An Interesting Case of Spontaneous Intramural Bowel Haematoma in a Young Man Taking Anabolic Steroids

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An Interesting Case of Spontaneous Intramural Bowel Haematoma in a Young Man Taking Anabolic Steroids

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Abstract

Introduction: An interesting case of spontaneous intramural bowel haematoma secondary to anabolic steroid use.

Report: A 24-year-old man using anabolic steroids for building muscle bulk underwent emergency surgery to remove a large portion of his bowel for extensive intramural bleeding. Discussion: The symptoms were attributed to anabolic steroids in the absence of anticoagulants, trauma or blood dyscrasias. He had been taking testosterone-based anabolic steroids prior to onset of symptoms. We hypothesise use of anabolic steroids as a potential suspect for causing intramural bowel haematoma.

KEYWORDS: Bowel, Haematoma, Haemorrhage, Anti-coagulant, steroid, anabolic, testosterone
Introduction

A literature search on bowel intramural haematoma yields a few anecdotal case reports, the majority due to anticoagulant use or trauma. An estimated incidence of 1 in 2500 patients on anticoagulants has been reported with spontaneous small bowel intramural haematoma.1,2

Here we present an unusual case report of a spontaneous colonic intramural haematoma in the absence of trauma, blood dyscrasia or anticoagulants. We hypothesise that the mural haematoma was secondary to this steroid use.

Case

A 27 year old man presented with sudden-onset lower abdominal pain.

Past medical history: Splenectomy following a road traffic accident 10 years ago followed by deep vein thrombosis (DVT) post-operatively. Three months later, warfarin was stopped when he underwent large bowel resection and ileo-rectal anastomosis for mesenteric haematoma as a complication of his anticoagulant therapy.

During the current admission, an urgent CT scan of the abdomen and pelvis showed the distal bowel grossly distended up to the rectum with evidence of colonic mural haematoma and active mural haemorrhage (Figure 1).
The patient underwent endovascular arterial embolisation of several bleeding points in the bowel. (Figure 2).

Due to further deterioration he underwent emergency laparotomy the following day. Intra-operatively, he had a large haemoperitonuem with many litres of blood in the abdominal cavity and a large intramural haematoma in the rectum. The rectum was perforated and gangrenous; hence the previously formed ileorectal anastomosis and rectum had to be removed. Intra-operatively, the patient developed DIC and deteriorated so abdomen was packed with a view to return to theatre 48 hours later. He was transfused with 18 units of red blood cells, 4 units of fresh frozen plasma, 2 units of cryoprecipitate and 1 unit of platelets.

On return to theatre after 48 hours the patient underwent a washout, haemostasis of bleeding points and ileostomy formation.

12 days after surgery, he developed a DVT in the left external iliac vein and common femoral vein and, an IVC filter was inserted. His midline laparotomy wound dehisced and a large subserosal haematoma was found. After discussion with haematologists, it was agreed that he should not be given anticoagulants in view of his bleeding tendency.

Discussion

This is a rare case of active rectal and colonic mural haemorrhage which was not related to the most common aetiologies i.e. anticoagulant therapy, trauma or bleeding dyscrasia.
Splenectomy increases the risk of thrombosis so this may explain his high susceptibility to DVT. His first laparotomy 9 years ago for mesenteric haematoma was attributed to warfarin, which correlates with literature findings. His thrombophilia and vasculitis screen was negative.

Before his current admission he had been taking anabolic testosterone prohormone for which he had completed one cycle and had started the second cycle.

Prohormones taken by our patient were dihydrotestosterone based anabolic steroids with significant testosterone activity. These prohormones are produced in the methylated form for the ease of activation and absorption in the liver. Manufacturers recommend regular use of liver protective supplements whilst on these prohormones.\(^5\)

This particular brand had been taken off the market previously due to side-effects and is currently sold under a different trade name. Manufacturers have reported that these prohormones can “cause some additional stress on the liver,” but does not specify exactly what those stresses are.\(^5\)

Another reported side effect of these anabolic steroids is fluid accumulation.\(^5\) We hypothesise in this patient that these steroids were causing bowel oedema and intramural haematoma was secondary to the shearing of the intramural vessels.

The benefits and side effects of these anabolic steroids are available either from the manufacturer’s website or from bodybuilding website forums, focusing mainly on the positive aspects. The scientific background of these reported benefits and risks is questionable.
Use of steroids and supplements is becoming increasingly popular in the younger generation. An estimated 1 to 3 million US athletes are taking steroids. Our patient has stopped the drugs and has made a good recovery.

References:


4. SD Matrix by PharmaLabs
   a. www.sdmatrix.co.uk

Figures:

Figure 1 – Active haemorrhage into the bowel wall
Figure 2b - Post-embolisation with multiple coils