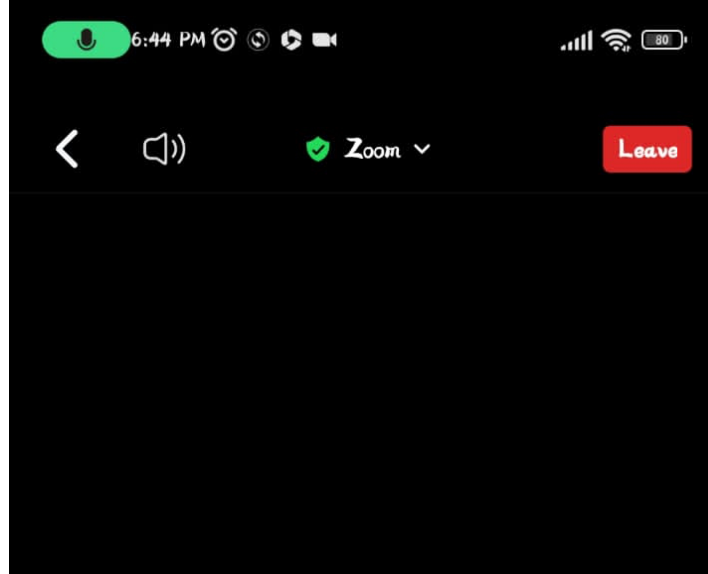


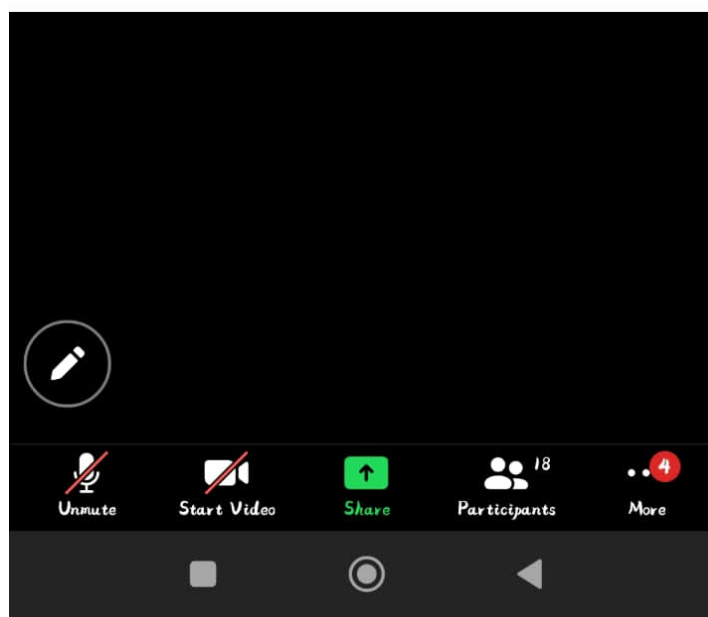


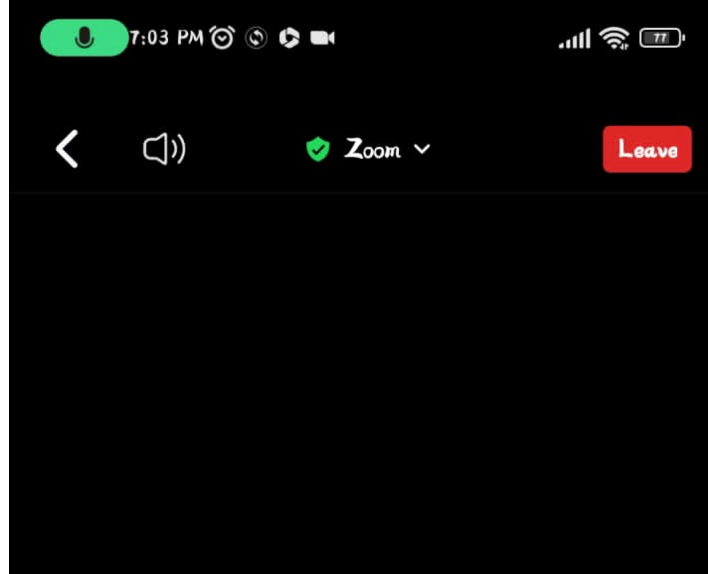
A 16-year-old man presents with a history of progressive cyanosis, haemoptysis, and episodes of syncope.

On examination, he has a notably prominent left precordium and an ejection murmur in the second left intercostal space.

What is the most likely diagnosis?

