution was used in both resection and bypass surgery. The stomach was used in 77% and colon in 23% of all cases. (Fig. 4,5)

Results

Pathological lesions were reported in 32 cases, 20 were ulcerative lesion (63%), and 12 encircle lesion (37%). The most common histopathological section was squamous cell carcinoma (27/55, 49%) and the other were 12 adenocarcinoma (22%) and no recorded in 16 cases (29%).

Many postoperative complications occured such as pneumonia (14/53, 26%), anastomosis leakage (10/53, 19%), wound infection (4/53, 8%), stricture of anastomosis (4/53, 8%). Eight patients

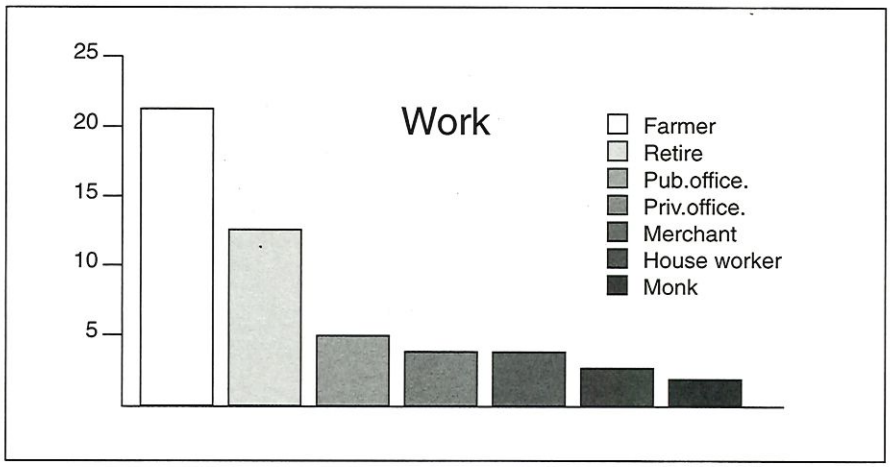

Figure 1

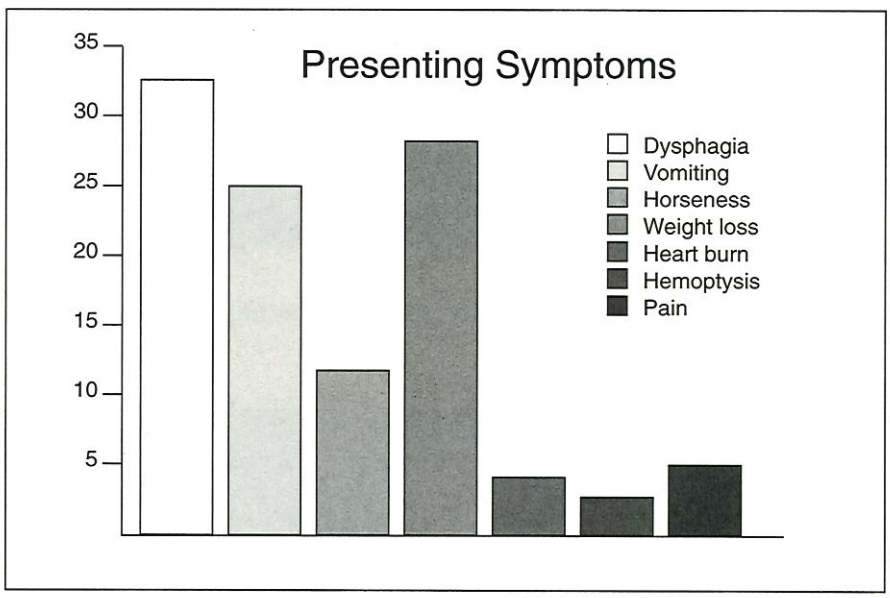

Figure 2

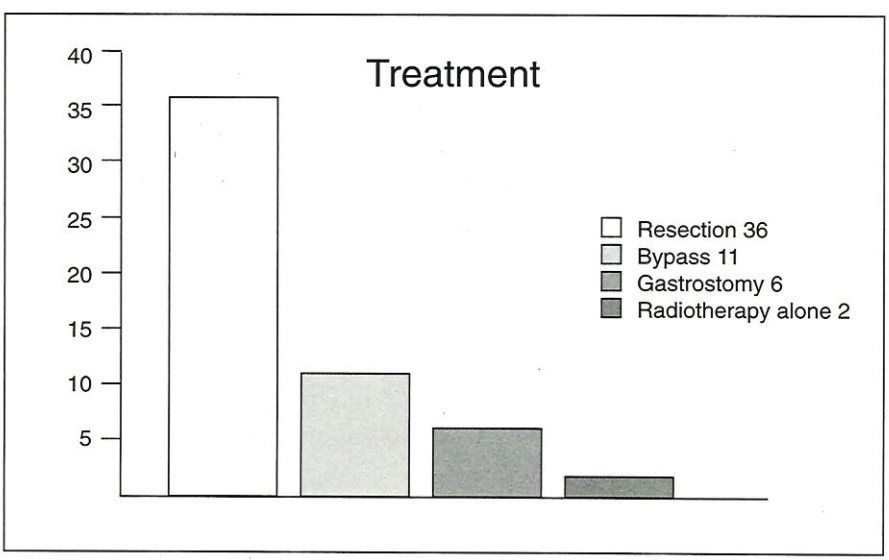

Figure 3

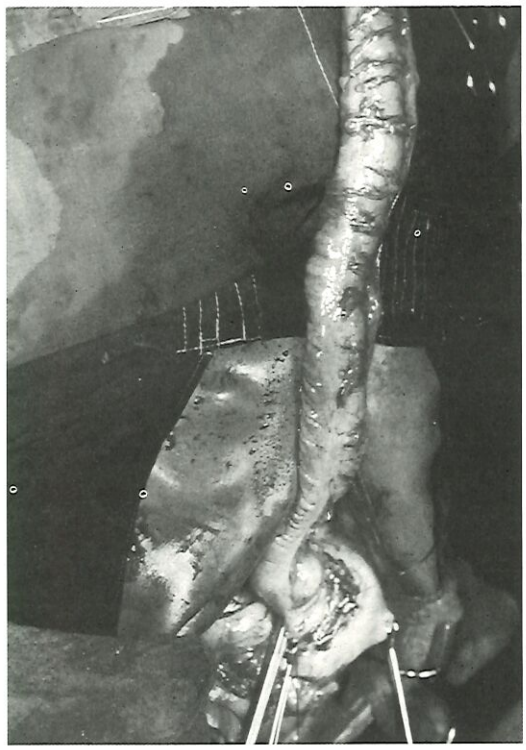

Figure 4. Colon was used as a substitution after resection or for bypass.

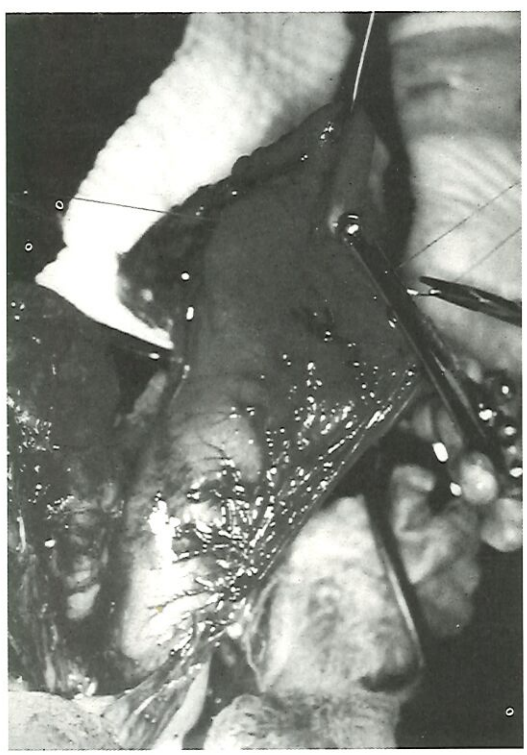

Figure 5. Stomach was more frequent used for substitution

died 6 cases of which were from pneumonia and sepsis and another two patients developed perioperative acute myocardial infarction.

The hospital stay ranged from 8 to 53 days, average 18 days.

Thirty-nine patients were followed-up. Only one patient is still alive 8 years after operation and radiotherapy. The others attended at OPD from one month to 5 years, average 8 months.

Thirty-one patients were able to swallow well after treatment (56%). The other 11 patients had improved swallowing (20%), 5 cases had poor results (9%) and 8 died. (14.5%).

Discussion

Esophageal cancer is uncommonly found in northeast of Thailand. The patients had late proper treatment because of our ineffective referal system, poor health care education of the patients and inadequate in-patient bed. Srinagarind Hospital is the only one tertiary care hospital that cover a population of nearly 23 million in this region. Rarely is