INTRODUCTION

LEARNING OBJECTIVES:
1. Recognize challenges of timely and accurate diagnosis of retroperitoneal (RP) lymphoma
2. Develop a differential for retroperitoneal masses (RPM)
3. Recognize limitations of fine needle aspiration for diagnosing lymphoma

This case describes the diagnosis of primary composite Non-Hodgkin Lymphoma (NHL) presenting as persistent nausea and vomiting

CASE

76 year-old female presented to ED with persistent nausea and vomiting over the past two months. Basic work up was unrevealing and she was discharged to her PCP after being treated conservatively with IVF and antiemetics

PCP obtained GI consult and esophagogastroduodenoscopy was performed that showed mild gastritis with biopsy proven H. pylori for which she completed antibiotics.

Several weeks later, the patient presented to the emergency department with continued nausea and vomiting. She felt weak, dehydrated and was afraid to eat because of provocation of vomiting. She denied abdominal pain, constipation. She endorsed 10 kg unintentional weight loss.

Past medical history: Type 2 Diabetes Mellitus, Hypertension, Hyperlipidemia, osteoarthrits, transient ischemic attack

Past surgical history: None

Medications: Amlodipine/Benazepril 2.5-10 mg qday, Aspirin 81 mg, Brimonidine drops, Calcium Carbonate – Vitamin D, Fenofoibrate, Meloxicam 7.5 mg daily, Simvastatin 10 mg QHS, Metformin 500 mg BID, Metoprolol tartrate 100 mg BID

Allergies: None

PHYSICAL EXAM

T: 98 F, P: 85, RR: 18, BP: 144/65, sPO2 97% room air

General: NAD, elderly women

Neuro: Alert, cooperative, CN 2-12 grossly intact, moves all extremities equally, normal sensation

Eyes: Anicteric

HENT: Dry oral mucosa, no discharge/drainage

Lungs: No adventitious lung sounds

Heart: RRR, One S1 and S2, no MRG

Abdomen: Soft, NTND, hyperactive bowel sounds, no ascites, no masses

Skin: No rashes

Psych: Full affect, pleasant

Extremities: +2 pulses, 1+ edema bilaterally, no cyanosis

LABS

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Lipase – 56

UA – 8-10

Hyaline casts

Stool culture – negative

Cdiff NAAT neg

Norovirus neg

Iron 63

TIBC 238

Ferritin 106

HOSPITAL COURSE

- Computed Tomography of the abdomen was obtained and revealed a 5.5x6cm spiculated RPM encasing the superior mesenteric artery and superior mesenteric vein.
- Upper gastrointestinal series demonstrated obstruction at the third portion of duodenum due to the mass.
- Given concern for ischemia, mesenteric ultrasound was performed demonstrating an irregular retroperitoneal soft tissue mass encasing mid to distal segment of the superior mesenteric artery and visualized branches but patent SMA and celiac arteries.
- Endoscopic ultrasound with fine needle aspiration (EUS-FNA) was performed and cytology was negative for malignant cells.
- Improved symptoms and discharged home.
- Two weeks later presented to ED and admitted for further evaluation.
- Given the inability to tolerate oral intake or pass a nasojejunal tube, TPN was started.
- Diagnostic laparoscopy with core biopsy of RPM was performed.
- Frozen section initially showed inflammatory reaction and no sign of malignancy.
- Final histopathology demonstrated composite NHL with diffuse large b-cell lymphoma and follicular lymphoma identified.
- The patient was started on CHOP chemotherapy with intention to cure.
- Patient is tolerating treatment and given decreased mass size is symptom free and tolerating PO.

DISCUSSION

- The case highlights difficulties clinicians face when presented with an RPM because the retroperitoneum is difficult to access and masses often grow asymptptomatically and present at advanced stages of disease.
- Lymphoma is the most common malignant tumor of the RP space, however initial presentation of lymphoma in the retroperitoneum is rare.
- Excisional biopsy remains the gold standard of diagnosis of lymphoma but because surgical treatment of lymphoma is generally unnecessary, minimally invasive diagnostic methods such as fine needle aspiration (FNA) are being used more frequently.
- FNA is widely used as a diagnostic modality because it is safe, quick and relatively inexpensive.
- Many clinicians still consider FNA inadequate for diagnosis of lymphoma. In a large retrospective study, only 12% concordance between FNA and excisional biopsy for diagnosis of lymphoma was observed and 15% of patients who received FNA were diagnosed incorrectly.
- The patient in this case was symptomatic and requiring total parenteral nutrition due to small bowel obstruction and the non-diagnostic cytology on FNA delayed definitive treatment and could have potentially resulted in an incorrect diagnosis.
- Ultimately, more randomized controlled studies are needed comparing FNA to excisional biopsy for diagnosis of lymphoma.

REFERENCES


CT Abdomen demonstrating large spacular soft tissue mass extending along root of mesentery with encasement of the ileal and jejunal branches of the superior mesenteric vein. There were no findings suspicious for metastasis or lymphadenopathy.