

CACHEXIA DUE TO AN UNUSUAL CAUSE

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INTRODUCTION

- Unintentional weight loss is a common condition encountered in medical practice.
- Here we present a case of anorexia and cachexia with an unusual etiology.

CASE PRESENTATION

- 72-year-old female with past medical history of hypertension presented to ED with complaints of bilateral leg swelling, progressive anorexia and unintentional weight loss since the past 6 months.
- Complaints were associated with progressive abdominal distention and feeling that the skin of her abdomen is tighter than normal. She denied any change in diet, dysphagia, vomiting, bowel habitus, fevers, chills, night sweats, or significant travel history.
- On physical exam, vitals were within normal limits. She appeared cachectic with a grossly distended abdomen. A large indistinct mass could be palpated per abdomen, 2+ pitting edema was present in bilateral lower extremities.
- Lab results were significant for microcytic anemia (Hb 9.3, MCV 79.7, RDW 17.2), with normal WBC and Platelet counts. Iron deficiency was present. Liver enzymes were within normal levels. There was decreased total protein and Albumin (5.3, 2.8 gm/dl). HIV and Hepatitis screening panels were negative. Peripheral blood smear did not show any evidence of leukemia.
- Findings from contrast enhanced CT abdomen and pelvis are shown here.
- Hematology Oncology were consulted who recommended a bone marrow biopsy to further evaluate her for a myeloproliferative disorder. The bone marrow showed gelatinous transformation (serous fat atrophy) of bone marrow with variable cellularity ranging from essentially 0% to 40%. Flowcytometry of the marrow content did not reveal any immunophenotypic evidence of a lymphoproliferative disorder, acute leukemia, increase in blasts, or plasma cell neoplasm. JAK2 V617F mutation was not detected.
- Due to the presence of increased vascularity on the CTA, a radiological working diagnosis of angiosarcoma was established. Patient declined further investigations like biopsy or excision of the splenic mass to confirm the diagnosis due to concerns for risks from surgery.



CT abdomen and pelvis with contrast showed a large heterogeneous mass in the left upper quadrant measuring approximately 17 x 21 x 33 cm. Presence of a large central area of nodular hyper attenuation, likely representing intraparenchymal hemorrhage.

DISCUSSION

- Massive splenomegaly exists when the spleen is large enough to reach the iliac crest, crosses the midline or weights more than 1500 g.
- The most common etiologies of massive splenomegaly include hematological disorders (chronic myeloid leukemia, angiogenic myeloid metaplasia, polycythemia vera, essential thrombocythemia, lymphomas, hairy cell leukemia, β -thalassemia major), infectious diseases (malaria) and genetic infiltrative diseases (Gaucher disease).
- Gelatinous transformation of bone marrow, observed on biopsy is linked to malnutrition and cachexia, and occurs in patients with severe debilitating illnesses, including neoplasms, chronic non-neoplastic disorders, anorexia nervosa, and acquired immunodeficiency syndrome (AIDS).

CONCLUSIONS

- Although malignancy itself is known to cause weight loss secondary to cytokines, TNF alpha and IL-1, IL-6, we present this unusual case where the patient developed anorexia and starvation due to the mass effect from her splenic mass.
- Patients with massive splenomegaly may have slow progression of symptoms which would be mild enough to be overlooked by the patient for a long period of time and can lead to atypical presentations.
- In this case, massive splenomegaly led to compression and collapse of her gastric cavity possibly over a prolonged period resulting in severe malnutrition and cachexia causing gelatinous transformation of her bone marrow.

REFERENCES

- O'Reilly RA. Splenomegaly in 2,505 patients in a large university medical center from 1913 to 1995. 1913 to 1962: 2,056 patients. West J Med 1998;2013:78–87