# Novel Treatment of a Chylous Mesenteric Cyst Discovered During Trauma Evaluation

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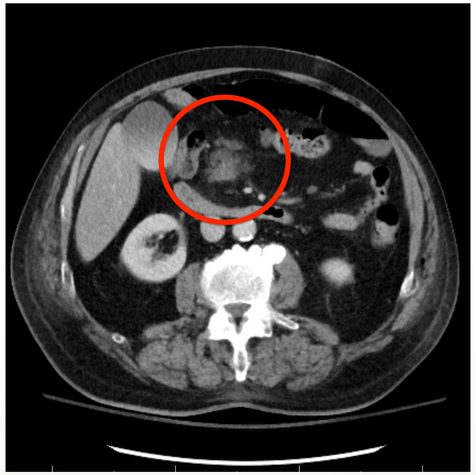


## Introduction

Mesenteric cysts are a rare benign disorder, thought to be caused by a disturbance of the lymphatics in the mesentery either through traumatic disruption, mechanical obstruction, or congenital lymphatic malformations. This is a rare surgical finding with only 19 documented cases noted in review of the literature. Surgical excision remains the standard of care, with complete enucleation due to risk of malignant degeneration and associated issues, including intestinal compromise. In our case, we discuss a unique case of incidentally noted chylous mesenteric cyst following abdominal trauma.

## Case Presentation

- **Presentation:**
  - 78 year-old man
  - past medical history of hypertension & hyperlipidemia
  - Presented at Mission Health ED following a motor vehicle accident.
  - On exam, patient's abdomen was soft and non-tender.
- **CT Findings:**
  - Multiple spinal fractures, rib fractures, sternal fracture
  - Lobulated foci measuring approximately 6 x 3.2 cm within the anterior upper mesentery.
  - CT diagnosis initially was mesenteric hematoma.



- **Diagnostic laparoscopy:**
  - Revealed a large soft cystic-appearing lesion in the mesentery which appeared to be fluid-filled.
  - 22-gauge spinal needle was used to aspirate approximately 3 cc of milky white fluid concerning for lymphocele. Fluid was sent for cytology.
  - Following aspiration, there was noted leaking of chylous material from the aspiration site. The area of needle aspiration was covered with fibrin hemostatic sealant. Following two applications of the adhesive substance, no further leaking was noted.
- **Follow-up:**
  - Patient was admitted to the ICU postoperatively for management of his multiple other injuries.
  - CT scan was performed on postoperative day #2 which demonstrated no intraperitoneal fluid.
  - Cytology demonstrated no evidence of malignancy with a scant amount of fibrinous debris.
  - Final diagnosis was chylous mesenteric cyst. Postoperatively, patient ultimately did well and was discharged on POD#16. No acute problems have occurred since discharge.

## Conclusions

Chylous mesenteric cysts represent a small subset of mesenteric cysts and should be considered when a physician encounters an intra-abdominal mesenteric mass. Typical imaging does not always provide an accurate diagnosis and many are found intraoperatively. Cyst aspiration with sealant application using fibrin hemostatic sealant can be considered an alternative in patients not able to tolerate a larger operation for complete excision.

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