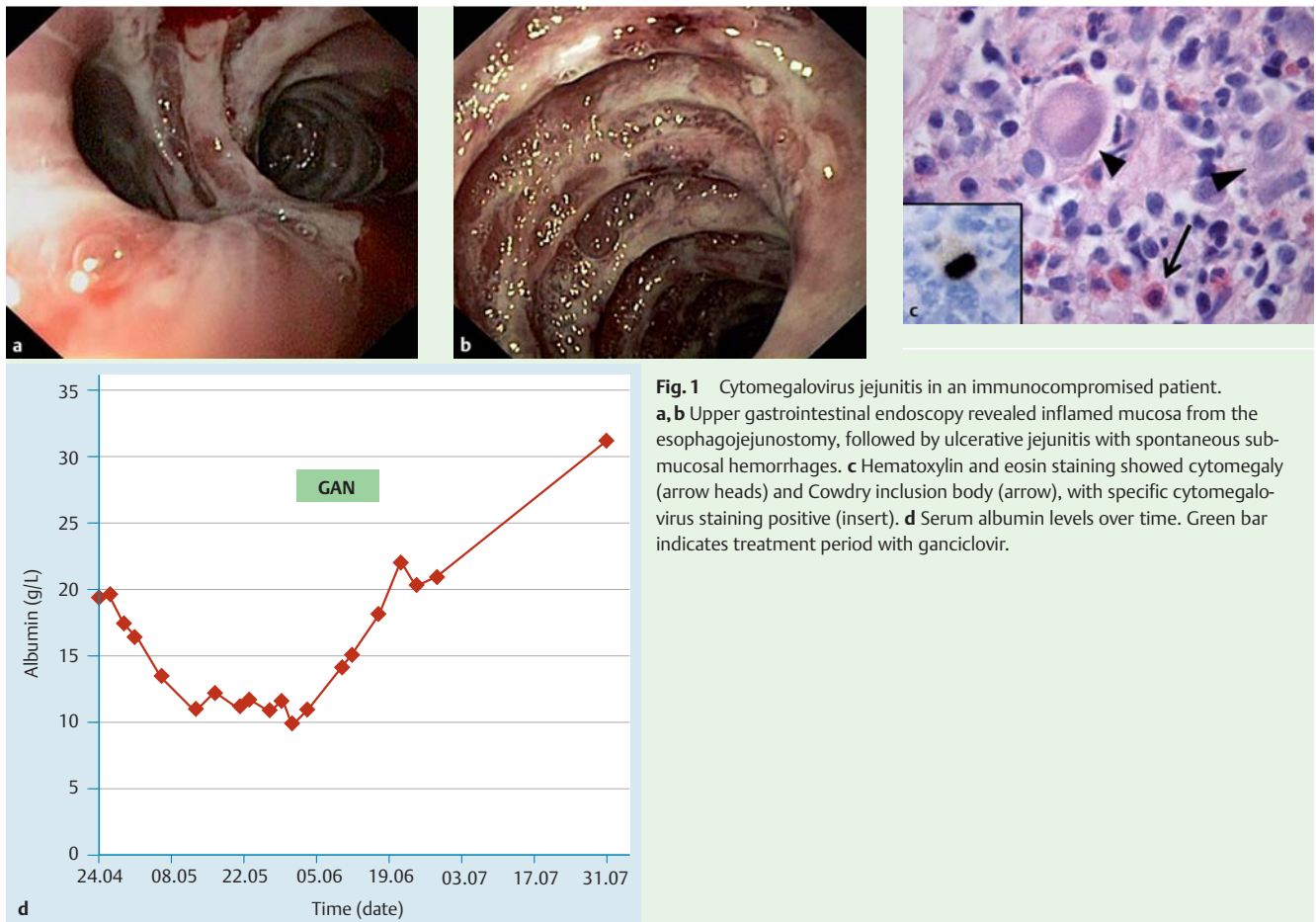


## Postgastrectomy protein-losing cytomegalovirus jejunitis in an immunocompromised patient



A 59-year-old man was admitted because of nausea and fatigue. He had been diagnosed with gastric adenocarcinoma 7 months earlier, and because of gastric outlet obstruction had undergone total gastrectomy with esophagojejunostomy and omentectomy (pT<sub>3</sub>N<sub>3b</sub>M<sub>0</sub>R<sub>1</sub>). Post-operatively, platinum-based chemotherapy was initiated, followed by radio-chemotherapy (5-fluorouracil + 45 Gy) approximately 2 weeks before admission. Initially, the nausea and fatigue were attributed to ongoing radiochemotherapy. During admission the patient became bed-bound, with pronounced anasarca edema secondary to severe hypoalbuminemia (lowest level 9.9 g/L, normal 35–52 g/L) despite maximal supportive care, suggestive of protein-losing enteropathy (proteinuria was only mild). From the esophagojejunostomy onwards, the mucosa was

severely inflamed with ulcerations, desquamation, and spontaneous submucosal hemorrhages for approximately 15 cm in the jejunum (► Fig. 1 a, b). Microscopic examination revealed extensive ulceration with granulation and dense infiltration of mononuclear cells, cytomegaly, and Cowdry inclusions (► Fig. 1 c). The diagnosis of cytomegalovirus (CMV) jejunitis was strengthened by positive serum CMV polymerase chain reaction (PCR; 3.84 log copies/mL). After 2 weeks of treatment with ganciclovir, the patient's general condition recovered and CMV PCR became negative. At 1 month after discharge, the patient was in good general condition with an albumin level of 31.2 g/L (► Fig. 1 d). Although CMV infection is mostly asymptomatic or gives rise to only mild mononucleosis-like symptoms, in immunocompromised or critically ill patients it can

cause life-threatening complications [1–3]. CMV enteritis occurs in only 4% of patients with CMV disease and is mostly restricted to a defined area rather than being panenteric [4]. As shown in inflammatory bowel diseases where CMV infects areas of already inflamed mucosa [5], it is likely that mucosal changes secondary to radiotherapy provide favorable conditions for CMV infection. The protein-losing enteropathy was most likely a combination of inflammatory exudation and villous atrophy with increased permeability associated with CMV infection [6]. This case illustrates that CMV should be included in the differential diagnosis of protein-losing enteropathy, especially following radiation therapy, and that biopsies should be taken to investigate CMV even when other potential explanations of mucositis are present.

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