# **CASE REPORTS**

# Colonic stenting: an alternative to surgery in the elderly

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#### Abstract

This case report describes the management of a frail older patient presenting with a rare case of an obstructing right-sided colonic lesion, combined with complex co-morbidities. The report briefly discusses use of colonic stenting in right colonic lesions as well as palliative management of colonic tumours in general.

Keywords: colonic stents, self-expandablemetallic stents (SEMS), right sided colonic tumours, palliation, elderly

#### Introduction

Self-expandable metal stents (SEMS) are now a safe and alternative treatment option to relieve malignant luminal obstruction and can be used as a bridge to surgery for left-sided colonic obstruction, or to avoid colostomy during palliation [1]. Acute left-sided colorectal malignant obstruction presents as the first symptom in approximately 15–20% of colorectal cancers [2]. The first stents used in the large bowel were designed for vascular or oesophageal use [3], but are now specifically designed for placement in the colon. Although SEMS are well reported in relieving obstruction in diverticular, anastomotic or malignant left-sided strictures [3–6], there is little evidence of their use in right-sided colonic lesions.

This case report describes the management of a frail older patient presenting with a rare case of an obstructing rightsided colonic lesion along with challenging co-morbidity

## **Case Report**

A 90-year-old woman was admitted with a dizzy episode shortly after getting out of bed. On systems enquiry it transpired there was some recent weight loss and a 2-month history of diarrhoea without melaena or blood per rectum.

She was referred to AICS (Assessment and Integrated Care Scheme) for multidisciplinary assessment. Prior to admission she had been living alone in her own home with support from her two daughters. Her home was equipped with a

stair lift and she had been independent regarding activities of daily living.

On abdominal examination a mass was palpable in the right upper quadrant.

# **Investigations**

Investigations revealed anaemia with haemoglobin of 9.2 g/dl. Liver function tests were normal. Ultrasound of the abdomen revealed an 8 cm tumour at the hepatic flexure confirmed on CT scan as an 8 cm mass in keeping with tumour (Appendix 1, available online). During the admission she developed pain and swelling of her right calf, and Doppler confirmed a non-occlusive DVT in the superficial femoral vein. While undergoing investigations she started to develop bowel obstruction with abdominal distension and vomiting.

# **Management**

Due to low creatinine clearance a 1 mg/kg daily dose of enoxaparin was used for anticoagulation, with monitoring of anti-Xa levels. The haemoglobin slowly dropped from 9.2 to 8.7 to 7.6 g/dl, after which, she was transfused 2 units of blood. An IVC filter was inserted due to difficulties maintaining the haemoglobin with anticoagulation, and following this, low dose (40 mg) enoxaparin was given with planned weekly haemoglobin checks.

Both, the patient and medical team, felt surgical intervention was not appropriate. Colonic stenting

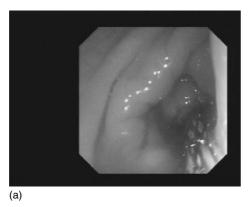




Figure 1. (a) Endoscopic view of stent being inserted. The endoscope is advanced to the lower end of the stricture, a guide wire passed through the tumour and the stent is then passed across the tumour and expanded; (b) Stent in its final position with the open bowel lumen visible.

was offered as a palliative option for symptom control. A pyloric stent was inserted (Figure 1, see also Appendix 2 available online) under radiological guidance and direct endoscopic visualisation (through-the-scope technique).

The obstructive symptoms rapidly improved over 48 h, and after referral to the palliative care team, she was discharged with a homecare package. The patient was maintained in her own home with the support of family, carers and palliative care team. She died peacefully at home a few weeks after discharge from hospital with her symptoms well controlled.

# **Discussion**

In the UK, approximately 34,000 patients are diagnosed with colorectal cancer each year [7]. Colonic obstruction is almost exclusively associated with tumours in the recto-sigmoid region, and acute colonic obstruction has a high mortality (12%) and morbidity (39%) [3]. This is the first report to describe stent insertion for imminent obstruction in a right-sided colonic tumour.

The combined radiological and endoscopic, or, throughthe-scope technique (TTS) is safer, permits acquisition of histopathology at the time of insertion and also permits stent stabilisation with the use of colonic endoclips to prevent migration as right-sided stents (by nature of the anatomy) are at increased risk of migration. Complications of the procedure include colonic perforation, bleeding, pain, tumour ingrowth and with tight strictures, stenting may not be technically possible [8, 9]. Stent-induced ulcers have also been described, [10] and following stenting, the patient may experience frequent loose or liquid stools [8].

However, relief of obstructive symptoms, relief of pain with reduced recovery time and hospital stay provide significant benefits to the patient, and enabled this lady to spend the remainder of her life at home supported by her family.

