

THE AFIB REPORT

Your Premier Information Resource for Lone Atrial Fibrillation!

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Editorial

Welcome to the sixth issue of *The AFIB Report*. In this issue we continue the reporting of the results of the LAF survey with at least one rather startling conclusion. Afibbers who take drugs have more episodes than afibbers who do not. The reason would seem to be that over 70% of afibbers with the vagal variety are prescribed drugs that are directly contraindicated for their condition. Why would cardiologists so persistently prescribe the wrong drugs? The explanation is probably fairly simple. Upwards of 95% of all the afib patients that a cardiologist sees have underlying heart disease. Afib connected with heart disease is, without exception, adrenergic in nature. So the standard protocol for atrial fibrillation is geared towards adrenergic afib and is exactly wrong for vagal afibbers. In part IV of the survey we will try to get a handle on which drugs, if any, work for adrenergic and vagal type LAF. Enjoy – and as always – your comments are most welcome!

*Yours in health,
Hans Larsen*

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Survey Results – Part III

A quarter of all respondents have hypoglycemia (low blood sugar) and another 24% have symptoms of hypoglycemia. About half the ones having diagnosed hypoglycemia felt that there was a definite correlation between a hypoglycemia episode and a LAF episode. This, in a way, is good news as it is fairly simple to quickly abort a hypoglycemic episode.

A full 44% reported digestive problems and many felt that there was a correlation between these problems (bloating, belching, reflux, etc.) and their LAF episodes.

In general respondents were healthy with only 36% reporting other disorders than LAF. Anxiety, asthma, and high cholesterol were most prevalent. Only 17% were taking pharmaceutical drugs for disorders other than LAF.

Most (56%) could feel an episode coming on. This again is good news as they may have enough time to abort the event by getting up and exercising (vagal) or taking a beta-blocker (adrenergic). Almost 90% experience ectopic (premature) heart beats from time to time and 70% of those felt there is a correlation between ectopic beats and a LAF event.

The most common side effect of a LAF episode is fatigue which is felt by 63% of all respondents. This is followed by dizziness (33%), anxiety or fear (17%), shortness of breath (11%), increased urination frequency (11%), nausea (9%), and tightness across the chest (9%). Seventeen per cent reported no side effects at all. Please note that the percentages do not add up to 100 as many respondents reported more than one symptom.

The maximum pulse rate during an episode ranged from 60 to 260 bpm with an average of 145. The minimum rate was between 35 and 100 bpm with an average of 72.

Most people with intermittent (paroxysmal) LAF did not go to the hospital or emergency clinic when experiencing an episode. The remaining 13% did go to the hospital with about half of them receiving cardioversion. Interestingly, only two of the six respondents who did go to the hospital felt that this helped to convert to sinus rhythm quicker.

The most popular drug used to speed conversion to sinus rhythm was flecainide (Tambocor) which was used by 12% (either at home or in hospital). However, most people (53%) just rested or otherwise waited out the episode. Seven per cent found light exercise to be beneficial and 5% found sexual intercourse to shorten a long episode. One respondent was able to terminate a hypoglycemia-related episode within 5 minutes by eating a "power bar".

Atenolol (Tenormin) was used by 22% to slow down the heart rate during an episode followed by verapamil at 13%, propafenone (Rythmol) at 9%, and sotalol (Betapace) at 7%. Forty-eight per cent of all respondents did not use any drugs for slowing down the rate.

The time to recover fully from an episode varied from a few minutes to two weeks with an average time of 32 hours. About 13% of all respondents did not feel that having LAF had affected their quality of life. Forty-two per cent felt they had been moderately affected and 17% felt their life had been severely affected if not devastated. Here are some of the more poignant comments from the survey:

"Basically it has, over the last 30 years, changed my life. While I look at it as a life lesson(s) - HA! I really do not have any other option. It concerns me to the extent that you never know when an episode will occur - while it is not that frequent - I still know that it could happen anytime or anywhere. It has and will have input on travelling, activities etc. It is just a limitation on my system - and one that I have to understand - or it will remind ME!!! I guess it's like having a 30-year electrical short in your car and not being able to find it!! It does influence where you take it and where you park it. I have always looked on life as a glass half full - so in all honesty, while afib is my albatross, it has taught me a lot about myself that I never would have learned. So, for that reason, I am very thankful. You learn to play with the cards that the dealer gives you!!"

