

Esophageal Carcinoma in Southern Thailand

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Abstract

Background : Southern Thailand is an area with a high frequency of esophageal carcinoma. This paper presents basic data regarding esophageal carcinoma patients from this region.

Methods : Patients with histopathological confirmed esophageal carcinoma were retrospectively reviewed. The age, sex, location of tumor and resectability were studied.

Results : A total of 813 cases of esophageal carcinoma were reviewed, male: female ratio was 3.54:1 (634:179). Average age in males was 64.62 years and 64.30 years in females. The peak age-incidence was 51-70 years. Squamous cell carcinoma was most commonly found in the mid thoracic portion of the esophagus with 369 cases (45.39%), 70 cases (8.61%) were found in the cervical portion of the esophagus. Adenocarcinoma cancer was found at the esophagogastric junction in 47 cases (5.78%). Only 293 cases (36.04%) were operable. Respiratory tract involvement was noted in 49 cases.

Conclusion : The most common type of esophageal cancer in Southern Thailand is squamous cell carcinoma, as in other countries in Asia. The status of the patients, advanced age and locally advanced tumor were major factors of our low operable rate.

Key word : Esophageal Carcinoma, Southern Thailand

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Cancer of the esophagus has the greatest variation incidence between different geographic distribution⁽¹⁻⁵⁾. The People's Republic of China

reported the highest incidence of esophageal carcinoma of 169.22 cases per 100,000⁽³⁾. In Southern Thailand the incidence of esophageal carcinoma is

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about 3.6 per 100,000^(6,7). This rate is about three times greater than that found in other areas of Thailand⁽⁸⁻¹³⁾.

Our hospital is a university hospital located in Southern Thailand. Because of our ability to provide a complete investigation and our ability to provide combine treatments, almost all esophageal carcinoma cases in Southern Thailand are referred to this hospital. The purpose of this report was to present basic data regarding esophageal carcinoma in Southern Thailand and to make a comparative evaluation of this data regarding patients treated in this area.

PATIENTS AND METHOD

From June 1982 to December 1997, 813 cases of esophageal carcinoma presented at Songklanagarind Hospital. They were diagnosed and confirmed by histopathological report. The medical record, endoscopic finding, X-ray investigation and pathological reports were studied retrospectively. Patients was refused to participate in the investigation or those with incomplete data were excluded. The location of tumor was classified by the standard classification of UICC⁽¹⁴⁾. The location of tumor was finally confirmed by endoscopic, X-ray finding and operative reports.

RESULTS

There was a total of 813 cases of esophageal carcinoma in this study. Male to female ratio was 634:179 (M:F = 3.54:1). The highest incidence age group was between 51-70 years (Fig. 1). The

average age in males was 64.62 years and the average age in females was 64.30 years. One case was younger than 30 years and 50 cases were over 80 years old.

Locations of tumors are shown in Fig. 2. There were 70 cases (8.61%) of tumors located in the cervical region, 369 cases (45.39%) in the mid thoracic area, 124 cases (15.25%) in the upper thoracic area and 194 cases (23.86%) in the lower thoracic area. Tumors located in the esophagogastric area were found in 47 cases (5.78%). In addition, 9 cases (11.07%) had multiple areas of synchronous esophageal carcinoma.

There were 293 cases (36.04%) that could be operated by esophagogastricectomy. Patients presented with tracheoesophageal fistula in 49 cases (6.03%). Seventy three patients (8.99%) refused any treatment. Advanced tumor that was unresected was found in 259 cases (31.86%). The other 91 cases (11.19%) needed only supportive treatment.

DISCUSSION

Squamous cell carcinoma is the most common type of esophageal cancer in the world. Adenocarcinoma of the esophagus is second most common with an incidence of about 0.4 per 100,000⁽⁵⁾. Western countries have a higher number of adenocarcinoma than Asian countries. Asian countries also have a higher number of squamous cell carcinoma of the esophagus than adenocarcinoma. The incidence of esophageal carcinoma may also be different within Asian countries. We had previously reported 366 cases of esophageal carcinoma,⁽¹⁰⁾

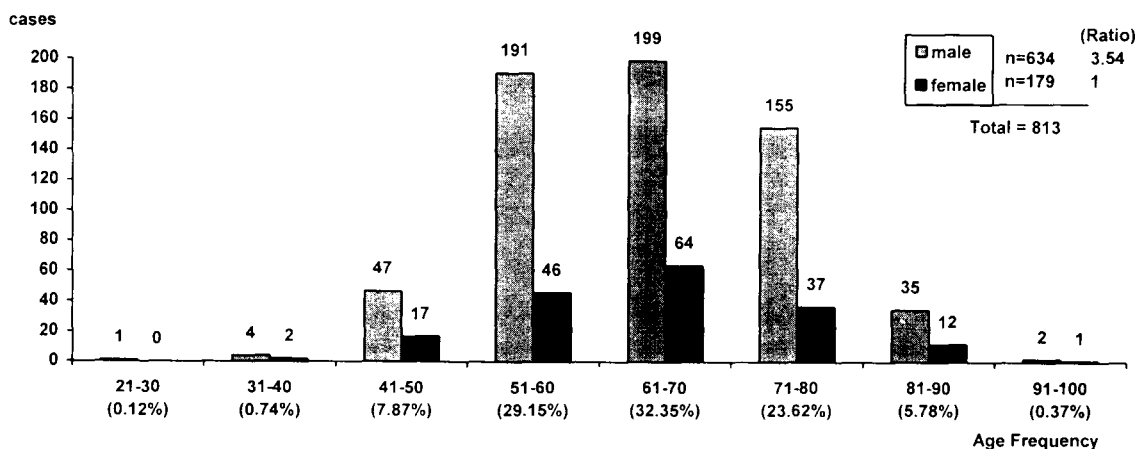


Fig. 1. Distribution of patients in difference age groups.

