*Surgical treatment of the Upper and Midthoracic esophageal cancer

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From 1953 to 1954 (June.) 11 cases of esophageal cancer, not including the lower third and at the cardia, were under my care as follows:—

Upper thoracic cancer 3 cases.
Middle thoracic cancer 8 cases.

For the Upper thoracic esophageal cancer.

Case 1 — Male, Thai, 51 yrs old having history of dysphagia for 6 months.

Gastrostomy and deep X-ray therapy was done elsewhere prior to admission to the hospital. Barium swallowing for esophagram revealed the cancer just above the aortic arch. Right submammary incision (Conerly's method) was performed for esophagectomy but in vain due to marked post-radiation pulmonary fibrostic adhesion to the antero-lateral side of the chest wall. The costal incision was closed and another 3000 r. dose of deep X-ray therapy was applied. Two months later after discharge he was still living well.

Case 2 — Male, Chinese, 50 yrs old having history of dysphagia for 3 months prior to admission. The cancer was just above aortic arch or about 20 cm. from upper incisors. Esophagectomy was done according to Nakayama's method (Rt. side approach.) Anterior Extrathoracic esophago-gastric anastomosis with pyloric myomectomy (Ramstedt's method) was performed. The patient died 2 hours later after operation from shock.

Case 3 — Male, Thai, 56 yrs old (See picture.) having history of dysphagia for 4 months before entry. On esophagoscopic examination the growth was found at 23 1/2 cms. from upper incisors. Esophagram (Ba-swallowing.) revealed the growth just above the aortic arch. Esophagectomy (Nakayama's technique) with Anterior extra-thoracic esophago-gastric anastomosis was performed succesfully, small area of leakage from the anterior gastric wall (fundus) developed on the sixth day after operation, due to small area of ischemic wall (Anastomotic area was all right.) Gastrostomy on anterior chest wall was performed for the purpose of feeding. Finally both openings on the gastric wall were succesfully closed by multiple plastic operations and the patient can swallow soft, semi-solid foods without difficulty. He is still living 6 months after the operation.

Middle thoracic esophageal cancer (8 cases)

Case 1 — Female, 60 yrs old, had dysphagia for 6 months before entry. The esophageal cancer was found at the level of left bronchus. Esophago-bronchial fistula was present on admission. Palliative gastrostomy was performed and she died 4 months later from excessive pulmonary bleeding.

Case 2 — Male, 51 yrs old, had dysphagia for 2 months before entry. Inoperable cancer was found at the level of left bronchus on exploratory thoracotomy. Nasal plastic tube feeding was used and he died 11 days post-operatively.

Case 3 — Male, Chinese, 44 yrs old, had dysphagia for 11 months before entry. Inoperable cancer was found at the arch of aorta on exploratory thoracotomy (Sweet's technique.) Gastrostomy was done and he was discharged 21 days after the operation.

Case 4 — (See picture case I) Male, Chinese, 52 yrs old, had dysphagia for 5 months before entry. Esophageal cancer was found at the level of the left bronchus. The cancer was localized without node involvement. Esophagectomy with supra-aortic gasiro-esophagic-anastomosis (Dr. Sweet's

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technique) was performed successfully. The patient can walk and take semi-solid foods 10 days post-operatively. He was living well 11 months after operation but finally died within one month from the new squamous cell cancer developed at the posterior pharynx.

Case 5 — (See picture case II) Male, Chinese, 49 yrs old, had dysphagia for 6 month before entry. Esophageal cancer was found just beneath the aortic arch with anterior local adhesion to the aortic arch. The peri-bronchial glands were not enlarged. Esophagectomy with supra-aortic esophago-gastric anastomosis was performed according to Dr. Sweet's technique. Microscopic examination of the cancer removed revealed epidermoid cancer. Total 4000 r. field of deep X-rays therapy was applied post-operatively. The patient was discharged seven weeks after operation.

Case 6 — Male, Chinese, 56 yrs old, (See picture case III,) had dysphagia for 5 months before entry. Esophageal cancer was about 3 cm. from the aortic arch with local adhesion to the surrounding tissues but without node involvement. Esophagectomy with supraaortic esophago-gastric anastomosis was performed (Sweet's technique.) He had post-operative complication by having kinking of the pyloric portion of the stomach just under the diaphragm. This complication was successfully corrected by pyloroplasty (Finney.) The biopsy of the cancer revealed poorly differentiated epidermoid cancer. Deep X-ray therapy was applied post-operatively he was living well 6 months after the operation.

Case 7 — Male, Chinese, 45 yrs old, having dysphagia for 2 1/2 months before entry. On exploratory thoracotomy, the esophageal cancer was found at the level of the left bronchus, with enlarged paraesophageal glands. Esophagectomy with anterior extrathoracic esophago-gastric anastomosis (Nakayama's technique) was performed. Leakage at the anastomotic site developed and he died 2 1/2 months post-operatively.

Case 8 — Female, Thai, 45 yrs old, had dysphagia for 2 months before entry. Esophagram (Barium swallowing) revealed the cancer about 3 cm. from the aortic arch. Virchow's glands were enlarged at the left supraclavicular region. 5000 r. of deep X-ray therapy was applied (without gastrostomy) The patient died 4 1/2 months after X-ray therapy.

Conclusion With our small series of esophageal cancers reported here, we are not quite satisfied for the point of the operative result, however, we can prolong the life of some patients to some extent, 6-8 months. We prefer to enter the right side of the chest when the cancer is at the upper and mid-thoracic level, even though Dr. Sweet's technique was used in this series with good result, but we usually encounter some technical difficultly in mobilizing the esophagus at the aortic arch and in doing anastomosis above the aortic arch. Dr. Nakayama's anterior extrathoracic anastomosis is the useful procedure for the shock patient during operation, because we can close the thoracic cavity readily before the anastomosis being done.

References

1. Garlock, John. Surg. Gynec. Obstetric 1938, 66, 534-548
2. Lewis, Ivor. Brit. J. Surgery 1946, 34, 18.
3. Nakayama, K. J. of International Coll. of Surgery. 1954, Jan.
4. Sweet R.H. Surg. Gynec. and Obst. 1952, 94:46.
5. Watson. W.L. et al. Surg. Gynec. and Obst. Jan. 1954.
6. Conerly D.B. et al Surg. Gynec. and Obst. Jan. 1954.
7. Macmanus J.E. Surgery, 1946, 24:9.
8. Mathewson C. Arch. Surg. 1950, 61:229.
9. Sweet R.H. Thoracic Surgery (W.B. Saunder Co.)
10. Merendino K.A. et al Surg. Gynec. Obst. Jan. 1952.