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Discussion Of An Interesting Case Of Crohn's Disease

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ABSTRACT

An interesting case of Crohn's disease is discussed whose initial presentation and diagnosis was that of irritable bowel syndrome. The key points in this case were the change in symptoms with time, the presence of alarm symtoms such as loss of weight, bleeding per rectum and tenesmus.

The indication for further diagnostic investigations whether invasive or not is a lesson to learn.

Keywords: Crohn's disease, irritable bowel syndrome

CASE DISCUSSION

History: A 35-year-old Chinese housewife presented in May 1993 with the problem of a change in bowel habits over the last 2 months. This was characterised by the production of loose, occasionally watery with mucoid stools. There was no bleeding per rectum. The frequency was 2 to 3 times per day. There was no tenesmus, nocturnal diarrhoea nor was it related to menses. She had a mild weight loss. There was no family history of colorectal cancer. Clinical examination was essentially normal.

Question: What is the diagnosis and what investigations would you ask for?

Answer: The likely diagnosis is that of irritable bowel syndrome(IBS). She is young, there are no alarm symptoms such as bleeding, tenesmus or nocturnal symptoms except for a mild weight loss. She also has no family history of colorectal cancer. However, the recent onset of symptoms not referable to any recent life events would be a point to note. Generally, patients with IBS have a long history of symptoms. The most relevant initial investigations to order would be a full blood count, liver function test and stools for occult blood followed by a trial of therapy should the investigations prove negative.

History: This patient did have a colonoscopy even though all the other tests were normal or negative. It was at her insistence. The result was normal. She was reassured and started on librax.

She subsequently presented in July 1993 with a perianal abscess. Intraoperatively, this was found to be an interspincteric abscess with fistula communication to the anus. It was drained and treated with antibiotics. Recovery was uneventful. Biopsy results were non-specific and suggested mucosal prolapse syndrome. She was seen again in October 1994 with a recurrence of symptoms but this time, there was bleeding per rectum. She was treated as for IBS with haemorrhoids and problems resolved.

She was again seen in September 1995 for abdominal pain with loose stools associated with right iliac fossa tenderness and a weight loss of 2 kg. Ultrasound done showed some fluid in the pouch of Douglas, the ovaries were normal.

Question: What is your diagnosis, is it IBS or is it not.

Answer: Her symptoms have clearly changed. She has a history of perianal fistulas, bleeding per rectum and weight loss. An ultrasound of the pelvis excluded a gynaecological problem but it did reveal a large amount of fluid out of proportion to what was expected in the pouch of Douglas. It is unlikely that she has IBS and she should be further investigated.

Question: What will you do? 1)Rescope the patient; 2)Treat symptomatically without investigations or; 3)do not scope but do other investigations.

Answer: Choice 2 is clearly out as she is unlikely to have a diagnosis of IBS. The choice is between that of a repeat endoscopy or other imaging modalities like a CT scan of the abdomen or barium enema. We would favour an endoscopy as that is the most direct way with the possibility of taking biopsies at the same time. The colonoscopy here should include a look at the terminal ileum with a biopsy.

Question: What do you expect to find?

Answer: We do not expect to find a cancer here as the interval between the previous endoscopy and the planned one presently is too short. That is, it is unlikely that a cancer can develop denovo from the colon in a space of 2 years. Hence the recommended screening for colorectal cancer is usually 5 yearly. We would expect to find something inflammatory . This is made more likely in view of her age, bleeding per rectum and history of perianal fistula.

History: A repeat colonoscopy was done and it revealed abnormal mucosa with ulcerations and psuedopolyps with an impassable stricture at the mid transverse colon (Fig 1). Biopsies taken revealed transmural inflammation with an abundance of lymphocytes, features that could be consistent with Crohn's disease.

A subsequent barium enema revealed a stricture with deep ulcers and rose torn ulcers at the area of the transverse colon (Fig 2). A small bowel enema revealed normal proximal jujenum and ileum. The distal ileum revealed thickened folds, thickened walls and deep rose torn ulcerations.

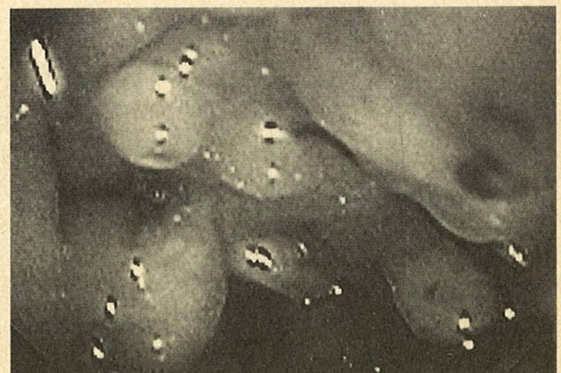

Fig 1 - Endoscopic picture of stricture and Pseudopolyps at the transverse colon.

