Case Reports in Gastroenterology
Case Rep Gastroenterol 2008;2:326–329
DOI: 10.1159/000155149
Published online: September 30, 2008

ISSN 1662–0631
www.karger.com/crg

Transgastric Diversion of Transnasal Long Tube Placement Using a Percutaneous Endoscopic Gastrostomy Site in a Patient with Bowel Obstruction and Massive Ascites due to Ovarian Carcinoma

Akira Horiuchi[a] Yoshiko Nakayama[b] Naoki Tanaka[a]

Departments of [a]Gastroenterology and [b]Pediatrics, Showa Inan General Hospital, Komagane, Japan

Key Words
Percutaneous endoscopic gastrostomy · Transgastric long tube decompression · Bowel obstruction · Massive ascites · Ovarian carcinoma

Abstract
The course of patients with advanced ovarian carcinoma is often complicated by bowel obstruction and/or massive ascites. A transnasal long tube may be placed to relieve bowel obstruction, but produces nasal discomfort and pain. Recently, the effectiveness of percutaneous endoscopic gastrostomy (PEG) tube placement for malignant bowel obstruction due to ovarian carcinoma has been reported, but not all patients received effective decompression. Diversion of a transnasal long tube to the PEG site in this case provided a useful method of long-term decompression while providing improved quality of life.

Introduction

The course of patients with advanced ovarian carcinoma is often complicated by bowel obstruction and/or massive ascites. A transnasal long tube may be placed to relieve bowel obstruction, but produces nasal discomfort and pain. Recently, percutaneous endoscopic gastrostomy (PEG) tube placement was reported as an effective alternative in these

Akira Horiuchi, MD
Department of Gastroenterology, Showa Inan General Hospital, 3230 Akaho Komagane 399-4191 (Japan)
Tel. +81 265 82 2121, Fax +81 265 82 2118, E-Mail horiuchi.akira@sihp.jp

Case Rep Gastroenterol 2008;2:326–329
DOI: 10.1159/000155149
Published online: September 30, 2008

ISSN 1662–0631
www.karger.com/crg

patients [1]. However, ascites is thought to be a contraindication to PEG placement because leakage of gastric contents can occur with consequent peritonitis or peristomal leakage. A new method combining PEG pull-through technique with a gastropexy device enabled patients with ascites to undergo the PEG placement safely [2].

We encountered a woman with massive ascites who had suffered from nasal pain due to the transnasal long tube placement for two months.

Case Report

A 54-year-old woman who had bowel obstruction and ovarian carcinomatous peritonitis was referred to the gastroenterology department in our hospital in August 2006. Although ovarian carcinoma had developed with massive ascites one and a half years ago, chemotherapy had been effective until June 2006, when bowel obstruction complicated with massive ascites developed. Total parental nutrition was started and a 18 Fr transnasal long tube was placed. She suffered from nasal pain due to transnasal long tube placement for 2 months and requested that the transnasal route be diverted to another route.

PEG with standard pull method (20 Fr) was successful using the gastropexy device without problems. Clamping of the transnasal long tube led to development of abdominal pain so that PEG placement alone and removal of the transnasal long tube was not considered feasible. One week after PEG placement the PEG tube was removed. The oral side of the transnasal long tube was introduced into the stomach using a standard endoscope and pulled out from the PEG site using an ultrathin endoscope (GIF-N260, Olympus, Japan) (**fig. 1**). The long tube for decompression functioned without problems until the patient died in November 2006.

Discussion

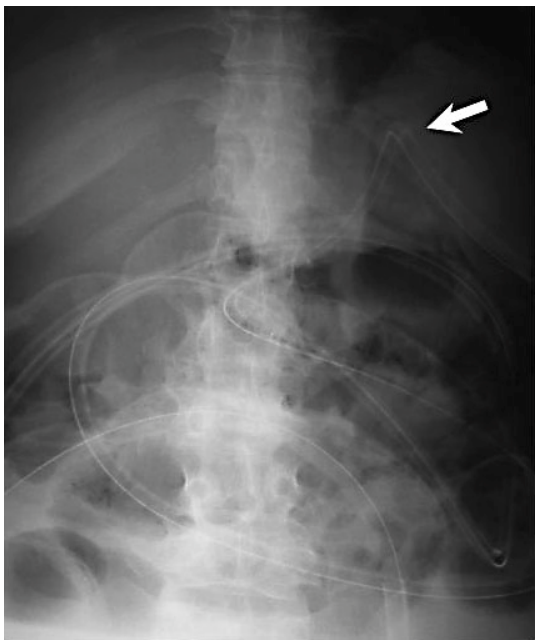
PEG tube placement for malignant bowel obstruction due to ovarian carcinoma has been reported to be successful, but not all patients receive effective decompression [1]. In this patient the PEG functioned very well, but the patient complained of abdominal pain shortly after clamping of the transnasal long tube, causing us to abandon plans to remove the long tube.

Generally, ascites is thought to be a contraindication to PEG placement because it may be followed by leakage of gastric contents. In this patient we used the gastropexy device with the PEG method and the PEG tube was successfully placed in spite of massive ascites. However, the sutures required to fix the gastric wall and the abdominal wall led to some pain in the abdominal wall. Diversion of the transnasal long tube to the PEG site was done with the assistance of an ultrathin endoscope (outer diameter 5.2 mm) passed through the PEG site, leading to successful long-term decompression and improved quality of life.

Case Rep Gastroenterol 2008;2:326–329
DOI: 10.1159/000155149
Published online: September 30, 2008

ISSN 1662–0631
www.karger.com/crg

Fig. 1. Abdominal plain film shows that the oral side of the transnasal long tube is pulled out from the PEG site (arrow).



Case Rep Gastroenterol 2008;2:326–329
DOI: 10.1159/000155149
Published online: September 30, 2008

ISSN 1662–0631
www.karger.com/crg

References

1 Pothuri B, Montemarano M, Gerardi M, Shike M, Ben-Porat L, Sabbatini P, Barakat RR: Percutaneous endoscopic gastrostomy tube placement in patients with malignant bowel obstruction due to ovarian carcinoma. Gynecol Oncol 2005;96:330–334.

2 Wejda BUJ, Deppe H, Huchzermeyer H, Dormann AJ: PEG placement in patients with ascites: a new approach. Gastrointest Endosc 2005;61:178–180.