Endoscopic Polypectomy: An Option to Treat Small Bowel Bleeding. A Case-Report.

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ABSTRACT

Background: Bleeding of the digestive tract in elderlies must provoke a significant deterioration to patient in a crisp stable condition. Capsule endoscopy provides excellent visualization of the small intestine, is well tolerated by patients, and is safe. Our interest is to present the use of well-known techniques that exist today in every hospital used in combination to treat cases that otherwise would need a greater and extensive surgical intervention. Methods: A patient was admitted to the surgery department from the emergency room with symptoms of melena for the last two days. After 48 hours enteroscopy and colonoscopy were performed and no pathology was found. Under general anesthesia and supine position, insufflation of the abdomen was performed trough a Veress needle inserted in the upper left quadrant. Three trocars were inserted in the right abdomen in the same time, from the abdomen were movilizated the omentum and the transverse colon to the upper abdomen, when the scope entered to the Treitz the gastroenterologist placed the scope curved in a right angle. Results: After recognizing the polyp, we kept the intestine with the graspers without any movement to facilitate the excision of the polyp by the gastroenterologist. The polyp was more than 7 millimeters and was excise using hot snare. After 6 month follow-up the patient doesn't suffer from bleeding and remains with stable hemoglobin. Conclusions: Using the laparoscopy as a method of roll up the gut to bring the pathology to the endoscope eye appears as an excellent tool for treatment.
Key-words: *endoscopic; laparoscopic;digestive-tract; case-report.*

INTORDUCTION

Bleeding of the digestive tract in elderlies must provoke a significant deterioration to patient in a crisp stable condition.

In most gastrointestinal bleeding episodes, the source of hemorrhage is localized to either the upper gastrointestinal tract or colon; however, in about 5% of cases, upper endoscopy and colonoscopy are non-diagnostic. [1]

When the armament for diagnostic to discover bleeding in the small bowel are going low without positive results the chances of the patient will be exhausted also.

When in 2000, the first publication about the use of wireless capsule to take images of the intestinal tract appears, become a technology for daily use, with some considerations for its use. [2]

Capsule endoscopy provides excellent visualization of the small intestine, is well tolerated by patients, and is safe. [3]

The capsule is an excellent instrument for diagnosis but have not the possibility to treat the pathology. The double balloon endoscopy described by yamamoto and have the advantage to diagnosis and treat. [4]

Double balloon endoscopy is an advanced technology but is safe for diagnostic with a 0.8% of complications, but, for therapeutic procedures the complications reported are 4.3%, without an unclear reason that can explain this rate. [5]

Numerous places and hospitals in the world do not have the facilities and advanced tools to treat complicated cases that require technology not available to the treating physician and sometimes, we are

forced to use and adapt the elements that we have in our working environment for offer to our patients adequate and safe solution avoiding damage or complications.

The interest in this study is to present the use of well-known techniques that exist today in every hospital used in combination to treat cases that otherwise would need a greater and extensive surgical intervention.

The authors describe a combination of a therapeutic enteroscopy laparoscopic assisted to treat a patient with a bleeding polyp 230 centimeters after the Treitz's angle.

CASE PRESNTATION

A woman, 72 years old was admitted to the surgery department from the emergency room with symptoms of melena for the last two days, the melena was soft and many times per day.

Dizziness and weakness from the day of admission and pallor. She suffers from hypertension and had been treated with antihypertensive drugs and aspirin.

Hemoglobin was 6.7 gr/dl in the first labs check and was stable, after 3 packed cells units the hemoglobin rise to 10 gr/dl.

The arterial gases were normal with normal lactate and electrolytes.

In the morning after, she was in a stable condition, gastroscopy was performed and no pathology was found in the upper gastrointestinal tract, CT- ANGIO was performed and also no pathology was detected.

After 48 hours enteroscopy and colonoscopy were performed and no pathology was found.