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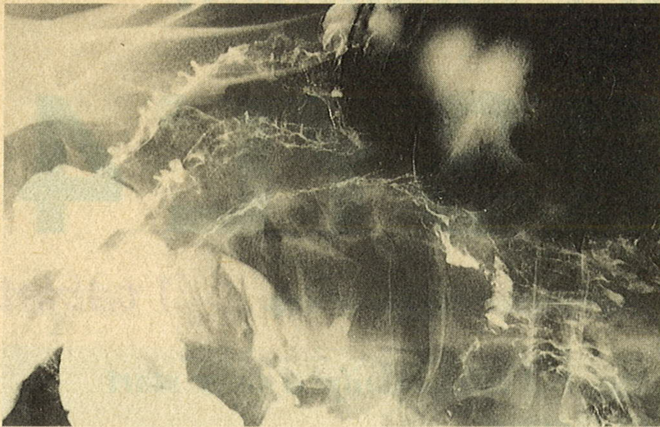

Fig 2 - Barium enema showing stricture with deep ulceration.

Question: Why were the barium enema and small bowel enema necessary after a colonoscopy was done?

Answer: Contrast studies should be done to see what is proximal to the stricture, ie the area the colonoscope cannot reach. In this case, we wanted to see the terminal ileum and caecum as this is often involved in Crohn's disease and tuberculosis of the intestines. A small bowel enema is always useful in this condition as it helps the clinician asses the extent of involvement.

Question: How confident are we that this patient has Crohn's disease? Is there a differential diagnosis?

Answer: There is nothing pathogonomic of Crohn's disease and the diagnosis is based on symptoms, signs and investigations that are consistent with this diagnosis. The differential diagnosis that often crops up in our region is that of tuberculosis which can give very similar features. There are no obvious differentiating features although tuberculosis is more ulcerative and fibrotic and usually not as widespread in its intestinal involvement as Crohn's disease. The endoscopist must never forget to take a biopsy for TB culture. When in doubt, treatment should be started as for both conditions till the culture results return. The other differential diagnosis is that of lymphoma, though this is rare. In this patient, the mucosal features such as psuedopolyps, strictures, deep ulcerations on contrast studies together with involvement of the distal ileum favour Crohn's disease. Moreover, patients with tuberculosis usually have more systemic complaints such as fever etc as compared to patients with Crohn's disease who are relatively well. This was well illustrated in this case.

Table I - Manning's Criteria (Br Med J 1978; 2: 653-4)

- loose stools at onset of pain
- more frequent stools at onset of pain
- pain eased after defecation
- visible distension
- mucous per rectum
- feeling of incomplete emptying

Table II - Rome's Criteria (Gastroenterology International 1990; 4: 159-72)

Continuous or recurrent symptoms for at least 3 months of:
- abdominal pain, relieved by defecation, or associated with a change in frequency or consistency of stool
- an irregular (varying) pattern of defecation at least 25% of the time (2 or more of):
* altered stool frequency
* altered stool form (hard or loose) watery stool
* altered stool passage (straining or urgency, feeling of incomplete evacuation)
* passage of mucous
* bloating or feeling of abdominal distension

History: This patient was treated as for TB and Crohn's disease with rifampicin, isoniazid, ethambutol mesalazine and prednisolone. The cultures were subsequently negative for acid fast bacilli and she was left on prednisolone and mesalazine. Subsequent investigations including a small bowel enema did not reveal involvement in any other area of the intestines.

Question: Does the patient need a rescope?

Answer: It would be logical to rescope this patient in about a year's time as the strictures and inflammation should respond to treatment.

History: A rescope was done in 6 months and it revealed that the stricture had indeed resolved, leaving only patchy areas of mucosal involvement.

Question: What is the long term prognosis of this patient?

Answer: The prognosis is guarded although the disease is limited to the colon. The prognosis also depends on the activity and course of the disease. Patients with repeated relapses have a worse prognosis than patients with extensive but quiescent disease. The aminosalicylates have been found to be useful in prolonging remission in this condition. She will need long term follow-up.

DISCUSSION

The diagnosis of IBS is a definite one and not one based on exclusion. It is a clinical diagnosis based on symptoms such as that of Manning's Criteria (Table I) or Rome's Criteria (Table II). There must be absence of warning or alarm symptoms such as weight loss, bleeding per rectum or nocturnal symptoms. However, there is a lot of overlap in symptoms between functional and organic disease. Investigations should be tailored to the patient, with minimal non-invasive investigations for those with a very low probability of having organic disease. The diagnosis should be revised should symptoms change such as illustrated in this case. It is also perhaps important that the same doctor be seeing the patient. This was not the case here, where the patient saw a total of 4 different doctors in this 3-year period.

The management of Crohn's disease in this patient is quite straightforward once the diagnosis has been established. The challenge as mentioned, for all gastroenterologists, is to differentiate this condition from tuberculosis. The finding of acid fast bacilli or a positive culture would help greatly though this is often not the case. Most gastroenterologists would resort to treating both conditions and stop tuberculous treatment after review of culture results and progress of patients.

This case also illustrates the excellent response Crohn's disease has to steroids and aminosalicylates. It reinforces the traditional teaching that indications for surgery in this condition is always conservative. This principle is similar in intestinal tuberculosis.

Further Reading

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