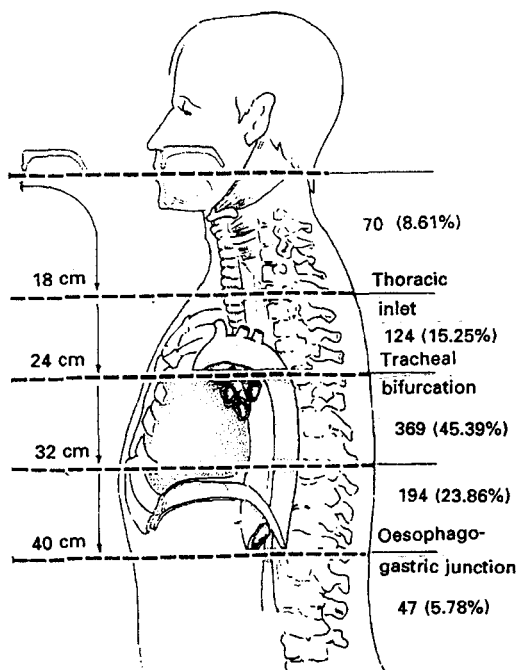


Fig. 2. Locations of tumor of the esophagus classified by the standard of UICC.

male: female ratio was 2.97:1, compared to this data, male: female ratio was 3.54:1. Compared to data from other areas of the world, we are in the low incidence group⁽¹⁶⁾.

The average age in male patients in this data was 64.62 years, and 64.30 years in females. The average age in both sexes was not significantly different. When we compared this with our previous study, the average age in males was 63.59 years and in females was 59.62 years. We concluded that the frequent period of age in both sexes

was about 51-70 years. The highest number was in the 61-70 age range (32.35%).

We classified the location of esophageal carcinoma as cervical (18 cm from incisor), upper thoracic (19-24 cm), mid thoracic (25-32 cm), lower thoracic (33-40 cm), and esophagogastric junction as UICC. The data showed that the most frequent area was the mid thoracic region, 45.39 per cent. This finding is not different from our previous report (50.98%)⁽¹⁰⁾ and also as reported from other Asian countries⁽¹⁵⁾. For the synchronous tumor of esophageal carcinoma, there were 9 cases in this series. All synchronous cases were diagnosed by pathological investigation confirmed after an esophagogastric resection operation.

Low resectability rate of this group of patients was due to the late state of patients and some of them refusing to be treated by our modality. Respiratory tract invasion occurred in 49 cases at admission, and unresectable tumor was found in 259 cases. Ninety one cases needed only supportive treatment. This data showed the numbers of advanced disease corresponded to a low resectability rate. Seventy three cases refused any treatment. Chanvitan A. reported the resectability of about 56 per cent in all cases in this area⁽⁶⁾. With the late state of patients and poor nutritional status, the mortality and morbidity rate were higher than other countries⁽⁶⁾. One of the most important factors that delay or refuse modality of treatment is the low socioeconomic status of the population.

SUMMARY

Eight hundred and thirteen patients of esophageal carcinoma were studied. The ratio for male: female was 3.54:1. The average age for males was 64.62 years and average age for females was 64.30 years. The resectability rate was low for older patients within a late stage and with a poor nutritional status. Forty-nine cases had respiratory tract involvement.

