The clinical characteristics and outcome of intraabdominal abscess in Crohn’s disease

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Introduction

For patients who suffer from Crohn’s disease (CD), an abdominal abscess is a serious complication that requires early diagnosis and treatment. According to the literature from western countries, its occurrence is between 10% and 30%,1–5 but in Japan, the only study on the subject, presented by Maeda et al.,6 who conducted a survey by questionnaire, reported that the incidence was 8.9%. Many of the patients with abscess formation complicating CD were subjected to surgical treatment: only a few have been treated with conservative methods. At our institution, a relatively large number of patients with CD complicated with an abdominal abscess have been treated. The incidence, therapeutic results, and natural course are presented below.

Subjects and methods

Among the 352 patients with CD who were observed at our hospital from 1985 to October 2001, 35 (9.9%) who developed abdominal abscess served as the subjects of this study.

The intraabdominal abscess was located in the abdominal wall, peritoneal cavity, retroperitoneum, or subphrenic region. Any abscess that developed immediately after laparotomy (within 3 months of surgery), any abscess that was caused by a silk suture, or bowel segments responsible for abscess formation, half had neither severe stenosis nor multiple fistulas. Almost all patients underwent surgery for the abscess, and, in more than a quarter of the patients, there was recurrence within a few years after surgery.

Key words: Crohn’s disease, abdominal abscess, diseased bowel segment responsible, therapy recurrence
perirectal abscess caused by anal lesions were all excluded from this study. Only those patients in whom the abscess cavity was clearly outlined on ultrasonography, computed tomography (CT), or magnetic resonance imaging (MRI) were included. For diagnosis, ultrasonography was used in 4 patients; CT for 2; a combination of ultrasonography and CT for 25; and a combination of ultrasonography, CT, and MRI, for 4.

To examine the intestinal lesions involved with abscess, preoperative peroral radiography of the small intestine, double-contrast radiography (also of the small intestine), and retrograde or standard double-contrast radiography of the large intestine were conducted. The severity of constriction of the intestinal lesions was stratified as follows: (A) mild stenosis without fistula; (B) stenosis without oral dilatation and/or with simple fistula; and (C) severe stenosis with oral dilatation and/or with multiple fistulas (Fig. 1). The patients were examined for the following features: the incidence of complications with an abscess, site of abscess formation, intestinal lesions responsible for abscess formation, treatment, and recurrence of abscess.

The Kaplan-Meier method was employed to compute the cumulative incidence of the complication. Comparison of the Kaplan-Meier curves of cumulative incidence was made by logrank test. Fisher’s exact test was used to compare incidences.

Fig. 1a–c. Severity of constriction of the diseased bowel segment responsible for abscess. a Mild stenosis without fistula; b stenosis without oral dilatation and/or with simple fistula; c severe stenosis with oral dilatation and/or with multiple fistulas.