The patient was in a stable condition, had normal intestinal movements and has been discharged after 5 days with a schedule to endocapsule study (Olympus, Center Valley, PA, USA) and the indication to stop aspirin. Anyway, the patient was re-admitted in the same condition again with melena and anemia of 7 gr/dl. She was treated with 2 packed cells units and the Hemoglobin raised to 9.7 gr/dl. After the blood that was given to her she remained stable. A new endoscopy did not reveal any point the bleeding in the upper digestive tract

The endo-capsule revels the pathology of bleeding from a small polyp about 2.30 meters, distal to the treitz's angle as indicated in figure 1(appendix).

Again, the bleeding stopped spontaneously, during this time the patient was not under aspirin treatment.

An explanation was provided to the patient and her family the need to perform polypectomy in an unconventional way in order to prevent new bleeding and to have a schedule for operation. The consent for the procedure was given by the patient and her family.

OPERATIVE TECHNIQUE

Under general anesthesia and supine position, insufflation of the abdomen was performed trough a Veress needle inserted in the upper left quadrant.

Three trocars were inserted in the right abdomen using a 5 milimeters 30 degrees optic wide view (Storz, Tuttlingen, Germany), and then the gastroenterologist was asked to introduce the colonoscope to the upper intestinal tract until the Treitz angle.

On the same time, from the abdomen were movilizated the omentum and the transverse colon to the upper abdomen, when the scope entered to the Treitz we asked the gastroenterologist to put the scope curved in a right angle as indicated in figure 2 (appendix).

Simultaneously, two graspers take the small bowel and start to sleeve in to the scope in a coordinate maneuver with the gastroenterologist who inflate and deflated the bowel to facilitate the bowel movement and avoid complications as indicated in figure 3 (appendix). The gastroenterologist also use carbon dioxide and nor air to improve the gas absorption.

After recognizing the polyp, we kept the intestine with the graspers without any movement to facilitate the excision of the polyp by the gastroenterologist as indicated in figure 4 (appendix).

The polyp was more than 7 millimeters and was excise using hot snare.

At the same time, we used two techniques of localization after excision: one clip was applied and Indian tattoo was performed. The procedure took 40 minutes and had no complications. After 48 hours the patient was discharged in a stable condition.

The histologic study reveal adenomatous polyp, no malignancy seen.

After 6 month follow up the patient doesn't have more bleeding and remains with a stable hemoglobin and continuing her chronic treatment with aspirin.

DISCUSSION

Obscure bleeding is gastrointestinal bleeding from an unknown source that persists or recurs after a negative initial evaluation (Esophagastroduodenoscopy, colonoscopy). [6]
A wide range of studies to evaluate obscure bleeding, including push enteroscopy, double balloon enteroscopy, wireless capsule endoscopy, enteroclysis, angiography, bleeding scanning with labeled red blood cells, and surgery with intraoperative enteroscopy or sonde enteroscopy. [7-8]

In these cases of occult bleeding the common interpretation of the first studies as upper and lower endoscopy it is that the source of bleeding was unperceived by the eye of the gastroenterologist, performing again those studies an delaying the posterior evaluations.

The distance of the small intestine from the mouth and anus makes small bowel endoscopy difficult. The procedure is limited by intestinal motility and the looping, free-hanging course of the small bowel. [9]
Standard endoscopy instruments generally provide us to visualize the jejunum no beyond of the first 50 centimeters.
Over the last years, capsule endoscopy is the first line method to evaluate obscure bleeding and the accuracy is very high and will led to appropriate treatment of the bleeding source in 86.9% of the cases. [10-11]
Abdominal exploration for intestinal bleeding is the last option in patients with intestinal bleeding and it is far from being the most appropriate method of treatment.