- A Atrial septal defect (ASD) with aortic regurgitation
- B ASD with aortic stenosis
- C ASD with mitral stenosis
- D ASD with pulmonary hypertension
- E Uncomplicated ASD

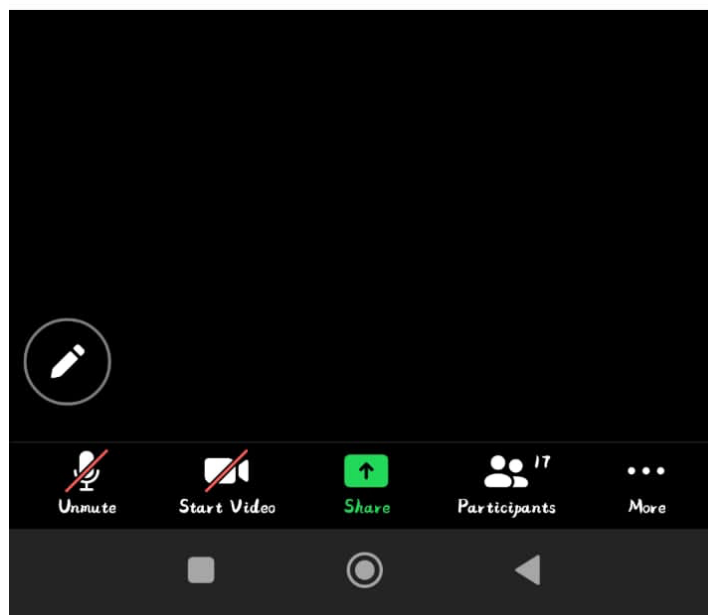


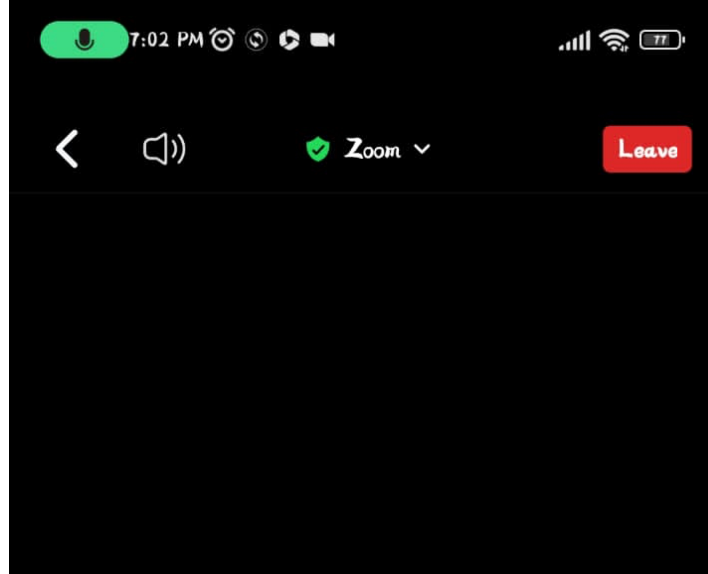


A 67-year-old man with chronic heart failure is reviewed in the cardiology clinic. He has a history of ischaemic heart disease as a cause of his chronic heart failure. He is currently taking a number of medications and would like a review of his drug therapy.

Which one of the following treatments has no proven mortality benefit?

- A Bisoprolol
- B Digoxin
- C Enalapril
- D Nitrates and hydralazine
- E Spironolactone

