CLINICAL IMAGE IN GASTROENTEROLOGY

Acute intestinal bleeding after endoscopic polypectomy: Super-selective endovascular embolization in a clinically unstable patient

Hemorragia intestinal aguda después de polipectomía endoscópica: embolización superselectiva en un paciente clínicamente inestable

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A 70-year-old man underwent endoscopy that revealed an adenomatous polyp in the ascending colon (fig. 1). It was removed in the same session through the placement of four endoscopic clips (fig. 2). Six hours after the endoscopic polypectomy, the patient presented with severe intermittent lower intestinal bleeding with an initial hemodynamically unstable status: heart rate > 80 bpm and systolic blood pressure <100 mmHg. After multidisciplinary agreement, the patient underwent urgent selective digital subtraction angiography of the superior mesenteric artery that showed the presence of active bleeding in the ascending colon in the area of the previous endoscopic polypectomy (fig. 3A). Super-selective transarterial embolization of the active bleeding was performed with success (fig. 3B and C). Lower intestinal bleeding disappeared and the patient was hemodynamically stable immediately after the transarterial embolization. The patient did not need a bowel resection.


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Figure 1 Ascending colon endoscopy showing an adenomatous polyp (arrowheads).

Lower intestinal bleeding after endoscopic polypectomy can be seen up to 2 weeks after the procedure. However, acute post-polypectomy bleeding is due to: insufficient
hemostasis of the vessels, or sloughing of the surface coagulum. Despite advances in medical management, acute lower intestinal bleeding after endoscopic polypectomy remains a major complication with high morbidity and mortality. Interventional endoscopy and angiography are the fastest and least invasive therapies for controlling this major complication\textsuperscript{1,2}. Nevertheless, endovascular embolization is the preferred therapy when there is massive hemorrhage or in clinically unstable patients\textsuperscript{3}.

**Ethical disclosures**

**Protection of human and animal subjects.** The authors declare that no experiments were performed on humans or animals for this study.

**Confidentiality of data.** The authors declare that no patient data appear in this article.

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**Figure 2**  Final endoscopic control after polypectomy with the placement of four endoscopic clips (arrows).

**Figure 3**  A) Selective digital subtraction angiography of the superior mesenteric artery that shows the presence of contrast extravasation (arrowhead) from the vasa recta of a distal arcade of the right colic artery, next to the only remaining endoscopic clip (arrow). B) Super-selective catheterization of the distal arcades of the right colic artery with contrast extravasation from the vasa recta (arrowhead) near the endoscopic clip (arrow). C) Final selective digital subtraction angiography of the superior mesenteric artery that shows the complete exclusion of the vasa recta of a distal arcade of the right colic artery embolized by n-butyl cyanoacrylate with the absence of contrast extravasation (arrowhead) near the endoscopic clip (arrow).
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Right to privacy and informed consent. The authors declare that no patient data appear in this article.

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Conflict of interest

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References