Patient Case Review: Choosing the Appropriate Patient for MULTAQ

David S. Cannom, MD
Clinical Professor of Medicine
UCLA School of Medicine
Director of Cardiology
Good Samaritan Hospital
Los Angeles, CA

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DR. PRYSOWSKY:

Thank you very much. David, let me turn it over to you to discuss the clinical management of AFib.

DR. CANNOM:

Well, thank you, Eric. My job is much easier given the fact we had three excellent talks on the topics you discussed, and the part about the clinical trials really makes the discussion of who to treat and how much easier. Let me just give you a few of my rules of the road for treating atrial fibrillation, which are obvious to all the clinicians in the audience. And there are two or three, really, I want to just discuss very briefly before I get to actual cases. One is that you have to know what rhythm you're treating, and the words that patients use to describe atrial fibrillation can apply equally well to other rhythms that you wouldn't necessarily want to treat with an antiarrhythmic drug such as supraventricular tachycardia, atrial premature depolarizations, VPCs. I think you owe it to the patient to obtain a very accurate record of what they're complaining of, either a Holter monitor, or long-term monitoring.

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(CONT'D)

Second, I think you owe it to the patient to take a very, very thorough history. These patients are some of the most difficult to take care of in terms of the amount of energy that the physician and his staff exert, and because of that, you need to make sure the patient needs to be treated, and that only comes from a very thorough history, and you really need to be sure that the patients affected by his or her atrial fibrillation, that he or she is not asymptomatic as probably 30 percent of atrial fibrillation patients are, although my bias on that point is that we tend to underestimate just how asymptomatic persistent atrial fibrillation patients are under treatment. But that's a whole other seminar.

Thirdly, it's critical early in your algorithm, your treatment algorithm, to make a decision about anticoagulation. This is not a seminar on anticoagulation, but you need to have that problem resolved before you get into antiarrhythmic drugs.

ARS Question

Is recurrence of AF a failure of therapy?

1. True
2. False

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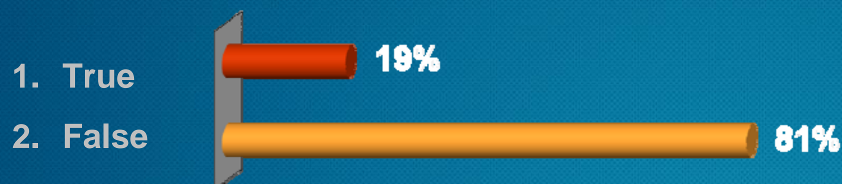
DR. CANNOM:

So, with that thesis being presented, and I see no shaking heads. Let me proceed with my three cases. But first, a question, a question that most clinicians will get in a snap. Is recurrence of atrial fibrillation a failure of therapy? True or false.

ARS Question

Is recurrence of AF a failure of therapy?



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DR. CANNOM:

Eighty-one percent were right, the other nineteen percent I'm sure will agree with what I'm going to say in another five or ten minutes. Atrial fibrillation recurrence is part and parcel of taking care of atrial fibrillation patients, and the fact that we don't have a perfect drug means we're going to have patients who have recurrences.

So having said that, let's move on to three hypothetical cases, but hypothetical in being logical extensions of Peter Kowey's remarks, because these patients are not I think the most difficult on your treatment spectrum, but still take home the points I think we want to make about drugs and patients.

Patient Case #1

- Sara is a 75-year-old woman with a history of hypertension for which she has been prescribed lisinopril. About a year ago she noticed occasionally waking up with a pounding in her chest, breathlessness and sweating.
- On work up, the internist diagnosed paroxysmal atrial fibrillation, prescribed metoprolol to control her heart rate, and added warfarin.
- Sara's episodes of arrhythmia have now increased in frequency; she has been referred to a cardiologist for further management and treatment.

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DR. CANNOM:

The first patient is a 75-year-old woman with a history of hypertension on lisinopril, and over the past year she has been worked up for a pounding sensation in her chest, breathlessness, and sweating. That, as I mentioned, I think could be anything, but certainly suggests atrial fibrillation. On workup, which I assume is extended monitoring of some type, the patient was diagnosed with PAF. She was given metoprolol to control her heart rate, and warfarin was added. So the initial decision was to control the rate. From the patient's description she's highly symptomatic, and unless there's more to the story that we're missing, she would seem to be a candidate for antiarrhythmic drug therapy and not just rate control. And if the symptoms increase in frequency, she is now referred to a cardiologist who will prescribe therapy for her.

Patient Case #1 (cont'd)

- P/E:
  - Pulse: 84 bpm, regular
  - BP: 112/80 mm Hg
  - RR: 20/min, lungs clear
  - No gallops or irregular heartbeat
- Past Medical History:
  - H/o AF episodes in past year, some cardioverted, some reverted without cardioversion
  - HTN
- Medications:
  - Metoprolol, lisinopril
  - Warfarin
- Labs and Tests
  - ECG
    - Normal sinus rhythm
  - ECHO
    - No wall motion abnormalities
    - LA diameter: 28
    - LVEF: 55%
    - No LVH
  - Negative Stress Thallium
  - Chest Xray
    - Lungs NAD
    - Heart WNL
  - PT/INR
    - 2.4 on 2.5 mg/d of warfarin

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DR. CANNOM:

This is the more precise clinical data. You can see that the history and physical are unremarkable, her past medical history doesn't really elaborate much more than what I've told you. Her medications are metoprolol, lisinopril and warfarin. Her EKG is unremarkable. Her echo ejection fraction is normal, and her INR is in the normal range. Remember, just to again, raise the specter of anticoagulation, her CHAD score being 75, and having hypertension is 2, so she is clearly a candidate for anticoagulant.