"I'm nervous travelling, I drink much less, I have completely changed my eating patterns, I get depressed easily, I have quit my job - apart from that, not much!! On the other hand, I've had to re-evaluate what matters in life, slow down, and learn to accept the unfairness and try to reach a state of calm."

"It has wrecked my love of racquetball because I'm afraid I am going to have an attack while I play since the meds don't feel like they hold anymore like they used to. I am leery of travel now until I find out what stage I am at."

"LAF has had an enormous affect on my life. I am anxious about travelling and making any kind of arrangement in advance."

"Causes restrictions in planning too far ahead, increases food cravings during episodes (because of stomach "butterflies", etc.). I am prematurely retired and feel constrained from taking on any work commitments. When the attacks occur, I strongly feel the symptoms and the irregular beats and this generates depression and negative outlooks for the future."

"I was once a very active long distance runner and bicyclist. I have had to curtail those activities. I have been far less active physically in the past 2 years - inhibited mainly by LAF."

"Very badly affected. I used to play a lot of sports and be very active physically, but I can't even swing a golf club for 30 minutes now without going into AF. I don't eat out much now and my social life and travel have been dramatically reduced."

Most (78%) took supplements. Almost 18% thought they definitely helped, but the majority (63%) was not sure whether they helped or not. The most popular supplements taken were:

70% magnesium
60% multivitamins
53% vitamin C
50% vitamin E
43% coenzyme Q10
40% fish oil
25% calcium
23% potassium
20% B-complex
18% selenium
13% hawthorn
13% l-carnitine
13% vitamin B12

The most popular supplements felt to be beneficial were:

100% fish oil
86% magnesium
71% vitamin E
57% multivitamins
57% vitamin C
43% coenzyme Q10
43% selenium
43% B-complex

Overall 39% supplemented with fish oil (tissue oil) and 4% with cod liver oil. This is encouraging as fish oil has been found to help prevent arrhythmias, heart attacks, angina, and sudden cardiac death. There is also evidence that eating fish or supplementing with fish oils (eicosapentaenoic acid and docosahexaenoic acid) help prevent breast and prostate cancer. For more information on the benefits of fish oil see www.oilofpisces.com.

Most (39%) took a daily aspirin to help prevent a stroke. Another 20% took Coumadin (warfarin) on a regular basis. Twelve per cent used fish oil or cod liver oil specifically for stroke prevention, 4% used ginkgo biloba while 8% took an aspirin only at the beginning of an episode. Actually as blood clots are more likely to be released after the episode ends and particularly if it lasts more than 24 hours it is advisable to continue with the aspirin for a week or two after a long episode. The remaining 17% took no specific precautions against stroke.

The official recommendations for anti-thrombotic therapy for people with lone atrial fibrillation (no other risk factors) are:

- age under 65 years – no therapy or aspirin if desired;
- age between 65 and 75 years – daily aspirin;
- age over 75 years – warfarin (Coumadin) if no contraindication.

Afibbers with risk factors such as rheumatic heart disease, prior stroke, heart failure, echo systolic dysfunction, diabetes or hypertension are advised to use warfarin at all ages. Warfarin is also prescribed for 3 weeks before and 3 weeks after attempted cardioversion.

Ninety per cent of respondents reported no adverse effects from their stroke prevention regimen and some had been on it for 10 years or more.

Sixty-four per cent (of non-chronic afibbers) took one or more pharmaceutical drugs to prevent future LAF episodes. The most widely used drugs were:

Atenolol (Tenormin) 21%
Other beta-blockers 25%

Flecainide (Tambocor)	18%
Sotalol (Betapace)	14%
Propafenone (Rythmol)	11%
Verapamil	7%
Digoxin (Lanoxin)	7%

About half of the drug users had side effects with the most common symptoms being fatigue (25%) and dizziness (11%).

A preliminary comparison of the number of episodes experienced by afibbers on preventive drugs and afibbers who took no drugs showed that drug users tended to have more episodes (23 versus 19 average over 6 months) than did non-drug users. The episodes were similar in duration. At first glance this seems rather improbable; that preventive drugs would actually make things worse. However, taking a closer look at the prescription pattern it becomes clear why this could indeed be the case. Over 70% of afibbers with the vagal variety were prescribed drugs that are known to worsen their condition (digoxin or beta-blockers).

I intend to look into the evidence for potential benefits of individual drugs – if properly prescribed – in phase 4 of the evaluation of survey results. Stay tuned for more in the July issue of “The AFIB Report”.