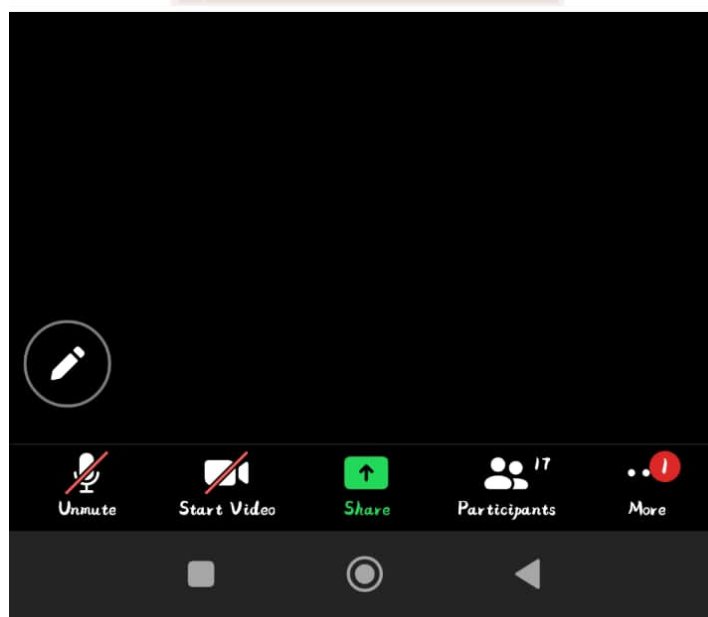


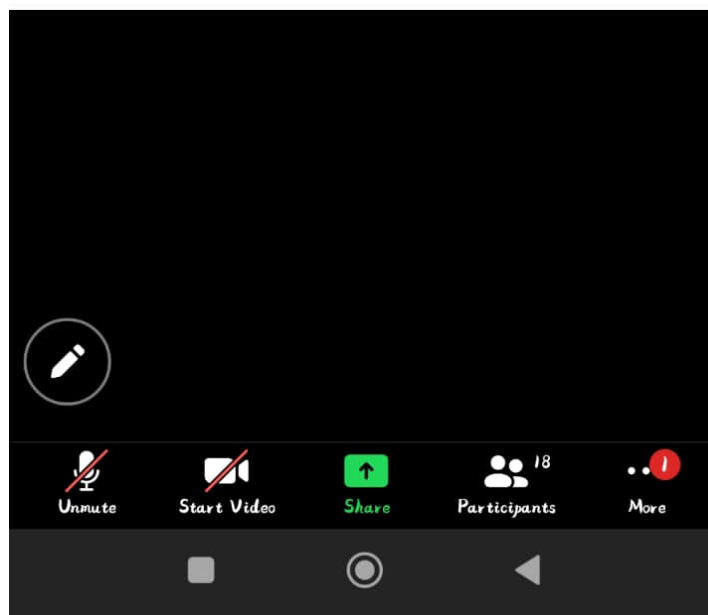
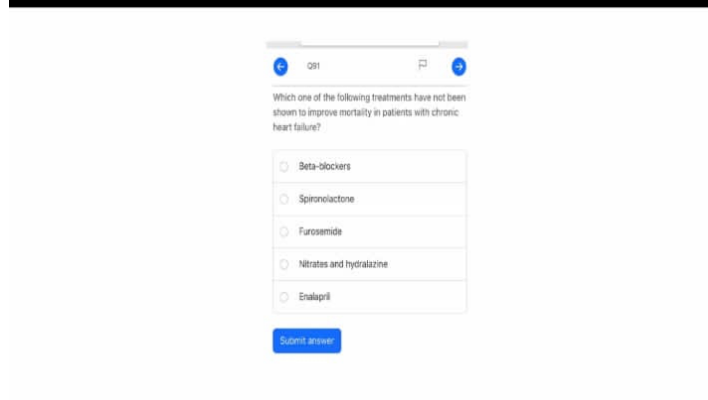
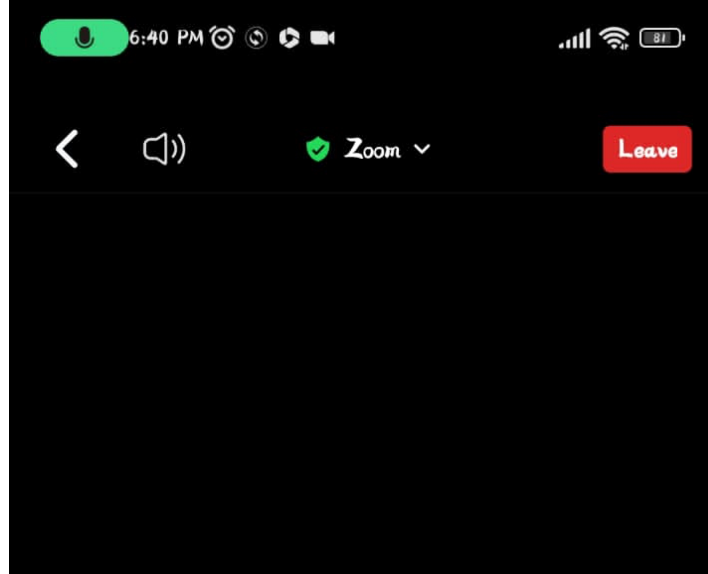


