QUESTION 10 (CARDIOLOGY)

An 80yo woman with long-standing AF and HT is referred for a 2nd opinion on further management. She has been on metoprolol and started warfarin a month ago. She is asymptomatic.

On examination, she has an apex rate of 60/minute and BP of 136/84. She has no signs of cardiac failure. An ECG confirms AF. A CXR shows cardiomegaly with a cardiothoracic ration of 14.5/28 but clear lung fields. Echocardiography demonstrates left ventricular hypertrophy and diastolic dysfunction. Systolic function is preserved with fractional shortening of 28%. Atrial dimensions are normal.

Which of the following long-term management strategies is most appropriate?

<table>
<thead>
<tr>
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<th>Attempt DC cardioversion</th>
<th>Thromboprophylaxis</th>
<th>Anti-arrhythmic therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Yes</td>
<td>Continue warfarin</td>
<td>Beta blocker</td>
</tr>
<tr>
<td>b</td>
<td>Yes</td>
<td>Change to aspirin</td>
<td>Beta blocker</td>
</tr>
<tr>
<td>c</td>
<td>Yes</td>
<td>Change to aspirin</td>
<td>Amiodarone</td>
</tr>
<tr>
<td>d</td>
<td>No</td>
<td>Continue warfarin</td>
<td>Beta blocker</td>
</tr>
<tr>
<td>e</td>
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</tr>
</tbody>
</table>

Answer D

Rate control vs Rhythm control in AF

- Two big trials (RACE and AFFIRM) both show that there is not difference in thromboembolic events between rate control methods and rhythm control methods.

- It is recommended that all patients with AF be on warfarin unless there is a contraindication

- This includes patients who have been successfully reverted with either DCR or medications

- Most likely these patients will still have episodes of AF and can be completely asymptomatic

- So, the 1st thing is to continue warfarin

- Rate control or rhythm control are both acceptable approaches

- In most patients rate control is employed:
  - There is a trend toward reduced mortality with rate control
  - Multiple potential side effects to anti-arrhythmic drugs
  - Recurrent AF is common after reversion (DCR or medication)

- Rhythm control should be considered for patients who:
  - have persistent symptoms despite rate control
- cannot be adequately rate controlled
- have a preference for reversion

- In addition there is a tendency to attempt rhythm control in young patients with a first presentation of AF (with DCR)

- So, in this 80yo woman rate control is going to be the best option, especially if it has been working so far

- Having said this there is a theoretical advantage to rhythm control in patients with heart failure as the failure would be easier to control and in diastolic failure the heart relies on the atrial contraction to push that last bit of blood through to the ventricle

- There have been to trials on this though, and this patient is not symptomatic with her failure so don’t really need to worry about this

- Therefore answer is d: continue warfarin, continue Bblocker, not for DCR

- Just for some additional info, risk factors for thromboembolic event in AF:
  - age > 65
  - female
  - Hx of TIA/stroke
  - HT
  - DM
  - CCF