Dealing with Hypoglycemia

Almost 50% of participants reported hypoglycemia or symptoms of hypoglycemia (low blood sugar). Common symptoms are:

- craving for sweets;
- irritability or weakness if meal is missed;
- dizziness when standing up suddenly;
- heart palpitations;
- afternoon fatigue;
- tiredness an hour or so after eating;
- depression or mood swings.

Hypoglycemia can be formally diagnosed through a 3-hour or, better yet, a 6-hour glucose tolerance test. Basically if your fasting glucose level is below 50 mg/dL or if your glucose level 4 to 6 hours after a meal falls below the fasting value you have hypoglycemia. However, the actual blood glucose level that causes hypoglycemic reactions can vary considerably between individuals. Hypoglycemia has been implicated in such diverse conditions as criminal behaviour, premenstrual syndrome, migraine headaches, atherosclerosis, and atrial fibrillation.

It is best controlled by religiously avoiding foods with a high glycemic index (sugar, white and whole grain bread, bananas, raisins, potatoes, rice, and wheat cereal) and by eating frequent small meals throughout the day. Alcohol should also be avoided and the intake of dietary fiber increased. A daily multivitamin (and minerals) capsule is very important and a minimum intake of 200-400 micrograms/day of chromium is essential.

A hypoglycemic-induced LAF episode can often be aborted by quickly consuming a “power bar” or a high glycemic index food like bananas or raisins. It is best to follow up with a snack of low glycemic index food (apple, orange, raw carrot or some nuts) in order to avoid a “yo-yo” effect. Hypoglycemia is relatively easy to keep in check and doing so may significantly reduce the number of LAF episodes.

The Exercise Connection

Long-term endurance training (vigorous regular exercise) profoundly affects the body’s physiology. Among other things it significantly lowers the heart rate and testosterone levels(1,2). It is also known that, while

exercise in the short term increases adrenergic tone (activates sympathetic nervous system), its long-term effect is an increase in vagal tone (predominant parasympathetic system)(3,4).

Most vagal type afibbers are heavy exercisers. This raises the tantalizing possibility that they might actually be able to reduce their number of episodes by cutting back on the exercise. A recent study carried out in Spain found that “detraining”, i.e. cessation or reduction in exercise resulted in profound changes. Blood volume decreased, heart rate increased, and adrenergic tone increased after 2 to 4 weeks without training(5).

One of the members of our group has actually observed that giving up on exercise one week out of every four significantly reduced his frequency of episodes.

Of course, abruptly stopping all exercise carries with it a whole new set of problems so a gradual approach is definitely in order. Might be worth experimenting with if you are a vagal afibber!

AFIB News

Timing of aspirin intake may be important. Researchers at Columbia University have discovered that aspirin exerts a significant influence on the autonomic nervous system. They used a double blind, crossover study where 22 participants received either an aspirin (325 mg) or a placebo with each meal for 2.5 days. At the end of the trial the researchers noted a significant decrease in adrenergic tone and a slight increase in vagal tone in the aspirin group. What does this mean to afibbers? Probably not a lot, but it might confer a slight advantage to take the daily aspirin with breakfast rather than with dinner.

Clin Auton Res, Vol. 10, August 2000, pp. 197-201

Magnesium prevents atrial fibrillation. Researchers at the Acybadem Hospital in Istanbul report that magnesium infusions (1.5 grams of magnesium sulfate in 100 ml 0.9% saline solution) given 1 day before, during, and 4 days after heart (bypass) surgery reduce the incidence of postoperative atrial fibrillation by a factor of 10 (from 21% to 2%). The lead researcher, Dr. Huseyin Cem Alhan, explains “There are no contraindications to magnesium therapy, we give it to patients with normal as well as low magnesium levels. In the elderly it has been shown that patients may be total body magnesium deficient, but have normal serum levels. We are not sure if the therapeutic mechanism is replenishment of a deficiency or a pharmacologic effect of the drug (magnesium)”.

Reuters Medical News, February 2001

Incidence of AF growing in the USA. A recent study carried out by the Kaiser Permanente concludes that the incidence of atrial fibrillation, which now affects 2.3 million Americans, will double over the next 50 years. Atrial fibrillation is more common in men than in women (1.1% versus 0.8%) and also more common in Caucasians than in African Americans (2.2% versus 1.5%). The incidence of AF increases with age from about 0.1% among individuals younger than 55 years to 9% in the group 80 years and over. Other studies have estimated that anywhere from 6% to 31% of all atrial fibrillation cases are of the lone variety.

Journal of the American Medical Association, Vol. 285, 2001, pp. 2370-75

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