OMENTAL INFARCTION FOLLOWING LAPAROSCOPIC COLORECTAL RESECTION
– JUST A MINOR COMPLICATION?


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AIMS

Omental infarction may occur after open or laparoscopic colorectal resection and causes significant morbidity, delay in postoperative progress and increase in length of stay. However, it is often overlooked both clinically and in the published literature. By case presentation and discussion of appropriate management, we aim to address this.

CASE 1

A 53 year old man with a 17-year history of ulcerative colitis presented with large bowel obstruction. CT abdomen and pelvis demonstrated a mass in the transverse colon as the cause, which was later shown to be a giant inflammatory polyep on endoscopy. In view of a background of pancolitis, he underwent emergency laparoscopic subtotal colectomy. An infection of the abdominal extraction site was diagnosed on day 5 which was treated with antibiotics and he was subsequently discharged home on the eleventh postoperative day with oral antibiotics.

One month later, he presented with malaise, rigors, and a persistent purulent discharge from the abdominal wound, which was opened to allow drainage. A CT abdomen and pelvis confirmed a collection in the suprapubic subcutaneous fat, without extension into the pelvis. However, an enlarged omentum was also shown to be abnormal, demonstrating areas of discrete fluid foci and local fat stranding, in keeping with a diagnosis of omental infarction (Figure 1). Supportive management was employed and intravenous antibiotics were prescribed for seven days. He was discharged on day eleven, with serial outpatient assessments planned. An interval CT at one month demonstrated improved appearances of both the omental infarction and the site of the former subcutaneous sepsis. Five months later, he underwent laparoscopic ileoanal pouch formation to restore intestinal continuity. At surgery, only stellate adhesions were visible where the omentum once lay.

DISCUSSION

Omental infarction may occur as a primary congenital abnormality or secondary phenomenon [1]. Secondary infarction may affect a normal omentum tethered to a pathological mass or to adhesions of previous surgery but can also occur without torsion, and has been associated with obesity, strenuous activity, congestive cardiac failure, trauma and surgery. When surgery is the cause, the infarct results more commonly from venous thrombosis of the omental veins, rather than direct division of omental arteries [2]. Published reports of postoperative omental infarction are limited, but the complication has been described after gastric [3] and colorectal [4,5] resection, using both open and laparoscopic approaches.

The diagnosis may be made on early CT imaging, but the evolving ischaemia and infarction are more often detected during a protracted postoperative recovery, or following readmission. The diagnosis is occasionally made incidentally during routine surveillance imaging following cancer resection [5]. However, infarcted omentum may have similar appearances on CT to omental malignant deposits. A temporal relationship in the history between surgery and demonstration of an early omental abnormality usually points to the diagnosis of infarction rather than neoplasia, although rarely PET CT has been used to distinguish between the two [5]. Conservative measures may be employed in the management of omental infarction and the majority of cases will demonstrate slow resorption, although a small number may require percutaneous drainage if an abscess develops within infarcted fat.

CONCLUSION

The seemingly minor complication of omental infarction following colorectal resection can significantly affect postoperative recovery, hospital stay and need for readmission.

KEY STATEMENT

Omental infarction should be considered in patients with a protracted postoperative course who fail to progress following colorectal resection. An awareness of the complication and its management will aid early diagnosis and commencement of supportive treatment, avoid unnecessary invasive intervention and prevent later readmission.

REFERENCES