

Case Report

Severe rectal haemorrhage after treatment for faecal incontinence

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Bulking agent injected submucosally is an alternative effective treatment for faecal incontinence in elderly patients who fail conservative measures. Since most elderly patients are on antiplatelet therapy and are sometimes unaware of their medication, this can lead to serious complications.

INTRODUCTION

Faecal incontinence is a socially disabling condition. Injectable bulking biocompatible gels are an effective, simple, office procedure for patients with mild-to-moderate faecal incontinence without sphincter disruption. We present a case of severe bleeding after administration of a bulking agent, necessitating surgery.

CASE REPORT

A 76-year-old-lady with mild faecal incontinence had failed conservative measures with diet modification, fibre-supplements, constipating agents and pelvic floor exercises (Kegel exercises). She had no obvious sphincter defect on ultrasound. Various treatment options were discussed with the patient and given her symptoms; she was advised on injectable bulking agent treatment. During the consultation the patient and her husband were asked several times about her medications, especially if she was on any aspirin, clopidogrel, coumadin or any non-steroidal-anti-inflammatory drugs. Both denied that she was on these medications.

An informed consent was obtained explaining the procedure, risks, benefits and alternative treatments. The patient was placed in a left-lateral-decubitus position. The hyaluronic acid/dextranomer (SOLESTA[®] Salix Pharmaceuticals, Raleigh, NC, USA) was then injected in the standard fashion. Briefly, using an anoscope, 1 ml of the gel was injected 5 mm deep submucosally, 5 mm above the dentate line at the posterior, left-lateral, anterior and right-lateral sites. The needle was kept in place for 20 s to avoid gel extrusion. After the fourth site injection, she had heavy bleeding from the sites. Initial

attempts at suture ligation and packing in the office were successful, but she rebled. She was sent to the closest hospital via Emergency Medical Services. Prior to being sent to the hospital, the patient's husband remembered that she was indeed on aspirin 81 mg and clopidogrel 75 mg.

In the emergency room, her initial systolic blood pressure was in 90s, and she continued to have severe bleeding. She was resuscitated with fluids, and transfused with one pack of platelets. This improved her vitals, and they remained normal. Initial haemostasis was obtained by packing the anorectum with soft roll gauze soaked in epinephrine 1:1000 solution. Her initial haemoglobin was 10.3, which dropped to 6.8. She then started rebleeding and was taken emergently to the operating room. She was transfused with 3 units of packed RBCs and second unit of platelets. During examination under anaesthesia, we observed that the haematoma had caused ulceration of the mucosa, with bleeding from the mucosal edges at posterior and right-lateral sites. Haemostasis was obtained by cautery and approximation of mucosa with 2-0 polyglactin (Vicryl, Ethicon, USA) sutures. Good haemostasis was achieved. The anorectum was packed with haemostatic dressing Surgicel (Surgicel[®]). She remained hemodynamically stable during the case and was placed in the intensive care unit. She remained well and was discharged home on the third postoperative day.

DISCUSSION

Faecal incontinence can have a devastating impact on the patient's life and can lead to limitation in activities, depression and loss of independence. The estimated prevalence in the USA varies from 2 to 18% of the general population, but 50%

in nursing home residents [1]. Faecal incontinence is the second leading cause for admissions to nursing homes [2].

Treatment modalities for faecal incontinence vary from conservative-measures including diet modification, physical therapy to surgery. Conservative measures are generally tried first and include dietary modification; fibre-supplements to bulk up the stool and constipating agents. Loperamide, diphenoxylate and atropine, and codeine have been used in patients with diarrhoea and faecal incontinence. These simple measures can improve the patient's symptoms. Traditionally, sphincteroplasty has been the gold-standard surgery for patients with sphincter defects [3]. In the short term excellent results are seen in over half of the patients, but this decreases to 15–60% good long-term continence [4].

Various new modalities have been developed for the treatment of faecal incontinence with success. Different injectable materials have been tried. This modality includes local injection submucosally to augment the sphincter and provide a better seal. The advantage is that it is an outpatient procedure, associated with low morbidity and patient discomfort. Dextranomer in hyaluronic acid is the most extensively studied and the only widely used bulking agent in the USA. A randomized, double-blind, sham-controlled trial showed a >50% reduction in faecal incontinence episodes in 52% treated with dextranomer in hyaluronic acid [5]. This is an effective treatment in patients with mild-to-moderate faecal incontinence, with failure of conservative measures, but who are not ready for surgery yet. Morbidity is low and includes fever and proctalgia, with bleeding and abscesses as rare events [5, 6].

The CURE (Clopidogrel-in-Unstable-Angina-to-Prevent-Recurrent-Events) trial showed that combination of clopidogrel and aspirin was more effective than aspirin alone in reducing cardiovascular events in patients with coronary artery disease [7]. Although latter trials including MATCH (Management-of-Atherothrombosis-with-Clopidogrel-in-High-risk-patients-with-Recent-Transient-Ischemic-Attacks-or-Ischemic-Stroke) showed that the combination may be more harmful than beneficial, the physician office prescribing of clopidogrel–aspirin combination increased significantly from 0.5% in 2000 to 22.7% in 2007 in the USA [8]. Most patients are unaware of their medications. In our case, the patient and her husband were asked at different times during initial visit, and during this office visit and denied being on

these medications. Although, the needle used for the submucosal injection is a small gauge spinal size needle provided in the kit, as this case highlights, in the presence of antiplatelet therapy, significant bleeding can occur. We feel that the bleeding along with the presence of the gel in the submucosal layer can lead to a much bigger haematoma, and cause ulceration of the mucosa. This resulted in excessive bleeding from the mucosal edges, as we did not find any arterial bleeders. Patients receiving submucosal injection of bulking agent should be monitored in the office post-procedure to assess for immediate complications. Platelet transfusions and emergent assessment in the operating room are of essence.

Injection of bulking agent is a simple, effective, office-based procedure for the treatment of faecal incontinence. Faecal incontinence is commonly seen in the elderly, many of whom are on antiplatelet therapy. We feel that this case highlights the need to ensure that all patients on antiplatelet therapy are adequately educated on the risks of bleeding with these medications. In the case of severe bleeding after an office-based procedure, emergent transfer to a hospital facility, transfusions and assessment in the operating room is essential to obtain a good outcome.

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