The authors agree with John A. Retzlaff that abdominal exploration for intestinal bleeding is not accurate, only 30% have a positive diagnosis. 17% indeterminate and in 53% the exploration was negative. [11]

Although, the combination of endoscopy and laparoscopy to identify the site of bleeding or treatment has been used for a long period, the method of laparoscopy to roll up the gut and bring the point of bleeding to the endoscope has not been described in the literature.
While, it is true that the work of surgeon along with the gastroenterologist has become an important factor in the treatment of patients, but in general the gastroenterologist verifies or supports the treatment performed by the surgeon, our case helps to describe as the surgeon can help to the gastroenterologist to perform treatment that otherwise would be impossible to carry out.
Further, this approach gives the ability to treat the patient without laparotomy, without intestinal resection and leave the place marked by if necessary to identify it.

CONCLUSIONS

The technological advancement is surprising in recent years, but the possibility of having advanced technology that allow treating patients with no common pathology is not available to all hospital services. It is then that we must adapt the resources available to provide the best treatment with the lowest possible invasiveness. Using the laparoscopy as a method of roll up the gut to bring the pathology to the endoscope eye, appears as a method available to every physician and witty, providing excellent weapon of treatment.

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FIGURES LEGEND:

1- Capsule view of intestinal polyp
2- Laparoscopic finding of the intraluminal gastroscope
3- View of sleeved small bowel into the gastroscope
4- Endoscopic polypectomy

Figure 1:

