

**THE AFIB REPORT**  
**Your Premier Information Resource for Lone Atrial Fibrillation**  
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## VIRTUAL LAF CONFERENCE

Proceedings of 21st Session  
January 9, 2004 – January 25th

### SUBJECT: Ablation Sequels

As more and more afibbers undergo pulmonary vein isolation (PVI) or other ablation procedures several questions arise with increasing frequency:

- What is the risk of developing stenosis in one or more pulmonary veins after the ablation?
- What are the chances that the heart rate will become elevated after the procedure and is this elevation permanent or does the heart rate eventually revert to normal?
- What is the risk of developing left atrial flutter after the procedure and can this be fixed via a touch-up procedure?
- What are the chances that new, or previously undetected, abnormal heart rhythms such as ventricular bigeminy (a premature ventricular beat (PVC) following each normal beat) will develop after the procedure and what can be done about it?
- If the ablation is unsuccessful and cannot be fixed via a touch-up procedure will I be worse off as far as episode frequency and duration is concerned than before the procedure?
- How frequent are touch-up procedures and does one have to pay once more to have them?

The most recent ablation survey (November 2003) found that an increase in pulse rate following the ablation was quite common. Ten out of 19 respondents reported an increase in rate, eight reported no change, and one reported a decrease. The average (mean) increase was 12 bpm with a range of 7 to 29 bpm. Three respondents reported that their pulse rate reverted to normal after about a year, but another 4 had experienced no reversal after a year or longer. The remaining 3 were too close time-wise to their ablation to conclude whether their pulse rate would return to normal. I have been unable to find any studies that have investigated the possible long-term consequences of an increased heart rate subsequent to ablation therapy.

I want to thank NJB for the suggestion to make these questions the next topic in the Virtual Conference Room and hope you'll share your experiences with your fellow afibbers.

***Hans***

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I guess I'll jump head first into this new topic. For those who might not know my story: Started having AF symptoms in Dec. 01, was eventually unable to work, had a PVI in Aug. of 03'. The way things stand as of now are-I consider myself

cured of AF.I have remained on a small dose of Metoprolol(25 mg per day) due to the fact that every time I've weaned off I experience rapid HR(not arrhythmia) especially in the middle of the night. Just today I saw my surgeon for the last time and he recommended I start weaning off the Beta blocker. So, for the third time or so I will take the 25mg every other day and hopefully within 2 weeks I'll be off the meds for good. I'm back up to just about where I was before AF as far as working out and aerobic activity. It does seem to take longer for my resting HR to return to normal (60 BPM) after exercise. Overall I couldn't be happier with the results of my PVI.I returned to NSR very soon after the procedure. Even the skipped beats haven't happened for a few months.

**Sammy**

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To make a long story short, after being treated for atrial flutter and then atrial fibrillation for 5 years, it appears I have finally gotten rid of both through the efforts of many, but especially my EP and the Cleveland Clinic.

I, like Sammy, had an ablation in August 2003, and have not had any documented afib since then. Thank God and all who helped me.

However, I still have a heart rate that seems to high, documented PVC'S - singles & ventricular bigemini (still waiting for summary of 30 day event monitor which was completed December 9th), and spells of fatigue which I suspect may be caused by the PVC'S.

More details later.

**NJB**

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Sammy,

You may find it easier to wean off the metoprolol if you take 12.5 mg every day rather than 25 mg every second day.

**Hans**

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It's worth a try. I'll start Sunday since I don't have to work that day. Thanks Hans.

**Sammy**

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Sammy - some time back, I weaned off metoprolol by shaving off a bit for each dose until there was none to shave. It took about six weeks since I was on 50 am and 50 pm.....but I didn't experience any rebound effect with the shaving. It may not be necessary for you to go so slowly, but I didn't want to take any chances.

**Jackie**

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I started on Sat taking 12.5 mg every other day.So far so good.I'm hoping that my body is ready for this change.