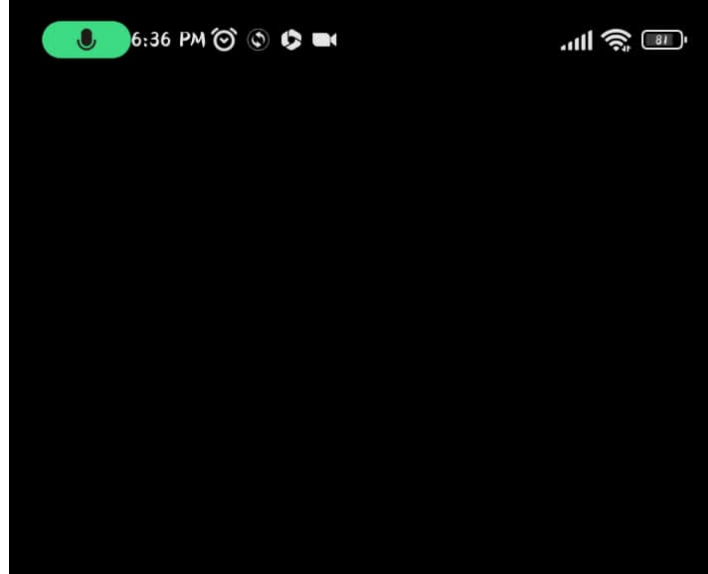
A 63-year-old man with known chronic heart failure is admitted with symptoms at rest. Examination reveals pitting oedema to his knees, elevated jugular venous pressure, and basal crepitations. He is in sinus rhythm at 80 bpm and his blood pressure is 100/60 mmHg. Current medication is bisoprolol (10 mg, once daily), frusemide (80 mg, once daily) and ramipril (2.5 mg, twice daily). Blood tests reveal a sodium concentration of 133 mmol/l, potassium 4.4 mmol/l and creatinine of 169 μ mol/l. The admitting doctor commences him on frusemide (80 mg, twice daily, iv) and increases his ramipril to 5 mg (twice daily).

When you review him the following day, which other drug would be most appropriate to include?

- A Amiloride (5 mg, once daily)
- B Bendroflumazide (2.5 mg, once daily)
- C Bumetanide (2 mg, twice daily)
- D Metolazone (5 mg, once daily)
- E Spironolactone (25 mg, once daily)







Q29

The neprilysin inhibitor, sacubitril, in combination with the angiotensin II receptor blocker, valsartan, has been shown to reduce mortality, reduce hospitalisations and improve symptoms in comparison to enalapril in the treatment of heart failure with reduced ejection fraction. What is its mechanism of action in heart failure?

- ☐ Improves myocardial contraction
- ☐ Prevents the degradation of natriuretic peptides such as BNP and ANP
- ☐ Reduces heart rate
- ☐ Multiple inhibition of renin, angiotensinogen and aldosterone
- ☐ Inhibition of vasopressin release therefore promoting diuresis

Raghd AR's screen



Q102

You have ordered a B-type natriuretic peptide (BNP) test on a patient with suspected heart failure. It has come back as being slightly elevated. Which one of the following factors may account for a falsely elevated BNP?

- ☐ ACE inhibitor therapy
- ☐ Beta-blocker therapy
- ☐ Furosemide therapy
- ☐ Obesity
- ☐ COPD

