A Rare Retroperitoneal Mass Simulating A Complicated Diverticulitis

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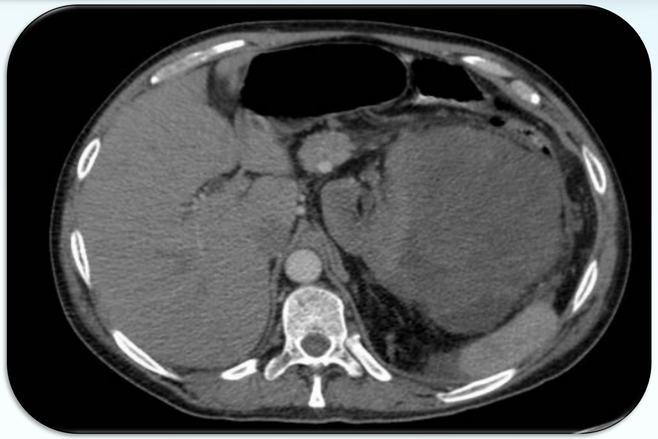
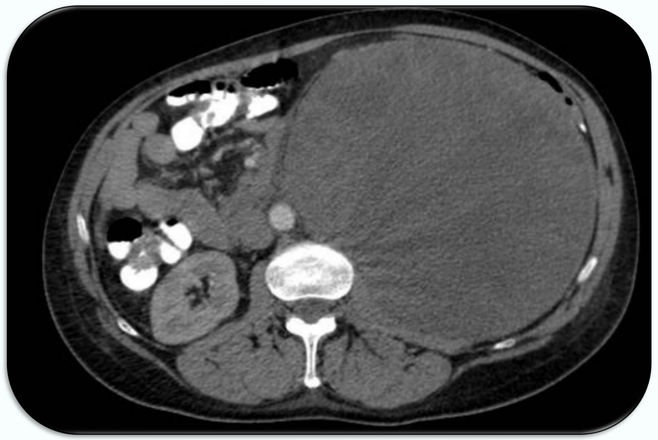
Introduction

- Extra-gastrointestinal stromal tumors (EGISTs) are a group of rare neoplasm that arises from cells outside the gastrointestinal (GI) tract.
- Occurs in <5% of all GISTs involving the retroperitoneum, mesentery, or omentum with a more aggressive behavior.
    - GISTs represent 1-2% of all primary GI cancer
- EGISTs typically present as large intra-abdominal masses with unspecific symptoms.
- We report a case of an EGIST mimicking diverticulitis with contained perforation.

Clinical Case

- 50-year-old male inmate with no medical history presents to the ED due to worsening abdominal pain that began 5 days prior to admission.
- Symptoms began suddenly associated to unquantified episodes of non-bloody, non-watery diarrhea, vomiting of gastric content and subjective fever.
- Physical exam with signs of dehydration, a distended abdomen with hyperactive bowel sounds, and a non-mobile large mass on the left lower quadrant with tenderness to light palpation and guarding.
- Laboratories were remarkable for neutrophilic leukocytosis, thrombocytosis, and elevated inflammatory markers.





- Abdomino-pelvic CT: Large left heterogeneously enhancing retroperitoneal mass with central necrosis measuring 18.6 cm AP x 18.4 cm transverse x 25.3 cm CC.
- Core-needle biopsy → high-risk GIST with positive immunohistochemistry for
    - C-KIT, CD34, CD56, Actin & Desmin
    - Very high mitotic index (45 mitosis/25 HPF).
- Surgery was deferred due to large size of mass and closure to adjacent structures.
- Neoadjuvant therapy with Imatinib was started but the patient was lost to follow up upon discharge.

Discussion

- This case describes a rare presentation of EGIST emerging from the retroperitoneum with a positive immunohistochemistry for desmin (1-2%) and manifesting as a complicated diverticulitis.
- Although there is limited data, EGISTs are known to relapse more frequently than GISTs thus the importance of implementing gene sequencing for developing new directed therapy.
- Furthermore, because EGISTs are found outside the GI system, symptoms only appear when the tumor has progressed to an advanced stage giving it a worse prognosis.

Conclusions

- EGISTs should be in the differential diagnosis of patients presenting with an abdominal mass.
- More research is needed to better understand the behavior, prognosis, and treatment options of these tumors.

References

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