# Bowel habit change in a woman in her late fifties

Commentary by **ANNA FOLEY** MB BS and **PETER GIBSON** MD, FRACP

**The woman's mother had colorectal cancer at the same age, so this diagnosis should be considered even though there has been no progression of symptoms or development of alarm features and recent colonoscopies have been normal.**

## Case scenario

Jean is a 57-year-old woman who is still concerned about a change in her bowel habit despite having had a couple of normal colonoscopies. She has been experiencing diarrhoea in the mornings for about the past five years. She wakes with the urge to defaecate, and subsequently has to open her bowels three or four further times before she leaves for work. The rest of the day is normal, although sometimes she needs to open her bowels a couple more times during the day. The stools are soft but formed, and there has been no blood or mucus and no pain. Most of her life she has had a 'normal' pattern of once daily defaecation after breakfast.

The reason that she is especially anxious is that the same change in bowel habit had developed in her mother at a similar age and her mother had subsequently died from metastatic bowel cancer.

What could be the reason for this change of bowel function?

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## Commentary

Jean's major concern is whether she has colorectal cancer. Having had a change in her bowel habit for five years without any progression of symptoms or development of alarm features such as rectal bleeding or loss of weight, and also a couple of normal colonoscopies, it is unlikely such a diagnosis is the cause of her symptoms. However, because of her concern, the possibility must not be simply dismissed. She is at greater-than-average risk because her mother had colorectal cancer at the same age.

The results of her previous colonoscopies must be reviewed to address the questions listed below.

- Why and when were the colonoscopies performed, especially in relation to the onset of the current symptoms?
- Were they technically adequate in terms of the quality of the bowel preparation and the completeness of the procedure?
- Was the terminal ileum examined and biopsies taken (if diarrhoea was present at the time)?
- Were multiple biopsies taken of both the proximal and the distal colon, and of the rectum if diarrhoea was present at the time (examining for evidence of microscopic colitis)?

If the colonoscopies were technically adequate and biopsies were taken when these symptoms were present, then the patient can be strongly reassured that she does not have colorectal cancer. If, however, the colonoscopies were technically inadequate or were performed before the symptoms had developed, or biopsies were not taken, another colonoscopy should be performed.

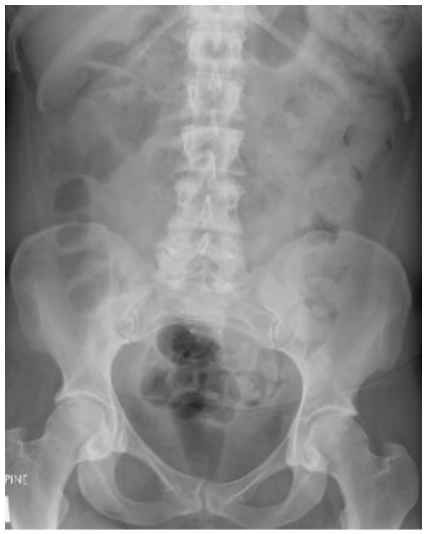

Figure. Plain abdominal x-ray (not of the patient in the case). Although this x-ray was officially reported as 'within normal limits', it shows a large amount of content in the descending and sigmoid colon and some in the transverse colon. In the clinical setting of a patient opening the bowel several times per day, this content suggests constipation might underlie the symptoms. A purge with, for example, a picosulphate-based laxative is indicated, together with the regular taking of an osmotic laxative such as a polyethylene glycol-based preparation.

Possible causes of Jean's symptoms are discussed below.

### Functional gastrointestinal disorder

Functional gastrointestinal disorder (FGID) would be considered the most likely diagnosis, given its frequency in the community and the lack of alarm features. The answers to two key questions may have a major impact on the therapeutic approach.

### What is the nature of the functional disturbance?

Jean may have either 'functional diarrhoea' or constipation with incomplete emptying. Soft stools are associated with slow transit constipation in children and probably also in adults, so the lack of pellety stools does not rule out the possibility of constipation. Questions about her defaecation practice may shed light on some anorectal dysfunction. Does she have tenesmus, or does she fully defaecate? Does she need digital assistance to defaecate? Does she suffer incontinence?