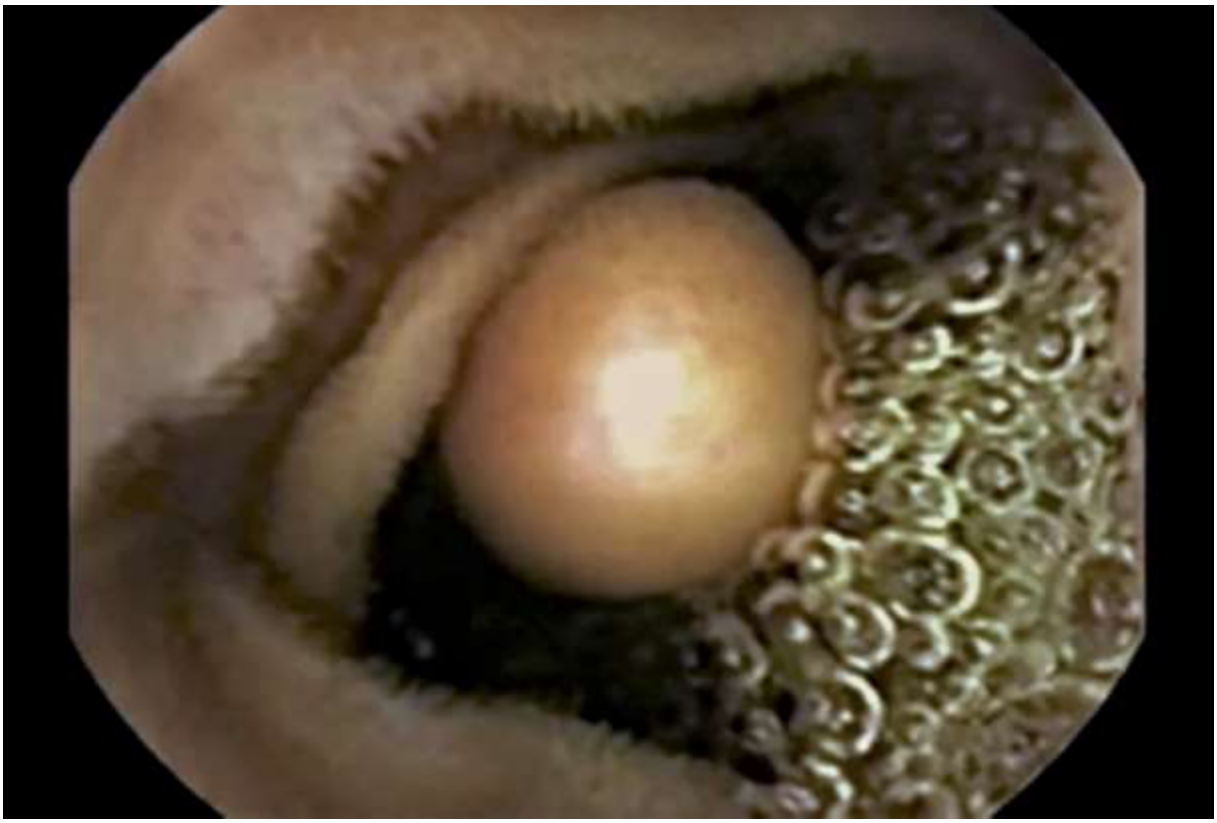

Figure 2:

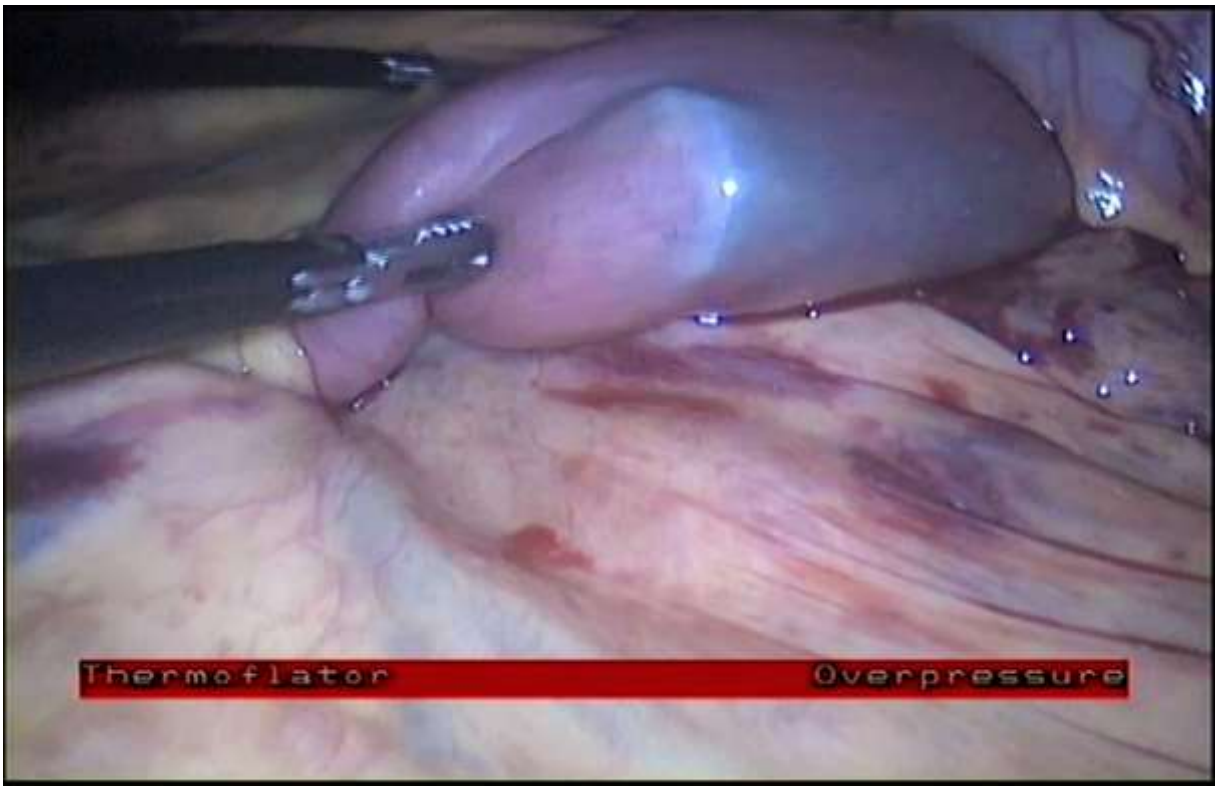

Figure 3:

Figure 4: