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A rare cause of severe esophagitis in an immunocompetent patient: double complication with an endoscopic resolution

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Dear Editor,

A 75-year-old male, with no relevant medical history and negative HIV1/2 serology, presented to the Emergency Department with mixed shock, specifically, septic shock of pleuroparenchymal origin and hypovolemic due to upper gastrointestinal bleeding (UGIB). Thoracoabdominal computed tomography (CT) scan showed an esophagopleural fistula (EPF), with a large right pleural effusion (lately known to be compatible with exudate Light’s criteria) and right pneumothorax, without active bleeding (Fig. 1A). The upper gastrointestinal endoscopy (UGIE) showed a severe esophagitis and an ulcer with an orifice in the center in distal esophagus (Fig. 1B). Biopsies of the edges of the ulcer were performed and anatomopathological (AP)
studies were negative for viral agents but tissue molecular studies (polymerase chain reaction [PCR]) identified cytomegalovirus (CMV) DNA. Despite the fact that no immunosuppression condition was identified, CMV severe esophagitis complicated by EPF with right-side empyema and UGIB was diagnosed. An esophageal fully covered metal stent (FCMS), with anti-migration system, was left in place for five weeks (Fig. 1C) and ganciclovir therapy (5 mg/kg/day) was maintained for 21 days. Clinical-analytical, radiological and endoscopic improvement was noticed (Fig. 1D and E) and no recurrence was reported during follow-up.

Discussion
CMV esophagitis is a rare entity in immunocompetent patients (IC), with few cases reported in the literature. None of them have described a double complicated CMV esophagitis (bleeding and perforation). In the absence of immunosuppressive conditions, CMV reactivation in IC could be related with age-associated senescence of the immune system (1).

The diagnosis requires a high index of suspicion and CMV should be considered as an etiological agent, especially in the elderly. AP studies have limitations, such as sensitivity dependent on sample quality (size and site) and the examiner’s experience. Viral PCR analysis of mucosal biopsies is more sensitive, with a high negative predictive value (2).

The indications for antiviral treatment in CMV infection in IC are not clear but in severe cases, authors defend treatment with ganciclovir (1). The endoscopic approach to EPF is a challenge, especially when associated with UGIB. There are no guidelines on this topic and it is necessary to weigh the pros and cons of the available endoscopic techniques and adapt its use to each case. In recent years, the use of FCMS in benign esophageal disease has become consensual. In this case, FCSM was chosen and allowed fistula closure, by second intention, and UGIB control (4,5). There is a risk of recurrence of CMV infection, however, prophylactic therapy is not recommended (1).

References


Fig. 1. A. Thoracic computed tomography (CT) scan documented a right-esophagopleural fistula (EPF) with oral contrast in pleural space (orange triangle). B and C. Upper gastrointestinal endoscopy (UGIE) showing severe esophagitis and an ulcer with EPF orifice in the distal esophagus (blue arrow). Esophageal fully covered metal stent (FCMS) in place. D and E. UGIE esophageal mucosa with a scar-like appearance without fistulous orifice. By fluoroscopy, there was no evidence of extravasation of contrast.