The following slides contain examples of questions from past HFA Certification exams.
A 68-year-old man was reviewed in the outpatient clinic with NYHA class III heart failure symptoms. He had long-standing severe left ventricular dysfunction, atrial fibrillation and a CRT pacemaker. Device interrogation demonstrated 77% biventricular pacing with frequent episodes of AF with uncontrolled ventricular response. He was taking bisoprolol 10mg once daily, ramipril 5mg twice daily, eplerenone 50mg once daily, digoxin 167.5mcg once daily, furosemide 80mg once daily and warfarin daily. He had previously been intolerant of amiodarone due to liver dysfunction. Physical examination was unremarkable.

Investigations:
- serum sodium 132 mmol/L (137-144)
- serum potassium 5.1 mmol/L (3.5-4.9)
- serum urea 8.6 mmol/L (2.5-7.0)
- serum creatinine 167 µmol/L (60-110)
- plasma digoxin (6hrs post dose) 1.4 ng/ml (1-2)

What is the most appropriate next step to improve his symptoms?

A. add diltiazem 120mg once daily
B. increase digoxin to 250mcg once daily
C. refer for AV node ablation
D. reprogramme pacemaker with trigger mode on
E. increase the pacemaker base rate
Which of the following echo parameters is normal?

A. mean E/e' > 14
B. mean E/e' < 10
C. septal e' < 7 cm/s
D. septal E/e' > 15
E. TR > 2.8 m/s