Reminder of important clinical lesson

An unusual case of fever and a sigmoid mass

Tamara Kubba,¹ Mio Takatsuka,² Eve Stern,¹ Thomas Smith,¹ Jason Lee,¹ Maitham Al-Whouhayb,¹ Michael Saunders¹

¹Department of General Surgery, Barnet Hospital, Herts, UK;

²Department of Surgery, Barnet and Chase Farm Hospitals, Herts, UK

Correspondence to Dr Mio Takatsuka, miotakatsuka@hotmail.com

Summary

A 52-year-old Afro-Caribbean female presented with a 2-week history of left iliac fossa pain and persistent fever. The working diagnosis was diverticulitis and she was treated with intravenous antibiotics. A CT scan of the abdomen showed a thickened sigmoid colon lying adjacent to the left bladder wall with inflammatory changes present. As the patient's condition showed no improvement, an explorative laparotomy was performed, which identified a mass in the sigmoid colon adherent to the bladder and left ovary. An anterior resection, partial cystectomy and a defunctioning loop-ileostomy were performed. Postoperatively, spiking fever with a high white cell count continued. No postoperative surgical complications were identified despite numerous investigations. Eventually, histology of the colon revealed a null type anaplastic large cell lymphoma with a high proliferation fraction of greater than 90%.

BACKGROUND

This clinical case proved to be a diagnostic challenge as the para-neoplastic fever was assumed to be part of a colonic inflammatory condition and postoperative anastomotic leak, rather than a malignant process. Only histology revealed the final diagnosis. In addition, while primary colorectal lymphoma is a rare disease in itself, the location of sigmoid colon is very rare. The most frequently involved regions of colorectal lymphoma are caecum, ascending colon and rectum.

CASE PRESENTATION

A 52-year-old Afro-Caribbean female was admitted with a 2-week history of left iliac pain with associated dysuria and weight loss of two stones over 4 months. Her medical history included a hysterectomy over 20 years ago. Family history included lung cancer in her mother.

On admission she was haemodynamically stable and non-feverish. Examination revealed tenderness in the lower abdomen with minimal guarding in the left iliac fossa.

INVESTIGATIONS

Inflammatory markers were raised with a white cell count of 21.8 and a C reactive protein of 97. Blood cultures were negative. An abdominal/pelvis CT scan showed a thickened sigmoid colon lying adjacent to the left bladder wall. There was inflammatory change within the left pelvic wall suggestive of sigmoid diverticulitis, but it was impossible to exclude neoplastic causes (figure 1).

TREATMENT

She was initially treated as acute sigmoid diverticulitis with broad-spectrum intravenous antibiotics and intravenous fluids.

Eleven days after admission, with persisting pain, fever and a further increase in inflammatory markers, a decision was made for explorative laparotomy. This identified a sigmoid mass adherent to the bladder and left ovary. An anterior resection, partial cystectomy and a defunctioning loop-ileostomy were performed.

Postoperatively the fever still persisted and therefore intravenous antibiotics continued to be given. A repeat abdominal/pelvis CT scan and contrast enema identified no anastomotic leak. A CT pulmonary angiography showed no pulmonary embolus, but a 2 cm right upper lobe mass with small volume right hilar lymphadenopathy.

Histology was still pending for the resected mass. As the patient appeared to be deteriorating, with no clear cause, a medical opinion was sought. It was suggested to investigate for fever of unknown origin. Investigations including an autoimmune screen, Mantoux test, HIV test and other viral serology were all negative. A blood film showed toxic granulation and left shift. The patient's lactate dehydrogenase (LDH) was raised at 334. A white cell scan showed no gross source of increased activity.

Final histology provided the answer to this challenging clinical case.

OUTCOME AND FOLLOW-UP

Histology revealed a null type anaplastic large cell lymphoma with a high proliferation fraction. The patient was further managed by the haematology team for aggressive chemotherapy with curative intent.

She is recovering from her treatment and consideration is now being undertaken for an autologous stem cell transplant to improve the chances of long-term remission/cure which is anticipated to be in the region of 40–50%.

Figure 1 An image from the CT scan showing the thickened sigmoid mass lying adherent to the left bladder wall.

DISCUSSION

The incidence of primary colorectal lymphomas is rare, comprising 10–20% of gastrointestinal lymphomas – the majority being mucosa-associated lymphoid tissue lymphoma – and only 0.2–0.6% of large bowel malignancies.^{1 2} Studies have identified the most common disease location to be the caecum (60%), followed by right-colon (27%) and the sigmoid colon (13%).³ It is reported that there is a male predominance, with a maximal incidence in the 50–70-year age group.^{1 4} There is a reported association with inflammatory bowel disease, although a direct causal link has yet to be established.⁵

Learning points

- ▶ Have a broad differential diagnosis, even with seemingly straightforward clinical presentation.
- ▶ Remember that postoperative fever may be due to malignancy rather than infection.

Competing interests None.

Patient consent Obtained.

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