# **Key points**

- Self-expandable metal stents (SEMS) are a safe treatment option to relieve malignant luminal obstruction.
- Combined radiological and endoscopic stenting techniques are likely to reduce complication rates.
- Palliative stenting of colonic obstruction can reduce hospitalisation and morbidity in terminally ill older patients.

#### **Conflicts of interest**

None.

# Supplementary data

Supplementary data for this article are available online at http://ageing.oxfordjournals.org.

# References

- Stefanidis D, Brown K, Nazario H et al. Safety and efficacy of metallic stents in the management of colorectal obstruction. JSLS 2005; 9: 454–9.
- 2. Umpleby HC, Williamson RC. Survival in acute obstructing colorectal carcinoma. Dis Colon Rectum 1984; 27: 299–304.
- **3.** Dohmoto M. "Endoscopic Stent Insertion for the Palliation of a Malignant Stricture." 1991.
- **4.** Morgan R, Adam A. Use of metallic stents and balloons in the Esophagus and Gastrointestinal Tract. Review Article. J Vasc Interv Radiol 2001; 12: 283–97.
- **5.** Fan Y-B, Yang Z, Wang Y, Huang Y-Y, Zheng Q. Clinical application of self-expanding metallic stent in the management of acute left-sided colonic malignant obstruction. World J Gastroenterol 2006; 12: 755–9.
- **6.** Forshaw MJ, Sankararajah D, Stewart M, Parker MC. Self-expanding metallic stents in the treatment of benign colorectal disease: indications and outcomes. Colorectal Dis 2006; 8: 102–11.

#### E. sakazakii bacteraemia with multiple splenic abscesses in a 75-year-old woman: a case report

- Cancer Research Campaign. CancerStats: Large Bowel–UK Report. London: Cancer Research Campaign: 2000.
- **8.** Davies RJ, D'Sa IB, Lucarotti ME *et al.* Bowel function following insertion of self-expanding metallic stents for palliative colorectal cancer. Colorectal Dis 2005; 7: 251–3.
- 9. Watson AJ, Shanmugam V, Mackay I, Loudon MA, Duddalwar V, Hussey JK. Outcomes after placement of colorectal stents. Colorectal Dis 2005; 7: 70–3.
- **10.** Wai C-T, Khor C, Ho K-Y. Post-metallic stent placement bleeding caused by stent induced ulcers. World J Gastroenterol 2005; 11: 5739–41.

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# Enterobacter sakazakii bacteraemia with multiple splenic abscesses in a 75-year-old woman: a case report

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#### **Abstract**

Enterobacter sakazakii is an uncommon bacterium that is known to cause severe neonatal infection and is rare among adults. We present a peculiar case of *E. sakazakii* bacteraemia with multiple splenic abscesses in a 75-year-old institutionalised woman, who was successfully treated with 6 weeks of imipenem and percutaneous drainage of the abscesses.

**Keywords:** Enterobacter sakazakii bacteraemia, multiple splenic abscess, elderly,

## Introduction

Enterobacter sakazakii (ES) is a motile, Gram-negative, rodshaped bacterium known to cause severe neonatal meningitis and necrotising enterocolitis in premature infants with the consumption of contaminated powdered milk formula [1, 2]. Adult infections are rare. Only nine cases have been reported to date, mainly of ill and immunocompromised older patients [3–8]. We describe a peculiar case of ES infection in an elderly woman.

# **Case Report**

A 75-year-old woman presented in June 2006 with fever, dyspnoea and vague abdominal pain. An otherwise well and independent elder, she was a resident of a mental institution for chronic schizophrenia. At presentation, she was tachycardic, tachypnoeic and febrile (38.4°C), with the presence of a left-sided pleural effusion and left upper quadrant abdominal guarding and tenderness. There were no other significant findings.

Laboratory results revealed neutrophilia  $(12.6 \times 10^9/l)$ , elevated C-reactive protein levels (176.8 mg/l) and mild transaminitis. The chest radiograph confirmed a moderate-sized left-sided pleural effusion. Computed tomography (CT) scan of the abdomen revealed multiple thin-walled splenic and parasplenic abscesses (Figure 1). One hundred twenty millilitres of thick 'tomato relish' paste was later aspirated under CT guidance. Cytological analysis showed inflammatory cells and fibrin debris but no malignant cells. Blood cultures eventually grew ES, which was sensitive to cefuroxime, ceftriaxone, gentamicin, ciprofloxacin, cotrimoxazole, and amoxicillin/clavulanate. The bacterium was resistant only to cephalexin.

The pleural aspirate was predominantly lymphocytic with no evidence of bacteria or acid-fast bacillus. Adenosine deaminase level was normal (29.66 U/I) and cytological analysis was negative for malignancy. Serum tumour markers (alphafetoprotein, carcinoembryonic antigen, CA 19-9, CA 125) were within normal limits and the human immunodeficiency virus (HIV) antibody was negative. In