Esophageal Carcinomas with Synchronous and Metachronous Primary Malignant Carcinomas in Other Organs


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Seventeen patients with 10 synchronous and 7 metachronous double cancers with carcinomas of the esophagus were surgically treated in the First Department of Surgery, Nagasaki University School of Medicine. All patients were men with an average of age 68.5. The incidence of double cancers with carcinoma of the esophagus accounted for 12.7% in a total of 134 of this series. The three triple cancers were included. Of the three, one was synchronous triple cancers in the esophagus, the stomach and the colon. The outcome was not necessarily satisfactory. Two had recurrence 3 and 5 months after surgery, but one is still alive for 33 months, free from carcinoma.

Patients and Results

Ten synchronous and four metachronous double cancer patients with carcinoma of the esophagus were experienced in our department. Of 10 synchronous one, associated organs were the stomach in 7 and the larynx, the pancreas and stomach with the colon in one, respectively. On the other hand, of metachronous double cancer patients, they were the stomach in 4, the lung, the kidney with larynx and the larynx with the prostate in one, respectively as shown in Table 1.

Among them, three triple cancer patients were treated in two synchronous and one metachronous primary malignant neoplasms. The first case, 70-year-old man, had a resection for renal carcinoma, followed by an interval of 24 months, underwent neck dissection and irradiation therapy for laryngeal carcinoma, and 32 months later, esophagectomy with radiation therapy for a3 esophageal carcinoma. He had expired with recurrence 3 months after the last operation. The second case, male age 73, had received laryngectomy with irradiation and chemotherapy for carcinoma of the larynx, elapsing 31 months, endocrine-chemotherapy for prostatic cancer, and 18 months later, esophagectomy for a2 esophageal cancer. He is still living 5 months after surgery with tumor-bearing. The last case, man aged 65, underwent simultaneous combined resection of the esophagus and the stomach as shown in Table 2 for early esophageal cancer (aO, 0-1le) and early gastric cancer (1 type) and also polypectomy for carcinoma in adenoma of the colon. The patient is now in good health, 33 months after surgery. All of the triple cancers were in early stage. The reasons for fair outcome were that a complete resection was achieved with minimal surgical invasion and all were in early stage of carcinomas.
Table 2  Triple cancers

<table>
<thead>
<tr>
<th>Case</th>
<th>Age</th>
<th>Primary Tumor(s)</th>
<th>Secondary Tumor(s)</th>
<th>Treatment(s)</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>70 yrs, M</td>
<td>renal cancer</td>
<td>laryngeal cancer</td>
<td>resection, neck dissection, irradiation</td>
<td>death</td>
</tr>
<tr>
<td>2</td>
<td>73 yrs, M</td>
<td>laryngeal cancer</td>
<td>prostata cancer</td>
<td>resection, endochemotherapy, irradiation</td>
<td>alive</td>
</tr>
<tr>
<td>3</td>
<td>65 yrs, M</td>
<td>esophageal cancer</td>
<td>gastric cancer, colon cancer</td>
<td>resection</td>
<td>alive</td>
</tr>
</tbody>
</table>

Discussion

The definition of double cancers is 1) malignant diseases in each tumor 2) arising from different sites 3) denying that each is not metastatic. It is generally accepted that the time interval discriminating synchronous from metachronous one is within 6 months\(^\text{3,4}\).

The incidence of double cancers in carcinomas of the esophagus has been reported to be in the range of 2.9 to 6.5% in spite of 3.6% in the nationwide survey\(^\text{5}\) in 1977. It is more frequent in Japan\(^\text{2,5}\) that double cancers of the esophagus accompany gastric cancer, despite a low incidence of 1.4% in Europe\(^\text{6}\). It is common that gastric cancer associated with double cancer of esophageal cancer is frequently detected. It is attributable to carcinogenesis related to daily diet and reflects the digestive tract fragile to continuous stimulation of carcinogens. Physicians should be aware of concomitant occurrence of gastric cancer with esophageal cancer in postoperative follow-up study.

On the other hand, Tepperman\(^\text{7}\) reported the second cancer occurred at the incidence of 3.6% every year after the treatment of carcinomas in the floor of the oral cavity and most were squamous cell carcinoma of the upper air way and upper digestive tract in origin. In the peri-and postoperative follow course of carcinomas of the esophagus, much attention should be paid to the presence and occurrence of synchronous and metachronous primary malignant tumors in the stomach and the oral cavity. In particular, a high incidence of gastric cancer is troublesome with respect to the use of the stomach susceptible to concomitant or subsequent carcinomas as an organ of reconstruction following esophagectomy.

The prognosis of double cancers associated with esophageal cancers correlates with advancing stages of esophageal cancers\(^\text{8}\). Application of endoscopic surgery is also recommended for synchronous double cancers which is in early stage of carcinoma. In contrast, it is most common that subsequent carcinoma to preceding esophageal cancers is gastric cancer that is relatively advanced. In fact, undue delay in detection of metachronous cancer is not infrequently experienced so that no effective therapy is prescribed. Furthermore, the elapsing time following surgery for esophageal cancers develops a high incidence of metachronous cancers. It is mandatory for meticulous follow-up to improve surgical outcome for metachronous double cancers.

References