

## Unexplained Constitutional Symptoms, Weight Loss and the Heart

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A previously well 44-year old woman was reviewed in the emergency department for systemic malaise, night sweats and altered bowel habits for 4 weeks, weight loss of approximately 5 kgs over the last 5 weeks with a CT abdomen ordered by her General Practitioner a day prior to the admission. Additionally, she noted an unaccustomed lethargy for 8 months, possibly longer. Her background was non-contributory. She was not on any regular medications and had no known allergies to any medications. Her family history was not significant. There was no history of recent overseas travel. She is a non-smoker and has alcohol on a social basis.

Her physical examination was unremarkable. Her ECG and chest x-ray was unremarkable. Laboratory tests of note were haemoglobin of 99g/L (115-165g/L), Platelet count of 481x10<sup>9</sup>/L (150-400x10<sup>9</sup>/L), ESR of 101mm/h (0-15), CRP of 52mg/L (0-8). The WBC including MCV and differential count were normal. Serum electrophoresis showed the alpha 2 fraction was elevated with a mild diffuse increase in the gamma region, ANA: 1:80 with a speckled pattern, which was homogenous and the centromere & nucleolar pattern, were negative. The rheumatoid factor was normal. Mid stream urine including culture, three fecal specimens and sputum specimens for Mycobacteria and other pathogens were negative. The Mantoux test did not show any induration. She also had normal cervical, chlamydia and high vaginal swabs. She also had a normal CEA, CA-125 and gynecological cytology.

The CT abdomen did not show any intra-abdominal pathology but the top cuts demonstrated a small pericardial effusion. A transthoracic echocardiogram (TTE) done on day 2 of her admission, showed a heterogenous mass measuring 2.2 x 2.2 cms in the region of the fossa ovalis characteristic of a left atrial myxoma. A transoesophageal echocardiogram (TOE) on day 3 confirmed the TTE findings. There was no stalk noted (Figure 1). Other investigations completed were CT chest and coronary angiography, both of which were normal. She had surgical resection which confirmed a myxoma attached to roof of left atrium over an area approximating a 5-cent coin (approximately 2cms) with no stalk. The patient was reviewed in the cardiology outpatient department and is doing well.

### Discussion

Cardiac neoplasms remain enigmatic because of their rarity and protean clinical manifestations [1]. The most common primary cardiac tumour is the atrial myxoma, which accounts for 40-50% of all these neoplasms [2, 3, 5, 7]. It occurs more commonly in women, and is usually diagnosed between the ages of 50 and 70 years [4, 7]. Although the overall incidence of the disease is low (0.0001-0.5% in autopsy series), it provides unique diagnostic and therapeutic challenges [2].

Three major syndromes are observed: constitutional syndromes, embolic phenomena, and obstruction of blood flow [2, 8]. Constitutional symptoms occur in 30-50% of patients, most commonly with left atrial tumours. The constitutional symptoms are protean and are thought to be due to tumor secretion of cytokines such as interleukin-6 [9,11]. The symptoms resolve with removal of the tumour. They may mimic such disorders as bacterial endocarditis, collagen-vascular disease, and occult malignancy [5, 11]. They include fever, weight loss, clubbing, Raynaud's, myalgia/arthralgia, haemolytic anaemia. Laboratory tests may reveal elevated IgM or IgA globulins, ESR, C-reactive protein, elevated WBC counts and decreased platelet counts [11]. Embolism which is often dramatic in its presentation occurs in about 30-40% of left atrial myxomas and in over 50% of left ventricular myxomas. About 50% of emboli will affect the CNS. Obstruction is dependant on the location of the tumour. Echocardiogram usually confirms the diagnosis of cardiac myxoma. Transoesophageal echocardiography (TOE) is the test of choice [10]. It has better specificity and 100% sensitivity compared to transthoracic echocardiography [10]. Operative resection of the myxoma is the treatment of choice [1, 10]. Most benign tumours can be resected completely with excellent outcomes [1, 5, 9, 11].