the lesion discovered in the localied form ; more often, extensive disease and distant metastasis is present. Long-term reported survival is rare. Our unit has considered the treatment of esophageal carcinoma to be purely palliative in nature. Most operative procedure utilizes the standard combined transthoracic and transabdominal aproach (23/53, 43%). Transhiatal blunt esophagectomy is performed easily and is well tolerated by the patient (20/53, 38%). Generally, operation has been considered to offer the best palliation for carcinoma of the esophagus, but the five-year survival is still low. There were only two patient who are still alive 5, 8 years after the operation. Eight patients were treated by adjuvant postoperative radiotherapy. These patients alived longer than the others, ranging from 2 months to 8 years, average 24 months.

Two patients showed poor toleration to chemotherapy. Because of high morbidity and mortality, we should strictly select the patients for appropriate treatment. Recently endoscopic ultrasound has become a powerful staging tool. Curative en bloc resection of visible tumor, including regional lymph nodes in the patient whose physical status is fit and with resectable tumor biology will allow the prospect of long-term survival.

Endoscopic therapies include dilatation of the esophagus, laser therapy, photodynamic therapy, esophageal prosthesis, bicap tumor probe and endoscopic injection therapy are meant to provide palliation of symptoms due to dysphagia with regard to palliation. In conclusion, we learned about esophageal cancer treatment that early diagnosis and treatment is needed. Complete resection of the cancer is the treatment of choice in selected patients. Combined surgical treatment and external radiotherapy improved the outcome especially in a cervical lesion.

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