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CASE REPORT

Laparoscopic Segmental Colectomy as Management of a Delayed Post Colonoscopic Polypectomy Bleeding: A Case Report in Yaoundé (Cameroon)—A Third World Country

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ABSTRACT

Colonic polypectomy reduces the subsequent rate of development of colonic cancers. However, serious complications can occur and postpolypectomy bleeding being the commonest. In most cases, postpolypectomy bleeding can be controlled endoscopically. We report a case of a 54 years old patient who present with a delayed postpolypectomy bleeding which could not be managed by endoscopic methods. We then performed a segmental colectomy by laparoscopy.

Keywords: Colonic polyp, Postpolypectomy bleeding, Laparoscopy.

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INTRODUCTION

With the improvement of equipment, a colonoscopic polypectomy is a procedure that can be performed safely, and it is becoming the standard for the treatment of polyps. However, various complications are associated with the procedure, and among them, the most common is hemorrhage accounting for 1 to 6% of polypectomies.[1-3] Postpolypectomy hemorrhage is divided into immediate bleeding occurring during surgery and delayed bleeding developing between a few hours and 2 weeks after surgery. The risk is related to the type and size of polyp, the technique of polypectomy, and the coagulation status of the patient.[4] In most cases, postpolypectomy bleeding can be controlled endoscopically.[5,6] We report a case of a 54 years old patient referred in our department for a delayed post-colonic polypectomy bleeding managed unsuccessfully by endoscopic methods, for who a laparoscopic segmental colectomy was performed.

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OBSERVATION

Mister NJ, a 54 years old patient, was referred to the visceral and laparoscopic unit of the National Social Insurance Fund Health Center of Yaoundé (Cameroon), a third health structure for the management of a noncontrolled delayed post-colonic polypectomy bleeding.

Two months ago, he noticed intermittent rectal bleeding without abdominal pain. He took metronidazole in automedication without any improvement. He then consulted a gastroenterologist who performed a total colonoscopy which revealed a sessile polyp at 50 cm of the anal margin (Fig. 1).

He then performed a hot biopsy and noticed and immediate bleeding (Fig. 2).

This immediate bleeding was managed successfully by toilet of cold saline, cautery and injection of epinephrine. The patient was observed during 24 hours and then discharge.

Six days later, he suddenly have a massive rectal bleeding with weakness and dizziness. The gastroenterologist performed a second colonoscopy which revealed an active bleeding alternating jet and seepage on the site of the polypectomy. He tried to perform cautery and epinephrine injection without success. Hemoclips, loops and band ligators were not available. The patient was then referred to our department.

At admission, the patient was conscious, complaining of abdominal pain and dizziness. At physical examination, he had a blood pressure of 110/60 mm Hg, a pulse of 110/min. No signs of peritonitis were found.

A full blood count revealed a hemoglobin rate at 9.3 gm/dl without leukocytosis. We decided to realize an explorative laparoscopy.

The patient was supine with legs bent with a vesical probe. We introduce the first 10 mm trocart supraumbilical by 'open-coelioscopy' and two others of 5 mm in right iliac fossa and left hypochondrium. The operative table was then tilted in a maximum Trendelenburg position with maximum right roll. The exploration of the peritoneal cavity revealed a serous hematoma at the top of sigmoid loop with a preperforative injury (Fig. 3).

We realized a wide resection of omentum separation with mobilization of splenic flexure. A 5 cm incision was subsequently made to the left iliac fossa and the sigmoid externalized. A segmental colectomy with 5 cm of margin around the lesion was performed, followed by a colo-colonic end-to-end anastomosis. We did not use a skirt because it was not available. The sigmoid was reintroduced into the peritoneal cavity (Fig. 4). We verified that the colon had not been twisted, we made a peritoneal toilet with saline.

We introduced a short antibioprophylaxy. The postoperative course was uneventful with recovery of liquid feed at the first postoperative day, with discharge at day 4. The patient no longer had to note rectorragies. Cytopathological analysis of the resected specimen (Fig. 5) showed a tubular villous adenoma with high-grade dysplasia. A monitoring schedule was introduced.

The cosmetic result was good (Fig. 6).

DISCUSSION

Colorectal carcinoma is one of the commonest cancers in the world. Most colorectal cancers are thought to arise from adenomatous polyps and its take an average of 10 years for a less than 1 cm polyp to transform into invasive colorectal carcinoma.[7,8] Colonoscopy offers a way of screening for polyps and its subsequent surveillance.

