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Patients and "cases" – a case of case report

Case reports, designed to describe and interpret an individual case, are often the first line of the evidence of the:

- Existence of unique disease or the condition,
- Important variations in the diseases and conditions,
- Of some unexpected events that may provide a new useful information.

Sometimes the "case" is so unique that the patient can be identified by the family, friends, employers against his/her will. For that reason, to enter the line of the evidence, authors of case reports must provide another evidence(s): evidence of the obedience of ethical standards, Helsinki declaration, evidence of the respect of the confidentiality and privacy, of the compliance with the HIPAA PHI rules and the local legislative norms, and particularly must submit properly signed informed consent. Only then the research can be approved and the paper published.

In the case report we present today, you will not find the informed consent because we do not violate ethical standards, including HIPAA PHI. HIPAA PHI refers to the Health Insurance Portability and Accountability Act of 1996 - Protected Health Information. It is all about the standards for privacy of individually identifiable health information – as all SJSM students know.

Rami Bayaa: **Gastric perforation in Crohn's disease in a young female: a case study**

Gastric perforation in Crohn's disease in a young female - a case study-

Rami Bayaa

Background:

Crohn's disease (CD) is an idiopathic, chronic inflammatory process that usually affects the ileum and the colon, but can occur anywhere along the digestive tract, from the mouth to the anus. Contiguous gastroduodenal involvement of the antrum, pylorus, and proximal duodenum are often met. Patients usually experience bouts of symptomatic relapse and remission. CD affects both genders equally and has bimodal incidence, occurring mostly in the 2nd to 3rd decade of life and, in smaller rate, during the 6th decade. The initial lesion, a focal inflammatory infiltrate around the crypts, is followed by ulceration of superficial mucosa. Later, inflammatory cells invade the mucosal layers and begin to organize into noncaseating granulomas, which extend through all layers of the intestinal wall and into the mesentery. Longitudinal and circumferential fissures and ulcers separate islands of mucosa, giving it a cobblestone-like appearance. This predisposes to the formation of fistulas. Signs and symptoms in this stage may include rectal bleeding, fever, weight loss, nausea, vomiting, and abdominal pain. CD can also present with extraintestinal manifestations such as skin, joints, or biliary tract symptoms.

There are only a few research articles that address the question of the incidence and prevalence of gastric perforation in CD, a few case-reports and no controlled, prospective treatment studies of this life-threatening condition.

Case report

Our case study follows the course of a 27-year-old Caucasian female with a past medical history of Crohn's disease who presented with acute, severe, diffuse non radiating abdominal pain, tenderness and rigidity. The pain was severe, aching, constant and progressively worsening. The patient stated that nothing ameliorated the pain, including Motrin given by her mother, while any movement aggravated it. The pain was not the usual pain she experiences from her Crohn's disease. She had restarted her prednisone prior due to increased disease activity. Associated symptoms included light-headedness and diaphoresis. There were no distinguishable features in the rest of her personal and family history.

In the emergency room, vital signs showed no hypotension or tachycardia. her abdomen was markedly tender, with the rebound tenderness. Bowel sounds were present, and there were no pulsating masses. A CT scan of the abdomen showed antral perforation with mild to moderate amount of free air and free fluid, suggesting the presence of generalized peritonitis secondary to gastric perforation. She underwent exploratory laparotomy and repair of gastric perforation with Graham patch. During the procedure, a 1.5cm anterior gastric wall antral perforation within 1cm of the pylorus, was found. Upon incision of the abdomen, there was air pushing the peritoneum upward. Opening of the peritoneum revealed a significant amount of contamination due to spillage of stomach content into the abdominal cavity. The ulcer was repaired using a 3-0 Vicryl suture transversely. An omental patch was secured anteriorly over the repair, and was secured to the stomach with another 3-0 Vicryl suture. There were no abnormalities seen in the small or large intestines. Prior to the closure of the incision, a 10 flat Jackson-Pratt drain was placed just anterior to the repair site and exited through a right lower quadrant incision and secured to the skin with a 2-0 nylon suture. The biopsy showed an ulcerated stomach tissue with acute and chronic inflammation. No granulomas, malignancy or intact mucosa were identified.

The patient was started on antibiotics and was placed NPO. During her recovery, a nasogastric tube was placed due to abdominal discomfort, and was removed post-operative day 5. Her Jackson-Pratt drain was removed post-operative day 6, and the patient was discharged that same day. Follow-up visit to the clinic a few weeks later demonstrated marked improvement of symptoms, with the only complaint being mild incisional pain.

Dicussion

Gastric perforation in CD has been considered to be an uncommon complication that usually occurs in association with another pathology, such as peptic ulcer disease. Small and large intestinal perforations are slightly more common. Free perforation is one of the indications of emergency surgery, but perforative CD is accompanied by more post-operative complications and poor anastamotic healing. Additionally, recurrent disease is more frequent in the short term (up to 5 years) follow-up than obstructive CD. In this case the question remains, was her gastric perforation a result of her recent steroid use, an active Crohn's flare-up, or a combination of both?

Conclusion

Since symptoms of gastric CD disease and peptic ulcer disease are very similar, they can be mistaken for one another and the patient may not receive the optimal therapy. Early recognition of gastric perforation in CD is also challenging, but opportune diagnosis and emergency surgery is life-saving in those cases.

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