



CORESS A CONFIDENTIAL REPORTING SYSTEM FOR SURGERY

Case Report:

A middle aged, previously fit man attended an open access rectal bleeding clinic with a 4-week history of fresh rectal bleeding on defaecation. He had no other symptoms and no significant previous medical history. Flexible sigmoidoscopy revealed a 2cm diameter, ulcerated tumour described as being 9cm from the anal verge. Biopsies confirmed invasive adenocarcinoma. A CT scan of abdomen and chest was normal. An MRI of the pelvis revealed extension into the mesorectum and the presence of a few small nodes.

The patient received neo-adjuvant chemo-radiotherapy consisting of 5 fluorouracil and a total dose of radiation amounting to 45 Gy over six weeks. He re-attended the surgical clinic two weeks after completion of these treatments. He was asymptomatic. He did not undergo further sigmoidoscopy. He was consented for anterior resection and possible defunctioning loop ileostomy. He was taken to theatre two weeks' later. Laparotomy was performed and no evidence of tumour could be found. Rectal mobilization was carried and no palpable tumour could be felt. On-table rigid sigmoidoscopy was carried out and minimal scarring was seen at about 9cm from the anal verge. The patient underwent a routine anterior resection with mesorectal excision. The anastomosis was fashioned with an EEA 31 gun. It was leak-tested and found to be satisfactory. The specimen was opened in theatre and no evidence of tumour could be found. The patient had a completely unremarkable postoperative recovery and was discharged 7 days later.

The patient was discussed at the next colorectal MDT. No evidence of tumour was found within the specimen.

The patient was informed of these findings when he attended the Outpatient Department. He was informed that this was not an uncommon occurrence in patients who had undergone neo-adjuvant radiotherapy. He was advised, therefore, that this was a good result, that no further adjuvant therapy was required. Six weeks later the patient re-attended for review. He was asymptomatic. Examination revealed a supple anastomosis through which the sigmoidoscope could be passed easily. The anastomosis was measured, approximately 7cm from the anal verge. There was palpable thickening in the rectum at about 5 or 6cm from the anal verge. Flexible sigmoidoscopy was carried out and multiple biopsies were taken from around the anastomosis and the rectum immediately distal to the anastomosis. These revealed severe dysplasia and in one biopsy a focus of invasive adenocarcinoma was identified. The patient was informed of these findings and advised that whilst a further sphincter-saving resection might be possible the advice was that he should undergo a rectal excision. A second opinion was taken which confirmed this advice. The patient subsequently underwent an abdomino-perineal excision of rectum at which time the loop ileostomy was closed and a divided left iliac colostomy fashioned.

At the next MDT histology of the resected specimen confirmed the presence of a rectal tumour. This was classified as PT1 N0 M0. The patient's colostomy functioned the day after surgery and he was commenced on a light diet. Four days after surgery he developed abdominal distension and at 7 days it was clear that he had intestinal obstruction. He was managed conservatively but on the 10th day after surgery he was found to have small bowel content leaking through his perineal wound. He was taken back to theatre where it

was found that closure of loop ileostomy (done with a GIA80 side-to-side anastomosis) had prolapsed into the pelvis. The pelvic peritoneum had not been closed at the time of rectal excision. It was deemed too difficult as a consequence of previous radiotherapy. It was assumed that the site of closure of the loop ileostomy had become fixed deep in the pelvis causing obstruction and had then subsequently perforated. The patient had the site of previous closure excised and a further defunctioning loop ileostomy was fashioned. The patient has since been discharged and is awaiting closure of this loop ileostomy.

Observations:

The comments in italics are from ACPGBI

1. In view of the fact that 10-15% of rectal tumours will respond to neo-adjuvant radiotherapy such that there is then no macroscopic evidence of disease, would it be appropriate for all these tumours to be tattooed prior to receiving neo-adjuvant therapy.

Comments:

This is good practice but the important thing is for the operating surgeon himself to check the position of the tumour in relation to the anal verge by digital examination and rigid sigmoidoscopy prior to any treatment.

2. The operating surgeon at the time of the anterior resection resected the site that he deemed to be a good 2cm below the site at which the tumour had been identified.

Comments:

This is an error because it is guesswork. Measurements need to be accurate. Furthermore, the anastomosis should have been lower than 7 cm, implying an inadequate TME distally. Low anterior resections should leave an anastomosis no greater than 5cm from the anal verge, which can be measured intraoperatively.

3. Did the surgeon miss the tumour? Did this occur because the flexible sigmoidoscopy's measurement of 9cm from the anal verge was incorrect, the tumour, in fact, was lower, or did the surgeon miscalculate the amount of rectum taken at the first procedure? Would it be appropriate for all these patients to have accurate measurements of tumour distance from anal verge by rigid sigmoidoscopy performed immediately prior to theatre?

Comments:

Flexible sigmoidoscopy is often carried out by physicians and the distance from the anal verge is often overestimated, so it is absolutely essential for position of the lower margin of the tumour to be checked by the operating surgeon by digital examination (this would have been readily palpable if it was truly at 9cm or below) and rigid sigmoidoscopy at initial outpatient presentation. That's the real message in this case.

CORESS REPORTING FORM

A Confidential Reporting Form is given on page 9. This form can also be downloaded from the Association's website at: www.asgbi.org.uk Please use this Reporting Form to submit Case Studies to the FREEPOST address given on the form.