Colonic polypectomy by colonoscopy reduces colorectal cancer incidence by 76 to 90%.[9,10] Complications that develop after colonoscopic polypectomy are hemorrhage, perforation and postpolypectomy syndrome.[1] Delayed postpolypectomy bleeding occurs in approximatively 0.95 to 2% of all patient.[11] Delayed bleeding is difficult to predict and a massive hemorrhage may occur after discharge, in which fatal problems may develop.[1] In several studies, delayed bleeding after a colonoscopic polypectomy has been reported to occur preferentially after resection of large polyp

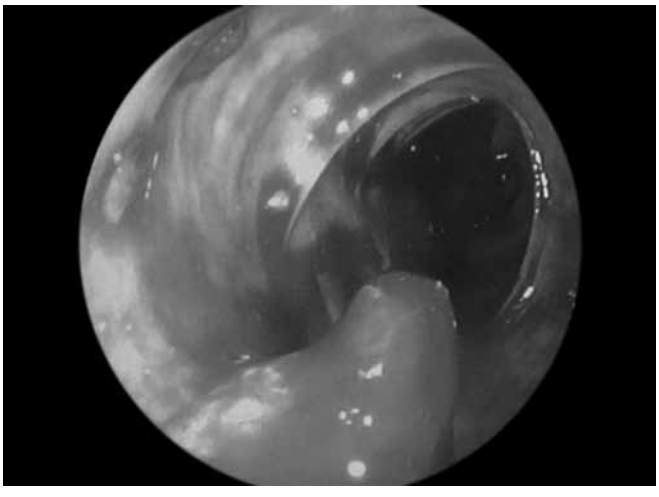

Fig. 1: Sessile polyp at 50 cm of anal margin

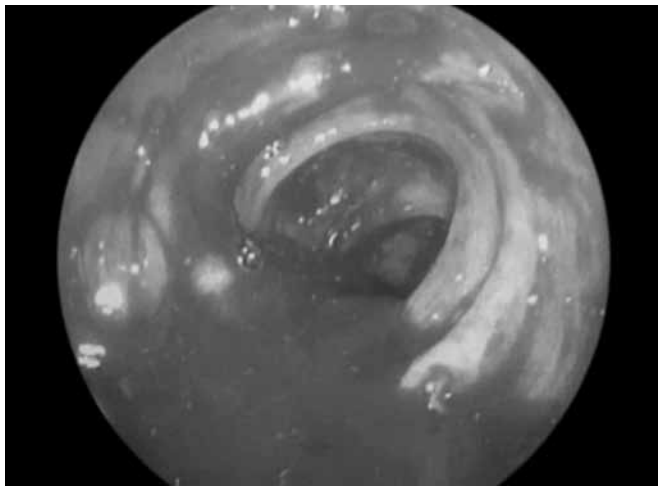

Fig. 2: Immediate bleeding following polypectomy

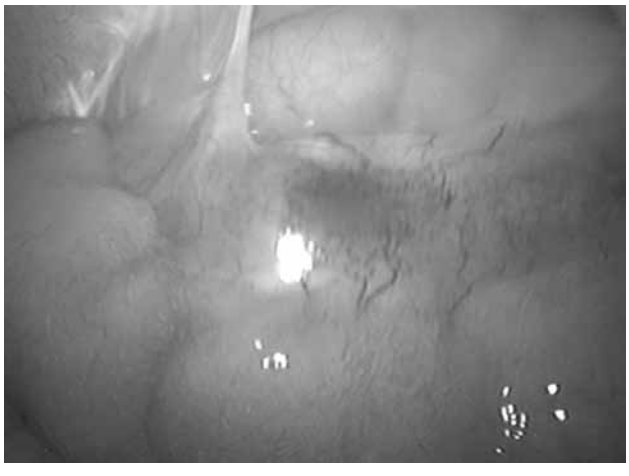

Fig. 3: Laparoscopic view of the sigmoid with serous hematoma with preperforative injury