REFERENCES

1. Roth AJ, Rich AT, Putnam JB, et al. Cancer of the esophagus. In: De Vita TV, Hellman S, Rosenberg AS, eds. Cancer principle and practice of oncology. Lippincott, Philadelphia; 1999: 980-1020.
 2. Casson GA. Esophageal cancer. In: Pearson Gf, et al, eds. Esophageal surgery. Churchill Livingstone, New York; 1995: 539-59.
 3. Hennessy TPJ. Tumours of the oesophagus. In: Hennessy TPJ., Cuschieri A, eds. Surgery of the oesophagus. Bailliere Tindall, London; 1986: 307-51.
 4. Lewin KJ, Dawsey SM, Wang GQ. Squamous carcinoma of the esophagus in China and the West: are they different disorders? Diseases of the esophagus 1995; 8: 44-7.
 5. Yakshe NP, Fleischer ED. Neoplasms of the esophagus. In: Castell OD. The esophagus. Little, Brown and Company. Boston; 1992: 227-98.
 6. Chanvitan A, Geater A. Incidence and mortality. In: Chanvitan A, ed. Oesophageal cancer study in Southern Thailand. Medical Media Publisher, Bangkok; 1990: 3-14.
 7. Tumor registry, Songklanagarind Hospital, 1990-1996.
 8. Puttawibul P, Nimitpanpong P, Tancharoen S, Chanvitan A. Substernalgastric bypass for palliation of oesophageal carcinoma; a report of 10 patients. Siriraj Hosp Gaz 1986; 38: 923-8.
 9. Chanvitan A, Puttawibul P, Nimitpanpong P, et al. Carcinoma of the oesophagus: Experience from Thailand. Asian J Surg 1994; 17: 262-8.
 10. Puttawibul P, Nimitpanpong P, Chanvitan A, Puttawibul P. Carcinoma of the oesophagus in the Southern part of Thailand, studies of patients and residence in 366 cases. Siriraj Hosp Gaz 1988; 40: 521-6.
 11. Chanvitan A, Puttawibul P, Nimitpanpong P, Wattanaareprongchai S. Preoperative chemotherapy and radiation therapy in cancer of the esophagus: A Potentially Curative Approach. Thai J Surg 1987; 8: 263-72.
 12. Chanvitan A, Geater AF, Puttawibul P, et al. Experience with esophageal carcinoma in Songklanagarind Hospital. J Med Assoc thai 1991; 74: 97-107.
 13. Chanvitan A, Puttawibul P, Casson GA. Flow cytometry in squamous cell esophageal cancer and precancerous lesions. Diseases of the esophagus 1997; 10: 206-10.
 14. Spiessl B, Beahrs HO, Hermanek P, et al. TNM Atlas illustrated guide to the TMN/p TMN classification of malignant tumours. Springer-Verlag, Berlin; 1990: 62-5.
 15. Fox M, Wong J. Squamous cell carcinoma. In: Pearson Gf, et al., eds. Esophageal surgery. Churchill Livingstone, New York; 1995: 571-86.
 16. Mannell A. Carcinoma of the esophagus. Curr Probl Surg 1982; 19: 555-647.
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มะเร็งหลอดอาหารทางภาคใต้ของประเทศไทย

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บทนำ : มะเร็งหลอดอาหารเป็นโรคมะเร็งที่พบบ่อยทางภาคใต้ของประเทศไทย รายงานนี้จะนำเสนอข้อมูลพื้นฐานเกี่ยวกับผู้ป่วยที่ได้รับการวินิจฉัยว่าเป็นมะเร็งหลอดอาหารในพื้นที่ภาคใต้ของประเทศไทย

วิธีการศึกษา : ผู้ป่วยมะเร็งหลอดอาหารที่เข้ารับการรักษที่โรงพยาบาลสงขลานครินทร์ที่ได้รับการวินิจฉัยยืนยันโดยผลการตรวจทางพยาธิวิทยาจะถูกศึกษาถึง อายุ เพศ ตำแหน่งของมะเร็ง และการผ่าตัดเอามะเร็งออก

ผลการศึกษา : ผู้ป่วยทั้งหมด 813 ราย เป็นผู้ป่วยชาย 634 ราย ผู้ป่วยหญิง 179 ราย อัตราส่วนระหว่างเพศชาย:เพศหญิงเท่ากับ 3.54 : 1 ผู้ป่วยชายมีอายุเฉลี่ย 64.62 ปี และผู้ป่วยหญิงมีอายุเฉลี่ย 64.30 ปี โดยช่วงอายุที่พบบ่อยคือ 51-70 ปี มะเร็งชนิด squamous cell เป็นมะเร็งที่พบบ่อยที่สุด โดยพบมะเร็งชนิด adenocarcinoma บริเวณ esophago-gastric junction เพียง 47 ราย (ร้อยละ 5.78) ตำแหน่งของมะเร็งหลอดอาหารที่พบบ่อยคือที่บริเวณทรวงอกส่วนกลาง 369 ราย (ร้อยละ 45.39) สำหรับที่บริเวณคอพบ 70 ราย (ร้อยละ 8.61) ผู้ป่วยที่สามารถผ่าตัดเอามะเร็งออกได้มีทั้งหมด 293 ราย (ร้อยละ 36.04) โดยตรวจพบว่าการลุกลามบริเวณหลอดลม 49 ราย

สรุป : การศึกษาผู้ป่วยมะเร็งหลอดอาหารทางภาคใต้ของประเทศไทยพบว่าเป็นมะเร็งชนิด squamous cell เป็นส่วนใหญ่ ตำแหน่งที่พบบ่อยคือ บริเวณทรวงอกส่วนกลางเช่นเดียวกับที่พบในประเทศอื่นในแถบประเทศทางทวีปเอเชียด้วยกัน เนื่องจากมะเร็งลุกลามไปค่อนข้างมากและผู้ป่วยที่เป็นมะเร็งหลอดอาหารส่วนใหญ่อยู่ในช่วงอายุมาก จึงทำให้การผ่าตัดรักษาผู้ป่วยเหล่านี้ทำได้ไม่เต็มที่เท่าที่ควร

คำสำคัญ : มะเร็งหลอดอาหาร, ภาคใต้ของประเทศไทย

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