COLLATERAL DAMAGE: SPLENIC INJURY REQUIRING SPLENECTOMY DURING ELECTIVE HEMICOLECTOMY IN A HOSTILE ABDOMEN

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INTRODUCTION

- Splenic injury is an uncommon (< 1% incidence) but potentially life-threatening complication of colorectal surgery.
- Highest risk:
  - During splenic flexure mobilization in a “hostile abdomen.”
- Risk is significantly increased by:
  - Dense adhesions.
  - Prior abdominal surgery.
  - Infected or incorporated mesh.
- While minor bleeding can be controlled conservatively, uncontrolled hemorrhage may necessitate emergency splenectomy, which carries its own significant risks.

CASE PRESENTATION

- Patient: 68-year-old male with significant past medical history of CKD, CAD s/p PCI, prior ventral hernia repair with mesh, recurrent diverticulitis presents for an elective robotic sigmoidectomy.
- Intraoperative findings:
  - Large, infected mesh found invading the left colon.
  - Dense, inflammatory adhesions at the splenic flexure, obliterating the plane at the splenic flexure.
  - Procedure converted to open exploratory laparotomy.

COMPLICATION & MANAGEMENT

- **The complication**:
  - During the mobilization, a deep splenic capsular tear occurred, causing massive hemorrhage.
  - Attempts to achieve hemostasis with topical agents were unsuccessful
- **Hemodynamic instability & management**:
  - Emergency splenectomy for hemorrhage control using multiple EndoGIA stapler loads across the hilum.
  - A left hemicolectomy, mesh explantation, and colorectal anastomosis were then completed.
- **Outcome**:
  - EBL: 2.5 L
  - Transfused 4 pRBCs, 1 Plt, 2 FFP
- **Post-op course**:
  - Prolonged ileus & fascial dehiscence
  - Reoperation on POD 10 for abdominal wall closure.
  - Eventual recovery and discharge to rehab.

DISCUSSION

- Iatrogenic splenic injury is most often from excessive traction on the splenocolic ligament.
- The infected mesh created a fuse, inflammatory mass, making injury nearly unavoidable.
- Management algorithm:
  - Attempt conservative measures like topical agents or splenorrhaphy.
  - Splenectomy is the definitive life-saving procedure for uncontrolled bleeding.

CONCLUSION

- The procedure was well-tolerated with an uneventful postoperative course.
- The patient resume oral intake early and was discharged without complications.
- Pathology: confirmed complete GIST excision with negative margins (R0).
- Key benefit: oncologic goals met while avoiding the anatomical distortion of conventional wedge resection.

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