—Original Article—

PRIMARY ADENOSQUAMOUS CARCINOMA OF THE STOMACH: EXPERIENCE OF 11 CASES AND ITS CLINICAL ANALYSIS

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Summary

1) During the last 10 years, 11 cases of primary adenosquamous carcinoma of the stomach were operated on.
2) Histologically, the specimens from the stomach showed adenocarcinoma with squamous differentiation in all the cases.
3) All the patients but 1 were males and their average age was 61.2 years.
4) The duration of illness prior to treatment was relatively long period of time and the chief complaints in over half of the patients were abdominal pain.
5) Eight cases showed metastases at the time of operation. Metastasis to the regional lymph nodes was observed in 8 cases and the squamous element was present in 5 of these cases.
6) There was no operative death. Followup study was made in 9 cases. Only 2 are still alive and the remaining 7 died of recurrence. The length of survival averaged 10.7 months.

Key Words: gastric carcinoma, adenosquamous carcinoma, adenoacanthoma, follow-up study, clinical analysis.

Introduction

According to the diagnostic criteria settled by Japanese Research Society for Gastric Cancer, the primary adenosquamous carcinoma of the stomach is defined as a pathologic condition showing a mixture of adenocarcinoma with squamous component in histological examination, and in addition, more extensive areas of its squamous component by lower magnification. This mixed tumor is of interest in view of its rarity and unsolved histogenesis.

In Japan, this type of tumor was first reported by Takagi in 1973, and to date, only 47 cases have been reported.

Eleven patients of adenosquamous carcinoma of the stomach, including the cases showing more extensive areas of adenocarcinomatous component, have been operated on in our clinic for the last 10 years.

The purpose of this communication is to evaluate the clinical analysis of them and
clarify the characteristics of this lesion.

**Clinical Materials and Methods**

From January 1967 through December 1976, 586 patients with gastric carcinoma underwent gastrectomy on the Department of Surgery, Gastroenterological Division, Wakayama Medical College.

Throughout the histological diagnosis was made by the same pathologist.

The specimens for histological examination were fixed, sectioned in the standard manner, and stained with haematoxylin and eosin. When it is difficult to differentiate adenosquamous carcinoma from ordinary adenocarcinoma, the specimens were stained also with alcian blue as an additional check in the last 3 years of this study.

In order to elucidate the difference between these tumors and ordinary adenocarcinoma, we included the cases which showed more extensive areas of adenocarcinomatous component by histological examination in this study.

Eleven cases of primary adenosquamous carcinoma thus diagnosed were analyzed as to their clinical symptoms, operative and pathological findings and prognosis.

**Results**

Of 586 specimens of gastric carcinoma, 11 (1.9 per cent) were made the histological diagnosis of adenosquamous carcinoma. Clinical data are summarized in **Table 1** and **2**. All the patients but 1 were males and they were aged 38-72 years with an average age of 61.2 years. The greatest frequency occurred in the 5th and 6th decades of life (4 cases). The duration of illness prior to treatment varied from 2 weeks to 2 years and 6 months with a

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**Table 1.** Clinical data on adenosquamous carcinoma of the present series

<table>
<thead>
<tr>
<th>Patient No.</th>
<th>Age</th>
<th>Sex</th>
<th>Duration of chief complaint</th>
<th>Operation</th>
<th>Site of primary tumor</th>
<th>Size of tumor (Diameter, cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>58</td>
<td>M</td>
<td>1 yr.</td>
<td>abdominal pain</td>
<td>Gastrectomy (hemi.)</td>
<td>A (2)</td>
</tr>
<tr>
<td>2</td>
<td>52</td>
<td>M</td>
<td>2 mo.</td>
<td>abdominal pain</td>
<td>Gastrectomy (hemi.)</td>
<td>A</td>
</tr>
<tr>
<td>3</td>
<td>72</td>
<td>M</td>
<td>6 mo.</td>
<td>dysphagia</td>
<td>Gastrectomy (proximal)</td>
<td>F (2)</td>
</tr>
<tr>
<td>4</td>
<td>69</td>
<td>M</td>
<td>2 yr. 6 mo.</td>
<td>abdominal pain</td>
<td>Gastrectomy (subtotal)</td>
<td>B (2)</td>
</tr>
<tr>
<td>5</td>
<td>68</td>
<td>M</td>
<td>4 mo.</td>
<td>dysphagia</td>
<td>Gastrectomy (total)</td>
<td>F</td>
</tr>
<tr>
<td>6</td>
<td>70</td>
<td>M</td>
<td>10 mo.</td>
<td>abdominal pain</td>
<td>Gastrectomy (subtotal)</td>
<td>A</td>
</tr>
<tr>
<td>7</td>
<td>58</td>
<td>M</td>
<td>6 mo.</td>
<td>abdominal pain</td>
<td>Gastrectomy (hemi.)</td>
<td>A</td>
</tr>
<tr>
<td>8</td>
<td>38</td>
<td>F</td>
<td>2 yr. 6 mo.</td>
<td>abdominal pain</td>
<td>Gastrectomy (total)</td>
<td>B</td>
</tr>
<tr>
<td>9</td>
<td>68</td>
<td>M</td>
<td>1 mo.</td>
<td>dysphagia</td>
<td>Gastrectomy (total)</td>
<td>F</td>
</tr>
<tr>
<td>10</td>
<td>63</td>
<td>M</td>
<td>1 mo.</td>
<td>dysphagia</td>
<td>Gastrectomy (proximal)</td>
<td>F</td>
</tr>
<tr>
<td>11</td>
<td>57</td>
<td>M</td>
<td>2 wk.</td>
<td>abdominal discomfort</td>
<td>Gastrectomy (hemi.)</td>
<td>A</td>
</tr>
</tbody>
</table>

(1): This patient was lost to followup.

(2): Abbreviations are: A, antrum of the stomach; F, fundus of the stomach; B, body of the stomach; RLN, regional lymph nodes.