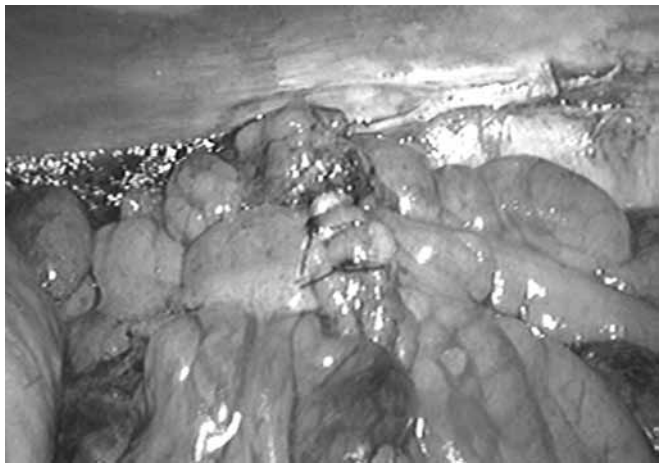

Fig. 4: Colo-colonic end-to-end anastomosis

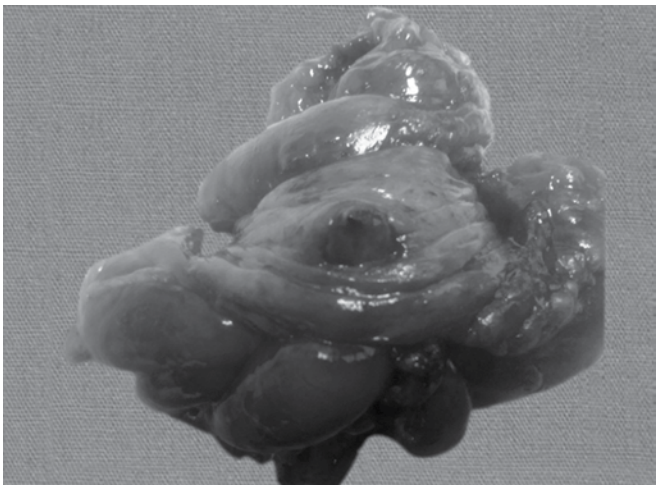

Fig. 5: Segmental colectomy piece

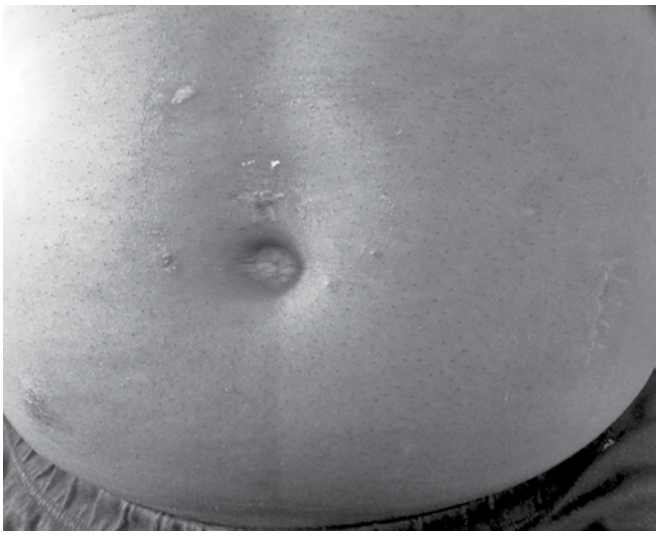

Fig. 6: Cosmetic result

of the right large bowel by endoscopic mucosal resection in patients older than 65 years.[1,4,12-14]

In our case, we had a sessile polyp of sigmoid removed by hot biopsy and complicated by immediate and delayed bleeding. The management of the immediate bleeding was successful after toilet by cold water, cautery and epinephrine injection. But after 6 days, it occurs a delayed bleeding probably due to the shedding of coagulation necrotic tissues and the resolution of the edema which open the closed blood vessels again. Unfortunately, the gastroenterologist could not managed it. This can be explain by the limited technical tea (hemoclips, loop and band ligators non available in our country), and the learning curve. Indeed, interventional gastroenterology is new in our country and practice of polypectomy in infrequent.

Recourse to surgery in case of postpolypectomy bleeding is exceptional, around 0.4%.[14] In these cases, laparoscopy is the first suitable way. Compared to open surgery, it allows a mini-invasive approach, a shorted hospital stay, less use of analgesics postoperatively and a better cosmetic result. But, the main difficulty during laparoscopy may be to identify the bleeding site. In our case, this location has been facilitate by the coexistence of a preperforative injury. This is the first time we realize a colonoscopy in our department for this indication.

CONCLUSION

Bleeding is the most common complication of colonoscopic polypectomy. The risk is related to the type and size of polyp, the technique of polypectomy and the coagulation status of the patient. In most cases, postpolypectomy bleeding can be controlled endoscopically. Therefore, endoscopist should be aware of various techniques of colonoscopic hemostasis. But, in exceptional cases, as our one of the failure of endoscopic management, laparoscopy with segmental resection can be an alternative.

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