So having heard the three talks, and my introduction to this topic, what would you want to do with this patient?

You could make a case for this being a patient to begin MULTAQ therapy as an outpatient--it should be the first therapy--and simply see at 400 milligrams bid how the patient does. And there is a strong expectation that the patient will do well.

Patient Case #2

- Laura is a 72-year-old woman with hypothyroidism who had been diagnosed with paroxysmal AF and NYHA Class II heart failure 3 years ago
- She currently takes metoprolol, warfarin, HCTZ and thyroxine
- She had presented with complaints of an increase in her AF symptoms a week ago and was fitted with an mobile cardiac outpatient telemetry event recorder (MCOT) at that time
- Today she has come to her cardiologist for review of her MCOT, labs and follow up

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DR. CANNOM:

So, let's move on to the next patient who is very much like patient number one who was kind of a mirror image of the characteristics of the ATHENA trial.

This is Laura, who is a 72 year old woman, with hyperthyroidism, who has been diagnosed with PAF. She had an episode of class two heart failure three years ago. It's important to try to figure out what that was, knowing that she is of a certain age. I think you'd suspect that she likely had a case of diastolic dysfunction that was treated at that time, but one can't be sure. It would be nice to get the exact details of that. But going forward, it will not affect our choices.

She's on a beta blocker, warfarin, hydrochlorothiazide and thyroxine. And her complaints are those of increasing symptoms, over the past week, and she had a mobile outpatient cardiac monitor that demonstrated atrial fibrillation, so we're sure what her rhythm is. And today, she sees her cardiologist for evaluation of her outpatient monitor.

Patient Case #2

- **P/E**
  - Pulse: 64/min, regular
  - BP: 106/78 mm Hg
  - RR: 20/min, lungs clear
  - No gallops or irregular heartbeats
  - No edema noted
- **Labs and Tests**
  - ECG
    - NSR
  - ECHO
    - No wall motion abnormalities
    - Mild dilation of left atrium
    - Mild LVH; LVEF: 60%
  - MCOT
    - Occ. PVCs; runs of AF 3 times in past week, 30 min duration, vent rate 100-110/min
  - Chest Xray
    - Lungs NAD; Heart WNL
  - TSH
    - 0.45 mIU/L
  - Electrolytes
    - Na: 137 mEq/L
    - K: 4.0 mEq/L
  - PT/INR
    - 2.4 on 2.5 mg/day of warfarin

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DR. CANNOM:

Again, she’s in sinus rhythm with normal blood pressure, normal exam, normal EKG. An echo that does not reveal systolic heart failure. Her EF is 60. That’s important. No wall motion abnormalities. And her MCOT shows occasional PVCs and runs of A-fib, so we’re sure we’re on to the right rhythm. Chest x-ray, thyroid functions are unremarkable. Her electrolytes, despite her hydrochlorothiazide, show a normal potassium. And again, her INR is in the normal range. She is also on Coumadin, as we know.

So, I think it's very reasonable to start MULTAQ as an outpatient with a high probability of success, and a very low complication rate in this elderly patient, hopefully being on it for a long time.

Patient Case #3

- William is a 62-year-old man with a history of hypertension for which he has been taking valsartan. He has a history of PAF for 3 to 4 years for which he was taking AAD and warfarin therapy
- He was admitted to the hospital on for persistent palpitations, dizziness and a fall resulting in a broken left wrist
- On admission he was found to be in AF with rapid ventricular rate

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DR. CANNOM:

The cases are becoming a bit more complicated. The third patient is a 62 year old male, with hypertension, has been taking valsartan. He has a history of PAF for a long time, three to four years. And he has been taking an antiarrhythmic drug now, unspecified, and he's on warfarin.

He comes into the hospital with palpitations, and had a fall and broke his left wrist. And he was in atrial fib with a rapid ventricular rate at admission.

Patient Case #3

- P/E:
  - Heart rate: 86
  - BP: 118/76 mm Hg
  - RR: 20/min
  - Irregular heartbeat on auscultation
- Past Medical History:
  - HTN
  - AF
- Labs and Tests
  - ECG
    - AF with RVR
  - ECHO
    - No wall motion abnormalities
    - LVEF: 60%
    - LA size: 5.1
    - No LVH
  - Distal fracture left wrist on xray
- PT/INR
  - 2.3 on 2.5 mg/day of warfarin

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DR. CANNOM:

He, despite the fact he has … said to have a rapid ventricular rate, his pulse is not … and counted as anything more than in the mid eighties. Perhaps we're seeing a demonstration of the pulse deficit that's been described through the years, again, pointing to the need to auscultate if you're going to get a true rate. He has hypertension and AF, as you know. He's in atrial fibrillation with a rapid ventricular response, and his echo EF is preserved. His LA size is slightly enlarged. And he, too, is in the therapeutic range for his INR.

So I think what you do is, you'd begin MULTAQ and you'd cardiovert the patient the next day, or the same day. I think if we're talking in that direction, there's no reason not to do it this way. But I think starting MULTAQ, cardioverting the patient, and then following him is a very reasonable therapy for this.