

61. Ischemic colitis and thrombophilia

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Q: "I am a 24 year old female and developed a self-limiting bout of ischemic colitis. I was not on birth control pill and have no history of blood clots. Work-up showed that I am heterozygous for factor V Leiden. I am now asymptomatic and repeat colonoscopy has been normal. Should I be on blood thinners?"

A: From the information given it sounds as if the above patient may have had "transient ischemic colitis" (see explanation below). Since this is usually a benign disorder with good outcome, I would probably not treat her with blood thinners, no matter whether she is heterozygous for factor V Leiden or not. However, it is also fair to say, that no large studies on this disorder exist. Most data in the medical literature are from clinical observations in the form of case reports and case series. These are, unfortunately, the worst and least useful data one can have for clinical decision making.

Ischemic colitis is a disorder in which part of the colon does not get enough blood and oxygen (ischemia = Latin for impaired oxygen supply). Parts of the colon therefore die.

- a. If one of the larger arteries that supply the colon with blood (= mesenteric arteries or their branches) is completely occluded, serious trouble results. Medical terms for these conditions are "mesenteric ischemia" or "superior mesenteric artery thrombosis" or "inferior mesenteric artery thrombosis". In this emergency, patients typically need surgery and partial colon resection for "dead bowel". This type of obstruction is most commonly caused by:
 - o arteriosclerosis (= hardening of the arteries in patients with other arterial risk factors (diabetes, smoking, high blood pressure, high cholesterol)
 - o blood clots that travel from the heart (= emboli), for example in patients with irregular heart beat (= atrial fibrillation)
 - o blood clots that form in the large intestinal arteries in patients with clotting abnormalities (= thrombophilias)

After surgical bowel resection the patients are usually treated with either aspirin (for arteriosclerosis) or warfarin (for atrial fibrillation and blood clots).

- b. If only small or tiny blood vessels in the colon wall are occluded or blood flow in them is impaired, mild patchy damage results. The body is often able to heal these lesions, no surgery is needed, and the patient recovers spontaneously. This condition is called "transient ischemic colitis"¹. It is an uncommon disorder, which typically occurs in younger, otherwise "healthy" patients. Women appear to be more often affected than men (3:1). Symptoms typically include colicky (=cramping) abdominal pain, vomiting, and rectal bleeding. Symptoms often resolve in 1-2 weeks. A diagnosis is typically made by colonoscopy with colon biopsy. It is overall poorly understood why some people get this disorder. Predisposing factors may be thrombophilias (there is one case report of a patient with heterozygous factor V Leiden²), cocaine abuse, diabetes, sickle cell disease, dehydration, drugs that lead to spasm of blood vessels (including herbal products³, such as bitter orange, ma huang, and guarana) or oral contraceptives¹. There has even been a report of 2 cases of transient ischemic colitis associated with air travel⁴.

References:

1. "Ischemic colitis". Best Practice & Research Clinical Gastroenterology 2002;16:51-61
2. "Ischemic colitis associated with factor V Leiden". Annals of Internal Medicine 2000;132:595-6
3. "Ischemic colitis associated with herbal product use in a young woman". JABFP 2002;15:309-11
4. "Transient ischaemic colitis following an aeroplane flight: two case reports and review of the literature". Gut 2002;51:746-47.