Subacute dyspepsia: A curious presentation of an ominous pathology

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INTRODUCTION

Dyspepsia is a symptom for a wide range of medical conditions. [1] It is common for practitioners to treat it symptomatically in the first instance. However, sometimes it can reflect ominous pathology that requires robust intervention. In this article we present a case of a patient with dyspepsia

CASE SUMMARY

45-year-old male presented to the hospital with subacute dyspepsia. He was seen by primary care who covered him with proton pump inhibitors which failed to resolve the symptoms. Patient attended to the hospital as he started to have leg swelling and general feeling of tiredness.
Blood tests showed alarmingly elevated haemoglobin levels and conjugated hyperbilirubinaemia. Also, patient had hepatomegaly and bilateral pitting leg oedema. Thoraco-abdominal imaging elucidated a large malignant tumour emanating from the liver causing pressure on the intrahepatic ducts and a tumour thrombus invading the hepatic veins, inferior vena caver, and the right atrium, filling almost two thirds of the right atrium and causing a picture of right heart failure. (Figure-01) Tumour markers were negative except for elevated LDH, other causes of acute hepatitis were also negative. (Table-01)
Given the extension of the tumour, it was deemed too risky to undergo biopsy and that a surgical option would be futile. Accordingly, a plan for palliative management was put for symptom control and early hospital discharge. Patient sadly passed away one month after hospital presentation.

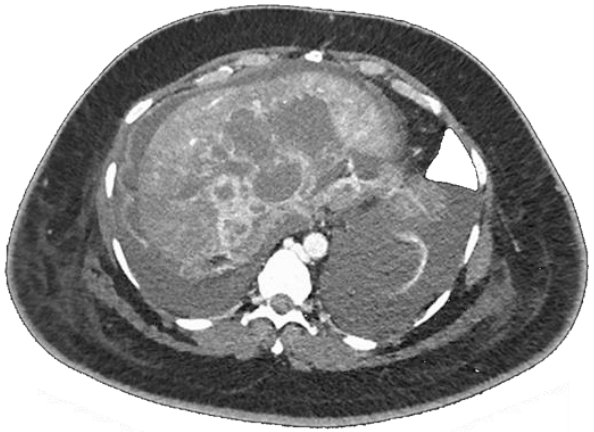

Figure-01: CT Thorax abdomen pelvis, this slide shows 11cm malignant mass in the caudate lobe of the liver. This is leading to intrahepatic biliary obstruction and IVC tumour thrombus precipitating lower leg oedema.

Table-01: investigations done showing basic bloods, liver function, and tumour markers.

TEST	RESULT	TEST	RESULT
Bilirubin	507 µmol/L	Conjugated	337 µmol/L
Creatinine	104 µmol/L	Adjusted Ca	2.64 mmol/L
Na	124 mmol/L	K	4.1 mmol/L
Hb	212 g/L	Haematocrit	0.652 L/L
ALT	98 U/L	ALK P	190 U/L
Albumin	24 g/L	PT	22 seconds
CRP	49 mg/L	ESR	21 mm
NT pro BNP	663 pg/ml	HBA1C	30 mmol/mol
Virology screen	Negative	Amylase	51 U/L
CA19-9	52 U/ml	Antinuclear antibody (Hep-2)	Negative
CEA	1.2 µg/L	Gastric parietal cell antibody	Negative
Alfa FP	<4 kU/L	Liver kidney microsomal antibody	Negative
LDH	924 U/L	Mitochondrial antibody	Negative
Caeruloplasmin	0.57 g/L	Smooth Muscle antibody	Negative
Erythropoietin	14.3 IU/L	IgG	24.5 g/L
JAK2 exon	Not detected	IgM	1.15 g/L
JAK2 V617F	Not detected	IgA	7.43 g/L

DISCUSSION

This patient presented with anatomical symptoms of his tumour, the feeling of distension, dyspepsia, and jaundice. the symptoms weren't thoroughly investigated on primary presentation due to it being a common complaint.
Interestingly, patient had high haemoglobin levels. It is known for sarcomas to cause the triad of polycythaemia, thrombocytopaenia and intractable heart failure. [2] This can be compared to this case as the tumour has likely emanated from vascular origin i.e., the inferior vena cava. Multiple studies have shown that primary hepatic leiomyosarcomas present insidiously and usually start in a vessel such as the portal vein and is associated with a tumour thrombus, it is of note that with this type of malignancy the patient has normal levels of neoplastic markers such as AFP, CEA, and CA 19 – 9. [3] Leiomyosarcoma is reportedly curable with surgical resection given that the tumour has no extrahepatic spread, and the patient is fit for surgery. Unfortunately, in this case the tumour has extrahepatic spread and thus this option was not feasible.
There is a proven link between hereditary retinoblastoma and development of sarcoma,[4] this patient did not have family history of retinoblastoma, but similar cases have been reported in the literature specifically for the development of liver sarcoma. [5]

CONCLUSION

For patients with dyspepsia who do not readily respond to simple measures; further investigations such as abdominal ultrasound should be offered. High haematocrit, low platelets, or acute heart failure should warrant further investigations. Future research is required to assess the link between childhood retinoblastoma and liver sarcoma to provide possible screening if such a link is proven.

References:

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