**Sammy**

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Hello All,

When telling your stories of ablations, I would be very interested to know what changes any of you made, before having your ablation, i.e. diet, supplementation, the time allowed for these changes, what your triggers were, if any,

exercise regimens, meds you took, and whether they worked, etc....

I had two flutter ablations done at the UW Hospital in Seattle, by EP Dr. Poole. Neither worked, and the second one caused me to go into AF, which then reverted back to flutter. I think the AF was caused more by beta blockers, however. I presently take flecainide and it is working well for me, with only a few breakthrough episodes caused by MSG and/or sulfites. I've been on the Paleo diet for 11 mths. now, and am supplementing heavily with amino acids and vitamins. I am hopeful that this will work, as I feel better than I have in a long time. I might add, that I feel my flutter was brought on by taking Prevacid.

**Richard**

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Richard

I have not had any ablations at this time but am getting things together for doing so as soon as possible. I have had afib and PVCs for too many years. I have tried all kinds of supplements that have been recommended and all kinds of diet changes. I even spent two days with a cardiologist guru that specializes in diet and drinking nothing but distilled water or reverse osmosis water, no beef, pork, poultry, only coldwater baked, broiled, or grilled (not smoked) fish. Not any of these regimens helped me one bit. Only benefit I received is the fact that I am able to control my Type II diabetes by eating only fresh fruits and vegetables either raw or lightly steamed and nothing that has been processed or out of a can. I have come to the conclusion that only PVA(I) or Maze surgery can help me.

Regards,  
**Glenn Camp**

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I had a PVI at MUSC in August. I have had no events since then that I would call afib -- only a few flutters or "skipped beats" in the few weeks following. I was taken off sotalol for the procedure and told to use it if needed afterwards, but I haven't taken any more. Because I had a stroke a little over a year ago, both Dr. Wharton and my EP wanted me to remain on coumadin for at least six months post ablation. I have had two 48-hour Holter monitors and expect another soon. I don't have any results back on this yet. No symptoms of stenosis, but I have not had CT or any other specific assessment. My pulse pre-afib was around 60. After the procedure it went up to the mid 80s and stayed there for 2-3 weeks, then gradually dropped back into the 70s and seemed to plateau there for a while. Now it is mid to upper 60s. In my initial visit with Dr. Wharton, I asked about the touch-up procedure and he said that it was basically the same as the initial ablation. Thus, I would guess that the cost would be similar.

**Dick**

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Now that I have some free time I will continue with details...

1. I had 0% stenosis at my 3-month post PVI.
2. Heart rate seems higher, but it's hard to prove. I do remember that in 1995, a few years before I was diagnosed with arrhythmia, it would be about 111 as I was cooling down & walking on my Nordik Trak. That monitor broke, so I now I use the one in the drug store. (I have great difficulty taking my own pulse. Intend to buy a stethoscope soon.) Ever since my ablation, I get a reading from about 100 - 115 after sitting down for a few minutes. So it appears that my "sitting pulse" is now what my "walking pulse" was in my pre-arrhythmia days. This disturbs me, but when Doc took it lying down it was 96 and he said not to worry. Nurse said it may go down over the next year.
3. I had already had 3 flutter ablations before the PVI. The third flutter ablation succeeded. About 15 hours later I developed Afib.
4. It appears that I developed ventricular bigeminy after my PVI because no one ever mentioned it in all the 5 years that I was treated for arrhythmias.  
I am still waiting anxiously for the summary of my 30 day event monitor to tell me exactly how many & how severe they

are. I counted 22 PVC'S per 60 seconds in one episode. I asked my EP how many PVC'S are too many - he said if they are every other beat. Which I had many times during the 30 day event monitor. I guess the question now is about duration. I often feel like I'm in afib and suspect it's because of the PVC'S.

EP says a PVC blocks the beat--it doesn't create a heartbeat, so it doesn't increase your HR. Said I could take Atenolol for symptoms if I wanted to, but didn't have to . Said he could map them at some time in the future, but guess he thought it was to soon after PVI.