The issue of constipation can most effectively be resolved, however, by a plain abdominal x-ray, where a loaded colon is inconsistent with true diarrhoea (Figure). It is important that you view the x-ray yourself as radiologists usually report according to average findings, and not according to the specific clinical scenario.

### Why has a functional disturbance become evident for the first time in her early 50s?

Although functional disturbance becoming evident for the first time in a woman in her early 50s is not unusual, understanding the triggers may offer a rational explanation and sometimes a therapeutic target.

Has there been a change in Jean's diet, such as eating sugarless chewing gum (which contains sorbitol), less fibre, more fruit or what she perceives as a 'healthier diet', or has she been following a weight reduction plan? Bowel habits are responsive to what is eaten. Did the change of bowel habits start with a bout of gastroenteritis or traveller's diarrhoea, because this is a clue that it might be post-infectious irritable bowel syndrome. Has she been taking any over-the-counter medications (such as NSAIDs) or complementary medicines? Has her alcohol intake increased, because this is a potential contributing factor?

An assessment of her psychological status, in terms of anxiety and depression, will also be important in planning subsequent management. For example, is there a clear connection of symptoms to stressful situations (such as work)? Did the onset of symptoms coincide with menopause? Although such symptoms are not usually hormone-related, menopause is a time of life when a woman's psychology and behaviour and her interests in, for example, her diet may change.

### Coeliac disease

Although in Jean's case there are few features other than diarrhoea suggestive of coeliac disease, this condition affects at least one in 100 Australians and often presents with few symptoms.

Coeliac serology (with a total serum IgA) would now be considered mandatory in this setting. Negative serology without IgA deficiency would be sufficient to exclude coeliac disease.

### Inflammatory bowel disease

In Jean's case, inflammatory bowel disease (IBD) would seem a less likely diagnosis. Colitis is unlikely if the colonoscopies were performed when she had the current symptoms, but ileitis is a possibility (hence, the importance of ileal examination at colonoscopy).

It should be ascertained whether the patient has suffered from fatigue or extraintestinal manifestations (mouth ulcers, joint pains, eye problems and skin rashes). A full blood examination and serum C-reactive protein (and/or erythrocyte sedimentation rate) should be checked. Normal findings, although not supporting the diagnosis, do not absolutely rule out IBD, but abnormalities would dictate additional testing (such as colonoscopy or small bowel imaging).

### Microscopic colitis

Microscopic colitis is a unique form of chronic colitis that affects older people, presents with waxing and waning diarrhoea, and is characterised by normal endoscopic appearance but specific abnormalities on colonic biopsies. It is not generally classified as 'IBD'. The condition will not be detected if biopsies of the colon are not taken.

Although generally of unknown cause, microscopic colitis can be associated with some drugs, especially NSAIDs.

### Other conditions

Hyperthyroidism and other malabsorptive conditions are possible but unlikely causes of Jean's symptoms. These can be addressed by checking the serum thyroid stimulating hormone (TSH) level and by screening for deficiencies of folate, vitamin $B_{12}$ and iron.

Infection (such as giardiasis) is highly unlikely in this scenario, but microscopic examination of freshly-passed stool for white cells (to detect colonic inflammation), fat droplets (to detect fat malabsorption) and ova and parasites may be worthwhile.

### Steps to take

In summary, taking the following steps should ascertain what is going on in this woman.

1. Clarify historical details, especially regarding potential triggers and toileting habits.
2. Ascertain the nature, timing and quality of the colonoscopies.
3. Evaluate her psychological status.
4. Perform a plain abdominal x-ray – a full colon in a person with frequent bowel actions indicates constipation.
5. Perform simple blood examination, including coeliac screening, haematology, C-reactive protein and TSH levels, iron studies, and folate and vitamin $B_{12}$ levels.
6. Perform faecal microscopy.

The therapeutic approach to be taken is then likely to be clear. MT

COMPETING INTERESTS: None.