

Title:

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STEMI secondary to splenic rupture after colonoscopy

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Mr. Editor:

We have read with interest the recently published case on splenic rupture after colonoscopy (1). Although this complication is being observed more frequently, in the case presented here, the particularity lies in the myocardial ischemia caused as a consequence of stasis at coronary level, determining a situation of extreme gravity, a diagnostic challenge and a therapeutic emergency.

We present the case of a 67-year-old woman, with a personal history of arterial hypertension and dyslipidemia. She was under study for dyspeptic symptoms and

underwent colonoscopy without immediate complications during the technique. In the following 12 hours she consulted at hospital emergency area for abdominal pain with accompanying vegetative symptoms. An ECG was performed, showing ST-segment elevation on the lateral side and blood tests, with hemoglobin levels of 5.6 g/dL, lactic acid of 6.6 mmol/L and markers of myocardial damage in the necrosis range. The patient was admitted to the Intensive Care Unit with refractory shock criteria requiring amines and connection to mechanical ventilation. The initial ultrasound study showed anterior and lateral hypokinesia with depressed ejection fraction (LVEF 34%). Urgent angiography showed complete occlusion of distal segments of the LAD, diagonal and marginal branches and thrombus aspiration was performed. After the procedure, abdominal computed tomography (CT) was performed, showing splenic damage with a large amount of free fluid and active bleeding in the venous phase at the level of the anterosuperior aspect of the spleen (Image 1). Splenectomy was performed with favorable evolution.

Splenic rupture is a life-threatening complication if not detected in time. The most frequent manifestation is abdominal pain in the left hypochondrium and hematometric repercussions due to the high vascularization of the organ (2). This can lead to hemodynamic instability with cardiovascular involvement, causing hemopertineum and the need for surgical splenectomy (3).

References:

- 1: Diaz Alcazar M, Garcia Robles A, Martín Lagos-Maldonado A. Rev Esp Enferm Dig. 2021 Mar;113(3):232. doi: 10.17235/reed.2020.7342/2020
2. Barbeiro S, Atalaia-Martins C, Marcos P, et al. Splenic Rupture as a Complication of Colonoscopy. GE Port J Gastroenterol. 2017;24(4):188-192. doi:10.1159/000452695
3. Jehangir A, Poudel DR, Masand-Rai A, Donato A. A systematic review of splenic injuries during colonoscopies: Evolving trends in presentation and management. Int J

Surg. 2016;33 Pt A:55-59. doi:10.1016/j.ijssu.2016.07.067



Figure 1: Hemoperitoneum with contrast extravasation in venous phase secondary to splenic rupture after endoscopic procedure.