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CARDIAC IMAGING QUIZ

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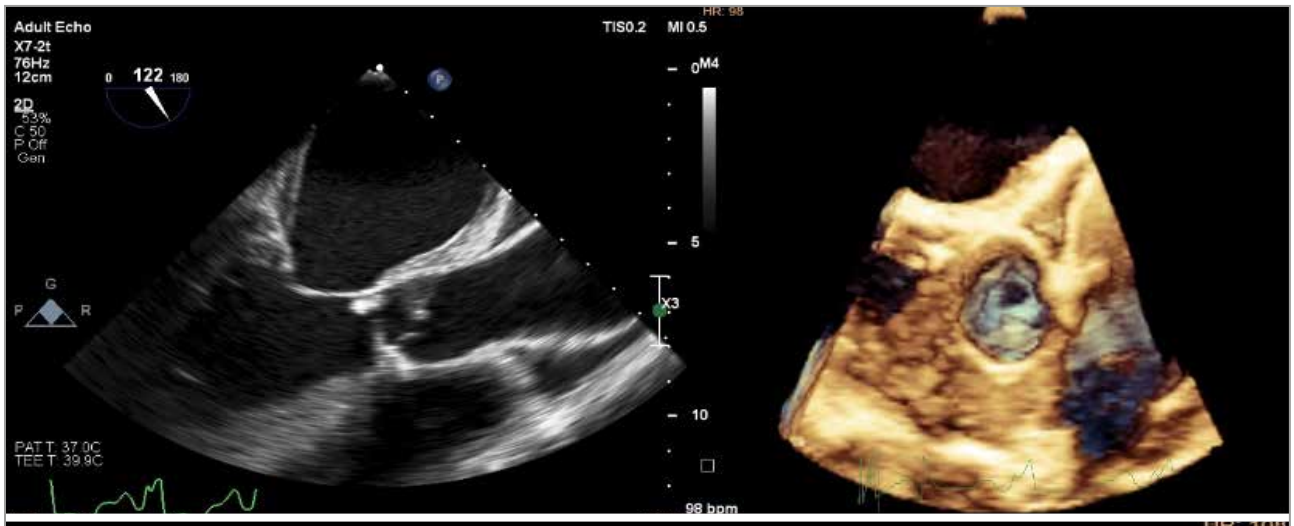

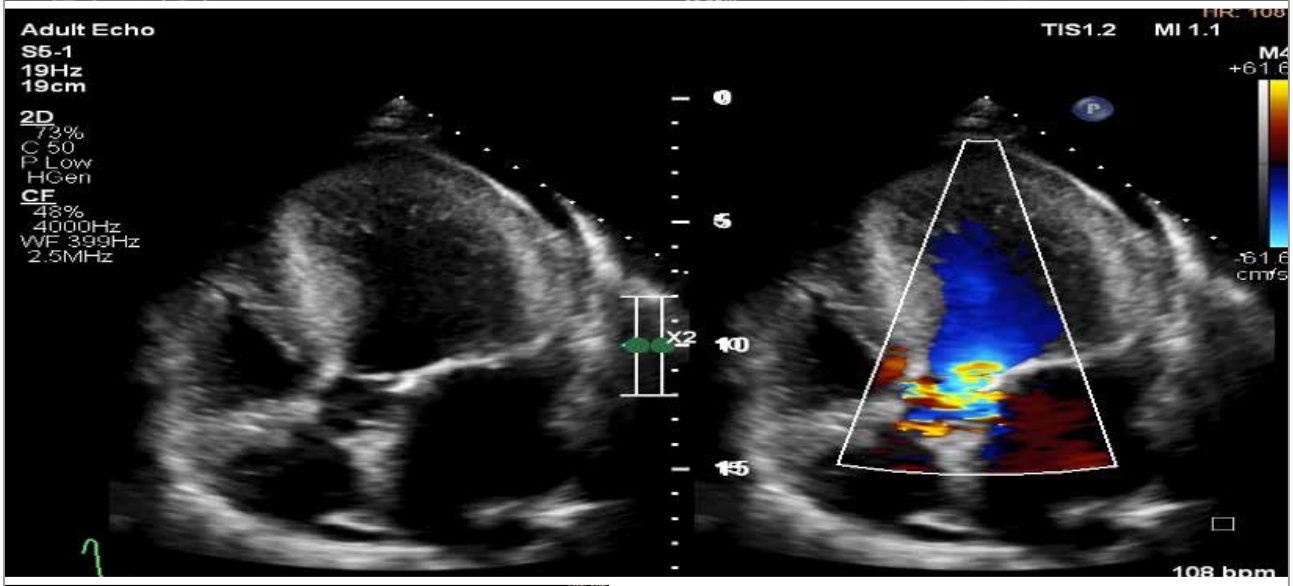

QUESTION: What is the diagnosis?

a. Mixed aortic valve disease
b. Aortic regurgitation
c. Aortic stenosis
d. None of the above

ANSWER

None of the above.

Subvalvular aortic stenosis due to a discrete subaortic membrane complicated by aortic regurgitation.

The echocardiographic images belong to a young male who presented with syncope. Subvalvular aortic stenosis has a prevalence of 6.5% and is one of the common adult congenital heart diseases. Transthoracic echocardiography plays an important role in the diagnosis and management of adults with subvalvar stenosis. Subaortic membrane (SM) is a condition characterised by the presence of a fibrous membrane or obstruction located just below the aortic valve. In this case it resulted in severe left ventricular outflow tract (LVOT) obstruction and aortic regurgitation. The mechanism of aortic regurgitation is related to an increase in LVOT pressure gradient and direct deformity of the valve from the high velocity jet through the stenotic orifice. Once a subaortic membrane is identified, it is important to rule out other congenital heart defects. Treatment consists of surgical excision of the membrane and close follow-with echocardiographic imaging for recurrence.

Conflict of interest: none declared.

SUGGESTED READING

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