A Rare Gastrosplenic Fistula Treated Endoscopically in a Post-Chemotherapy Patient with Diffuse Large B Cell Lymphoma

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Introduction

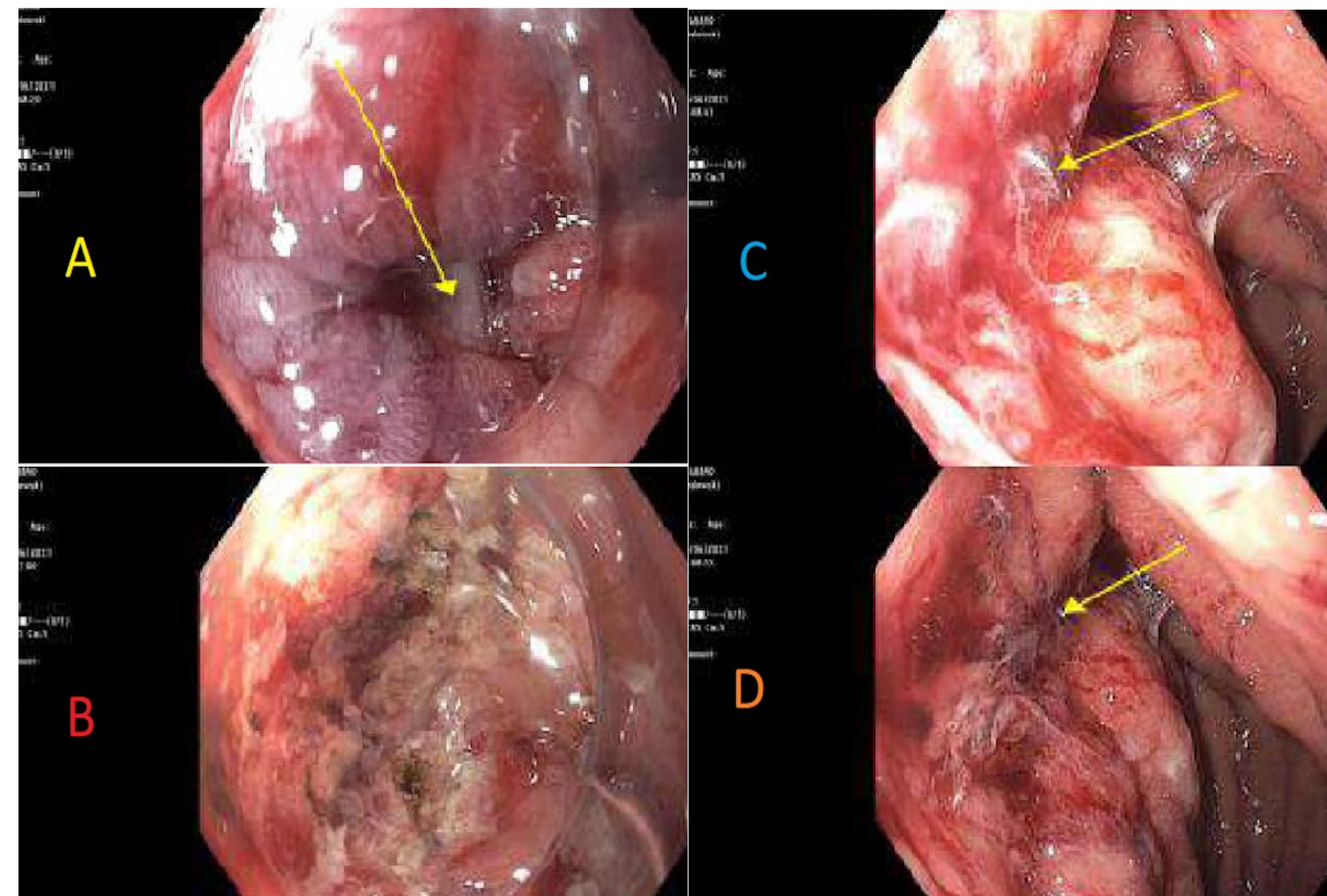
Gastrosplenic fistula (GSF) is a rare complication of diffuse large B cell lymphoma (DLBCL) involving the spleen and stomach. Fistulas can form spontaneously or following chemotherapy and occur due to local wall invasion. Presenting symptoms often include abdominal pain, splenomegaly, vomiting and fatigue. In this case we discuss a rare presentation of DLBCL complicated by GSF and abscess formation in a 36-year-old female presenting with abdominal pain with constipation.

Case Description

A 36-year-old female with a past medical history of DLBCL on rituximab, doxorubicin, vincristine, and cyclophosphamide presented with fever, leukopenia, tachycardia and tachypnea in the setting of abdominal pain with constipation. Due to SIRS positivity and severely decreased absolute neutrophil count (ANC) of 0.12 K/UL, the patient was started on IV meropenem. Initial CT abdomen and pelvis was concerning for GSF with gas/fluid collection in the spleen from fistulous communication with the stomach. This was confirmed on upper gastrointestinal series (UGI). An Ovesco clip was placed endoscopically and UGI series three days following endoscopic intervention confirmed successful and sustained fistula closure. She also underwent CT-guided abscess drainage catheter placement with interventional radiology. Abdominal fluid cultures grew *Strep constellatus, Strep anginosus, Lactobacillus rhamnosus* and *Parvimonas micra.*

Endoscopic Findings

During esophagogastroduodenoscopy (EGD), a 5mm fistula was found on the greater curvature of the gastric body with surrounding congested mucosa and ulceration. Tissue devitalization within and around the fistula was achieved using argon plasma coagulation (APC). An over-the-scope clip was then successfully deployed resulting in fistula closure.



A. 5mm gastrosplenic fistula on greater curvature of gastric body with contained ulcer indicated by yellow arrow
B. Tissue devitalization following argon plasma coagulation (APC)
C. Over-the-scope clip indicated by yellow arrow
D. Clip after deployment indicated by yellow arrow

Discussion

GSF with abscess formation is an exceedingly rare and potentially fatal complication of DLBCL which can often pose a diagnostic and therapeutic challenge to clinicians.

There have been few reported cases of GSF with the majority occurring in the setting of DLBCL involving the stomach and spleen. The second most common cause is Hodgkin's lymphoma, followed closely by histiocytic lymphoma.

Post-chemotherapy GSF occurs due to rapid regression of tumor burden which decreases wall integrity and promotes fistula formation.

Early diagnosis and treatment of GSF is vital in reducing overall morbidity and mortality in patients with DLBCL. GSF should always be on the differential diagnosis list in a DLBCL patient presenting with abdominal pain and positive SIRS criteria.

Contact & References

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