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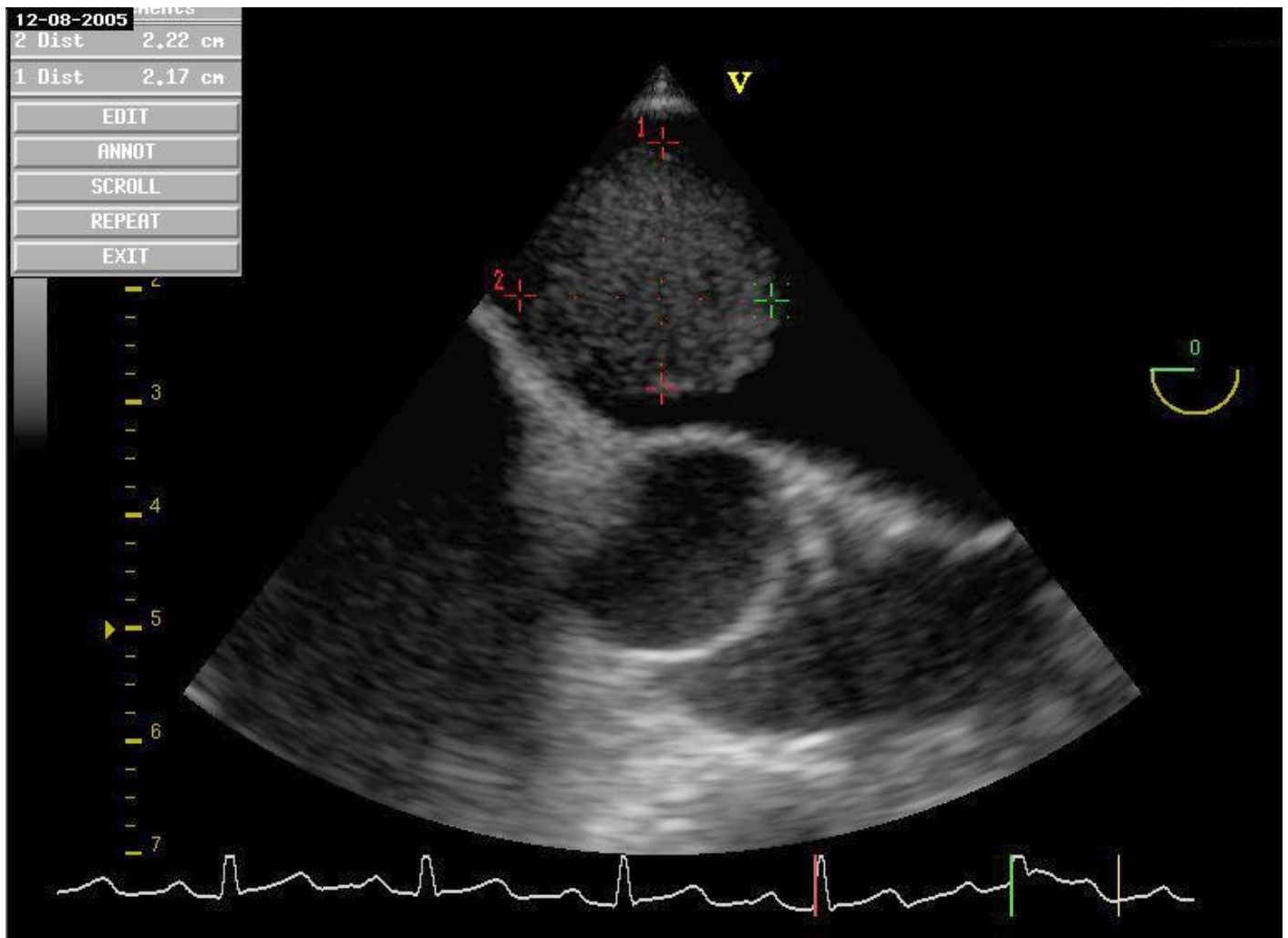


Figure 1. Picture of echocardiogram

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