Abstracts i1255

Poster Session

## P883

## Hepatocellular carcinoma presenting as a tumor thrombus extending from the inferior vena cava to the right atrium in echocardiography

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Case: A 74 year-old white male with COPD, type 2 Diabetes, Atrial Fibrillation and a Pacemaker presented to our hospital for a routine echocardiography follow-up for mild to moderate Aortic Stenosis. His past social history was positive for moderate alcohol consumption but negative for tattoos, recent travel, illicit drug use, blood transfusion or chemical exposure. During evaluation in the echocardiography lab the patient had symptoms of dyspnea, fatigue and abdominal distension. He was hemodynamically stable and physical examination was positive for signs os ascites and inferior limb oedema, but disclosed no scleral icterus, asterixis, spider angiomata or overt hepatomegaly. There was a recent weight gain of 10kg. Cardiac and pulmonary auscultation was unrevealing. The echocardiogram revealed moderate left ventricle dysfunction (EF ~40%), moderate aortic stenosis and a dilated inferior vena cava (31mm) with an image of a mobile mass in the confluence of the central hepatic vein with the inferior vena cava with extension to the right artium. Initial blood chemistry and blood count revealed macrocytic anaemia; slight increased y-GT, C-reactive protein and NT-proBNP (6210pg/mL). The patient was admitted and anticoagulation with subcutaneous enoxaparin was initiated with echocardiographic follow-up. An abdominal ultrasound was performed which a hyperecogenic mass (71x47mm) adjacent to the right and left supra-hepatic veins, highly suggestive of hepatocelular carcinoma. A triple-phase abdominal CT confirmed a nodular lesion 70x50mm on segment VIII, compatible with hepatocellular carcinoma (Fig.1). A cardiac magnetic resonance was performed documenting the tumor extension to the inferior vena cava and right atrium, suggestive of tumor thrombus (Fig.2). Multidisciplinary meeting enrolled the patient in palliative care. The right heart failure picture was refractory to medical treatment and the patient progressed to multi organ failure and a consumptive state. He died approximately 20 days after diagnosis.

**Discussion:** Intravascular tumor extension, also known as Tumor thrombus (TT) is a rare complication of some forms of cancer. In the late stages of Hepatocellular carcinoma (HCC) a TT can form in the portal or hepatic vein. These are usually detected during tumor workup or during evaluation of cardiorespiratory symptoms in a patient with a known abdominal carcinoma. Tumor invasion to the portal system is quite common while invasion to the inferior vena cava (IVC) and/or heart without invasion of the portal system is rare. Tumor extension to the RA or IVC, most patients were either symptomatic, had cirrhosis, or both. Our patient presented mainly with signs of right heart failure refractory to medical treatment and had no signs of portal invasion or hypertension in the various image modalities. The prognosis for a HCC with extension to the IVC or RA is grim, with a 1 to 4 months of mean survival regardless of treatment choice.

Abstract P883 Figure.



Figure 1

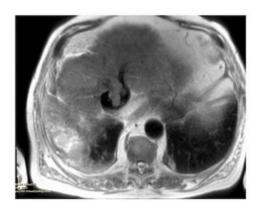


Figure 2