

Hemoperitoneum: Rare Complication of Percutaneous Endoscopic Gastrostomy: About a Case

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1. Abstract

Although rare, hemoperitoneum is a possible complication of percutaneous endoscopic gastrostomy. Certain precautions should be taken in order to identify this complication which could be fatal at an early stage. This is a letter to the editor that reports the case of a patient who presented with hemoperitoneum immediately following the procedure.

2. Commentary

Percutaneous Endoscopic Gastrostomy (PEG) is a frequent therapeutic procedure in the upper digestive tract [1]. It constitutes the reference method for prolonged enteral nutrition of medium and long duration, defined by a duration greater than 3 weeks in adults, 8 weeks in children, provided that the patient's life expectancy is estimated to be greater. at 1 month [2].

There are two main methods, the most used and the most reliable being the technique described by Gauderer et al. called "Pull" where the GPE probe is pulled from inside out by a guide wire [3]. Its main indications are severe swallowing disorders, dysphagia and certain malnutrition [1]. Although the consequences are most often simple, potentially serious complications have been reported. We describe here the case of a patient who presented with hemoperitoneum immediately following the procedure.

This is an 88-year-old patient with hypertension as an ATCD who did not have blood crass disorders, in whom GPE was indicated for severe undernutrition in a context of swallowing disorders. The first puncture by the catheter was unsuccessful, the latter returning bloody

on removal despite correct transillumination. A second attempt allowed the insertion of the gastrostomy tube. During the procedure, the patient presented paleness with severe hemodynamic instability requiring urgent resuscitation with recourse to noradrenaline and orotracheal intubation. The biological assessment showed anemia at 8 g / dl compared to 10 g / dl on admission. A thoraco-abdomino-pelvic scan was performed showing spontaneously hyperdense intraperitoneal effusion in favor of hemoperitoneum and numerous arterial varicose formations pergastric opposite the gastrostomy tube. After a few hours, the patient had presented an improvement in her hemodynamic parameters, reflecting spontaneous hemostasis by drying up of the intra-abdominal bleeding. The check-up found hemoglobin at 9.9 g / dl without the need for transfusion.

The morbidity and mortality associated with PEG is significantly lower than that observed after surgical gastrostomy. [4, 5] As such, it is the technique of choice for prolonged enteral nutrition. Serious complications are rare and occur in less than 3% of cases [6, 7].

Abscesses and parietal infections are the most common complications, but necrotizing fasciitis, damage to the colon or small intestine, gastrocolic fistula, duodenal hematoma, liver damage, gastric perforation, catheter migration, peritonitis and aspiration pneumonia have also been described [8]. In a series of 263 cases, Schurink et al. described only two cases of intra-abdominal hemorrhage [9]. Bordes et al. also described a case of hemoperitoneum in a 59-year-old patient in whom the first attempt at EPG was unsuccessful, as in our case.

It was a massive hemoperitoneum secondary to a laceration of a

branch of the gastric artery at the level of the lesser curvature, requiring urgent surgical hemostasis [10].

These cases show that, although rare, hemoperitoneum is a possible complication of PEG.

Because of its seriousness, it should be systematically mentioned before the unexplained appearance of arterial hypotension, especially after unsuccessful passage of the catheter.

For our patient, surgery could be avoided after consultation with radiologists and vascular surgeons, given the presence of inactive and minimal bleeding. Only close monitoring was recommended, with a fortunately favorable development.

Mortality associated with PEG is certainly less than 1% [1], but bleeding complications are potentially fatal. Lau et al. [5] reported a case of fatal post-PEG retroperitoneal hemorrhage following breaches in the splenic and superior mesenteric veins.

The authors suggested that adhesions between the pylorantoral region and the posterior hepatic surface predisposed to these events.

In our case, we suppose that the presence of numerous arterialized perigastric varicose formations next to the gastrostomy tube could have been responsible for the bleeding in our patient. Monitoring of the constants and abdominal palpation are essential post-procedure, in order to identify these complications early on.

In patients who previously had an injected abdominal CT scan, performed for any reason, this complication could possibly be avoided by a good study of the vascular network upstream of the procedure.

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