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Surgical Research

Jejunal Diverticulitis in a Diabetic Patient: A Diagnostic Dilemma

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ABSTRACT

A 63-year-old female presented with a seven day history of generalised abdominal cramp associated with vomiting and diarrhea. On abdominal examination there was no focal or generalised peritonism. On admission her white cell count was 16 and CRP was 8. Patient became hypotensive on admission and was transferred to Intensive care unit for vasopressor support. The follow-up assessment revealed patient's abdominal pain to be improving with mild tenderness on right upper quadrant. Also, patient's inflammatory marker deteriorated to 382. The decision was taken for diagnostic laparoscopy which showed four quadrant pus with closed bowel perforation at the site of jejunal diverticulitis on the mesenteric border. A bowel resection was not performed given the closed defect. Patient was given diligent washout. Recovery was uneventful, and patient was discharged home only to return three days later with sepsis requiring urgent laparotomy and bowel resection which was further complications which led to Intensive care unit admission and wound infection.

Keywords

Diabetes, Jejunal diverticulosis, Surgery.

Introduction

Diverticulosis is a blind pouch arising from a weakened portion of a wall [1]. Although jejunal diverticulosis is well mentioned in world literature its incidence rate is close to 0.5% [2]. Jejunal diverticulosis can remain asymptomatic but they have 10-30% chance of causing complications such as chronic abdominal pain, malabsorption, hemorrhage, diverticulitis, abscess formation and even bowel perforation [3].

Case presentation

63 years old diabetic female presented with 7 days history of generalised abdominal pain, diarrhoea and vomiting. She did not have any other systemic feature of unwellness. On examination her abdomen was soft with no focal or generalised peritonitis. Her blood results showed a raised white cell count of 16 and mildly elevated CRP of 8 whereas normal level is below 5. She was becoming hypotensive in the emergency department showing signs of sepsis of unknown origin. She was admitted in the ICU under the general surgery team. Patient required vasopressor support at this stage. A CT scan revealed a jejunal diverticulosis without any perforation. Patients CRP level increased to 382 after 14 hours despite antibiotic management. After discussion with the patient it was decided to undertake a diagnostic laparoscopy. Decision was taken in order to rule out an abdominal source of infection after 24 hours of Intravenous antibiotics and vasopressor support. During diagnostic laparoscopy it was found that there was pus in all four quadrants of the abdomen along with a healed area of perforation noted in the proximal jejunum at the mesenteric border. The rest of the bowel loop was investigated for any other defect and none was found. Since the perforated site was already healed up and did not exhibit any signs of gap, it was left as it was and a decision was made against performing a bowel resection.

After a diligent washout a drain was kept in and the abdomen was closed with staples. Then the patient was taken back to intensive care unit. She improved significantly and was transferred to the ward. She was discharged to home 5 days after surgery when the drain was taken out and she was tolerating normal diet. At this time, she was mobilizing well and had normal bowel bladder function. After discussion with the patient she was sent home with the note of all the relevant red flags. Unfortunately, she came back to the emergency 3 days later with peritonitic abdomen and was transferred to tertiary care hospital for further management. Here

the patient underwent laparotomy which exposed perforated jejunal diverticula 20cm proximal from Duodeno-jejunal flexure. 50cm of proximal jejunum was resected and primary anastomosis was made. A drain was kept in situ. Patient was maintained inpatient with intravenous antibiotic for 8 days along with total parenteral nutrition (TPN) administration to maintain nutrition. Staples were removed on day 10. There was a 2cm wound dehiscence at umbilicus with early infection requiring regular dressing. At the time of writing this case report the patient has been discharged from the wound clinic and has been well throughout.

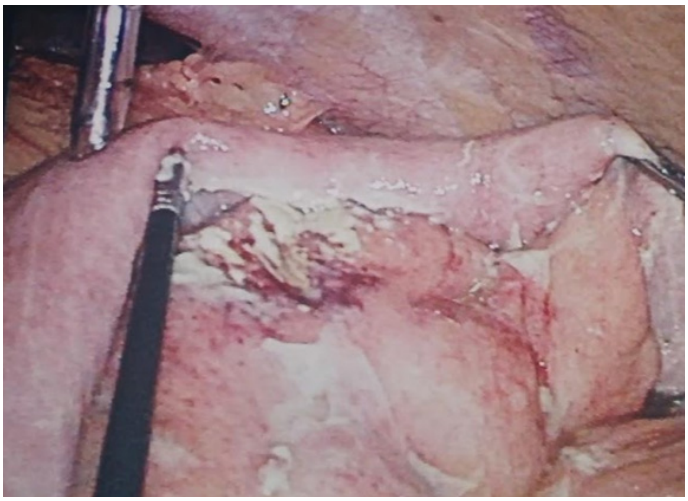

Figure 1: Healed perforation on the proximal jejunum during diagnostic laparoscopy.

Learning Points

- Regular monitoring of deteriorating patients.
- Using clinical judgement, blood results and imaging together to arrive at a holistic management decision.
- Diabetic patients may not mount usual signs of sepsis due to immunosuppression.

Consent

Written informed consent was obtained from the patient for publication of this case report and any accompanying images.

Patients perspective

"I think I started having a funny tummy about years ago but put it down to tummy wogs going around. Then we went away for the weekend and I was really feeling bad with diarrhea and vomiting which then cleared up. A week later started up again on the Friday but stopped again then started on the Monday night. I woke my husband up at about 1am and said he had to take me to the hospital as was cramping and vomiting with horrific pains in my stomach. Went through emergency at Armadale and was admitted with an abscess on my Jejunal.

At the end of the week I was deemed well and discharged from hospital.
On the Saturday I was vomiting and had the horrific pains again so went straight back to Armadale and after having CAT scans which showed up everything was worse than before I was transferred to RPH.
You have all the info on that

It is really strange as I feel I have been ill for several years now but always put it down to bugs going around. All I can say is thank god I went to hospital when I did as another day and I wouldn't be here to tell this tale."

References

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