INTRODUCTION
Gastrocolic fistula (GCF), a rare complication of some benign conditions and malignant conditions, is an abnormal communication between a segment of the colon and the stomach. Currently, the most common etiology of GCF is gastrointestinal malignant disease, especially locally invasive gastric and colon carcinoma. In a review of 1,500 cases of cancer of the stomach and 3,200 cases of carcinoma in the colon, only 11 cases of gastrocolic fistula were found.1 GCF secondary to transverse colon cancer is uncommon with a reported incidence of 0.3 - 0.4% in operated cases.2 The patient with GCF usually presents with weight loss, faeculent vomiting and diarrhoea.3

CASE REPORT
A 54-year-old man was admitted to the hospital with a two-month history of upper abdominal pain and change in bowel habits to watery diarrhoea, accompanied by weight loss, fecal halitosis and melena. Physical examination revealed that his abdomen was moderately distended. Laboratory tests on admission showed iron deficiency anaemia with haemoglobin of 5.1 g/dl, iron < 4 µmol/L and hypoalbuminaemia with serum albumin 26.2 g/L. Computed tomography (CT) showed an abnormal communication between the wall of the gastric mid body and the wall of distal transverse colon which was diffuse thickened (Figure 1). Barium meal revealed contrast flowing into the distal transverse colon near the splenic flexure from the greater curvature of stomach through the GCF (Figure 2). Gastroscopy showed a fecal flow through the gastric folds. Colonoscopy demonstrated a large mass of the transverse colon near the splenic flexure with a central hole through which the endoscope could be passed into the gastric lumen.

After correction of his malnutrition and anaemia, an exploratory laparotomy was undertaken. Intraoperatively, a large mobile tumour of the distal transverse colon near the splenic flexure was identified; and the mass was adherent to the greater curvature of the stomach, the mesentery and to several loops of jejunum. A radical en-bloc resection was performed involving a subtotal gastrectomy, left hemicolectomy and small bowel resection. Histology revealed a low-differentiated mucinous adenocarcinoma of colon which had penetrated the stomach wall. The patient made an uneventful recovery from surgery.

DISCUSSION
Advanced neoplasms of the stomach and transverse colon are the commonest causes of a gastrocolic fistula. The other rare malignant causative factors include gastric lymphomas, carcinoid tumours of the colon, and metastatic and infiltrating tumours of the biliary tract, duodenum, and pancreas.1,2 Widespread use of non-steroidal anti-inflammatory drugs and aspirin accounts for benign gastric ulcer being the most common cause of gastrocolic fistula formation for the last decade. Other causes include perforated diverticulum, perforated appendix, pancreatic abscess, inadequate gastric resection or incomplete vagotomy for peptic ulcer disease, Crohn’s disease, percutaneous endoscopic...
gastrostomy tube insertion, and right gastroepiploic-coronary artery bypass.1,3,4 The characteristic triad of clinical manifestations includes diarrhoea, faeculent vomiting, and weight loss.2,5 The presence of faeculent vomiting is clinically diagnostic of GCF, but it occurs in only 30% of the patients.1 There was no faeculent vomiting in this patient. GCF is best detected radiologically by barium enema, which confirms the diagnosis in 90 - 100% of cases; a barium meal may miss the diagnosis in 30 - 70% of cases. A small and narrow fistula can be missed by gastroscopy if it is hidden between the gastric folds.1 CT is also thought to be of value only in detecting extension of tumour in case of malignancy and subsequent pre-operative planning.6 The fistula in this patient was detected successfully by CT, barium meal and colonoscopy, but could not be pinpointed by gastroscopy.

There has been anecdotal success with conservative management such as endoscopic injection of the fistula tract with fibrin sealant or treatment with cimetidine,6 especially when peptic ulcer disease is found to be the underlying cause of the GCF. However, to a malignant GCF, radical en-bloc resection of the involved gastrocolic region should be planned, as was performed in our patient. Other surgical interventions include resection of the main diseased part of the fistula and primary closure of the other side of the fistula. Insertion of a covered colonic stent7 or an over-the-scope clip system (OTSC)8 may also be a useful tool for palliative management.

In conclusion, GCF should be considered in the differential diagnosis of patients presenting long-lasting diarrhoea accompanied by weight loss, faecal halitosis and melena. Abdominal CT is of value not only in detecting extension of tumour in case of malignancy and subsequent pre-operative planning, but also in diagnosis with the finding of abnormal communication between the wall of stomach and colon. Radical en-bloc resection of the involved gastrocolic region is the optimal treatment for patient with malignant GCF.

REFERENCES