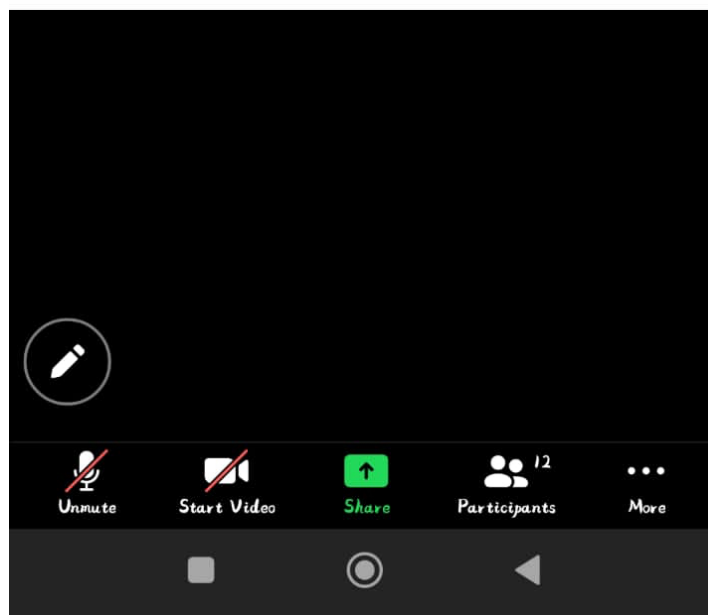
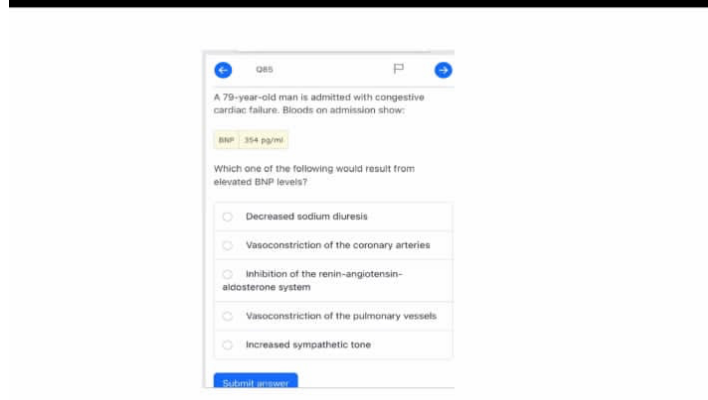
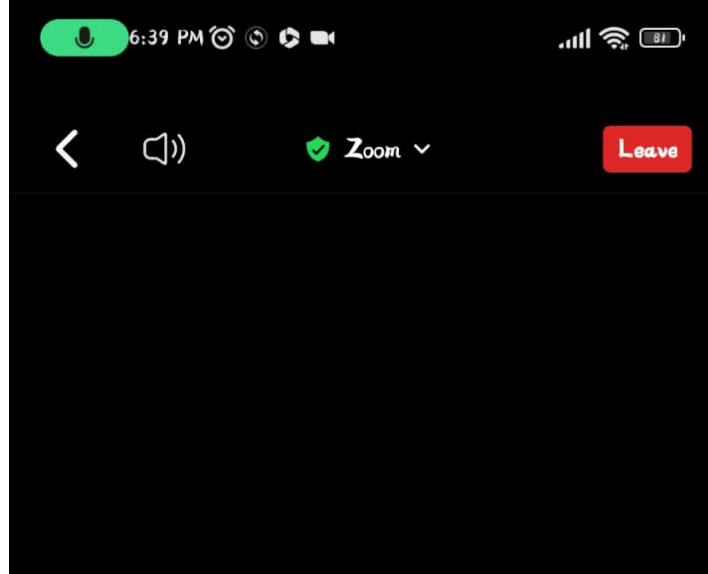
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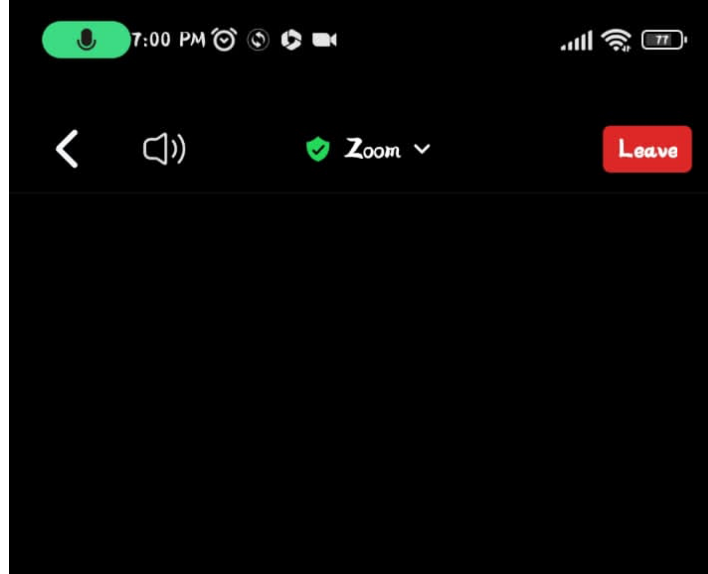
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What is the most likely diagnosis?

- A Atrial septal defect (ASD) with aortic regurgitation
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- C ASD with mitral stenosis
- D ASD with pulmonary hypertension
- E Uncomplicated ASD





A 60-year-old woman presents with exertional dyspnoea upon rushing upstairs or going to the local shops. She is in sinus rhythm at 80 bpm and her blood pressure is 160/80 mmHg without evidence of fluid overload. She is taking the maximum dose of an angiotensin-converting enzyme inhibitor (ACEI) and frusemide (40 mg, once daily) for long-standing hypertension. Echocardiography confirms significantly impaired left ventricular systolic function (ejection fraction, 35%). Coronary arteries and renal function are normal.

Which additional medication should be considered for symptomatic and prognostic benefit?

- A Amiodarone
- B Amlodipine
- C Bisoprolol
- D Isosorbide mononitrate
- E Losartan