Nurse at Clinic discouraged me from taking Atenolol unless they continued more than 30" after lying down. Problem is that I only diagnose myself correctly about 50% of the time. I am dependent on a monitor to get the whole story. She also told me that the reason they didn't show up before PVI was because they developed into AFIB. But now those nerve endings have been burned out.

So now I guess I have the precursor to afib??? Feeling quite confused about this issue.

5. While researching bigeminy, I ran across an article from **J Interv Card Electrophysiol. 2002 Dec;7(3):233-41. Reithmann C, etc.**

Pulmonary vein bigeminy is the pair of a second, late, and ectopic pulmonary vein potential during sinus rhythm. The aim of this study was to determine the electrophysiological characteristics of pulmonary vein bigeminy and to evaluate its relevance as a trigger for paroxysmal atrial fibrillation. METHODS & RESULTS: Pulmonary vein bigeminy was recorded in 8 of 45 patients(18%) who underwent mapping of pulmonary veins for ablation of focal atrial fibrillation.....CONCLUSIONS: The response of pulmonary vein bigeminy to atrial pacing and ostial ablation suggests that pulmonary vein bigeminy depend on an intact electrophysiological breakthrough between the left atrium and the pulmonary vein. Ablation targeting the pulmonary vein bigeminy is a possible limited approach for this subgroup of patients with paroxysmal atrial fibrillation.

WHATEVER!!

6. Some trivia about possible PVI complications. When they started to ablate my SVC after the pulmonary veins, they "captured the phrenic nerve" and had to pull back. The phrenic nerve controls the diaphragm which is PACEABLE!

7. In summary, I'm extremely grateful that the afib is gone and I'm off all medication. But I still don't feel totally cured because of the high HR and some symptoms which feel much like afib. Hopefully in another month, I will have the 30 day event monitor results back and that will give me more peace of mind (or not).

Thanks everyone for your input!

**NJB**

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Hans and all - I'd like to respond to this and I will, but I need to organize what I have to say so it isn't a lengthy and boring report.

I'll be working on it as soon as I finalize the taurine post I'm completing.

**Jackie**

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The ventricular beats, bigeminy, and SVT are what drives me up a wall and makes me feel so bad. I can't stand or walk, only can sit or lie back slightly but not flat. These make me feel like I'm dying.

**Glenn**

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Glenn,

Sounds to me like you should talk to your doctor about the possibility of getting weekly magnesium injections for a while.

**Hans**

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Hans I'm taking extra Magnesium already and have been since the middle of October.

**Glenn**

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Glenn,

You may be extremely low in magnesium, in which case oral supplementation would have little, if any, beneficial effect. You would need intravenous magnesium in order to regain your ability to absorb it orally.

**Hans**

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Hans my cellular magnesium shows to be close to a full tank.

**Glenn**

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Want to express something that I realized after previous post. Perhaps I had bigeminy or the makings of bigeminy before my PVI ablation, but it fast forwarded into afib and didn't manifest itself as bigeminy. I think that's what the nurse was suggesting.

Checked my HR again at store. Before shopping - about 102. Thirty minutes later after shopping - 107, 109. Disconcerting, but was told it could take up to one year for HR to drop down.

**NJB**

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It's been a full week of less than 12.5 mg every other day and no problems at all. I think I'll finally be able to kick the beta blocker habit very soon.

**Sammy**

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Sammy - I had a PVI ablation about the same time as you and am bothered by a heart rate which is often around 100. I just reread your post & see that you were having a similar problem.

How is your HR now that you are off beta blocker?

Or did you go back on it again?

**NJB**

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njb and all, I've been off the Beta for about a week now with no problems. As I'm sitting here right now my resting HR is about 60. I'm pretty sure that as long as I stay away from coffee I won't need the Metoprolol any longer. It's nice to go

out anywhere without thinking about bringing my meds along "just in case." At my peak (or low point) I was on 150mg of Flec and anywhere from 75 to 200mg of Toprol....I'm feeling good enough to post this in the regular BB..

**Sammy**