

THE AFIB REPORT

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Prescription for LAF

There is, unfortunately, no overall prescription for the management and cure of lone atrial fibrillation (LAF). LAF is not a disease as such, but rather a manifestation of some imbalance or other problem in the body. It stands to reason that the way to manage and eventually cure LAF is by addressing and eliminating the underlying causes.

The underlying cause(s) varies from person to person and a great deal of personal sleuthing is required in order to find and correct it. Nevertheless, there are certain common actions that every afibber can take to manage LAF and these are what this chapter is all about.

1. Confirm diagnosis

The first, absolutely essential step is to make certain that you have **LONE** atrial fibrillation; that is, atrial fibrillation without any underlying heart abnormalities or disease. The tests required to confirm this are discussed in Chapter 7. Your diagnosis may come back as paroxysmal (intermittent) or even permanent atrial fibrillation. Make sure your cardiologist confirms that there are no underlying heart problems.

2. Rule out known causes

Thyroid disorders, hypoglycemia, serious electrolyte imbalances, and pheochromocytoma are all known causes of LAF. They should be ruled out through appropriate testing as discussed in Chapter 9. If no medically recognized cause can be found then your atrial fibrillation is classified as idiopathic and you are basically on your own as far as determining and managing your own specific underlying cause.

3. Rule out and eliminate possible causes

Although not yet widely recognized as such, there are several other conditions that may contribute to the initiation and continuation of LAF:

- Magnesium deficiency
- Chronic inflammation
- Mercury intoxication
- Oxidative stress
- High cortisol/DHEA ratio

Magnesium deficiency

Magnesium deficiency is extremely common. Only about 1% of the body's total magnesium stores circulate in the blood so a blood test for magnesium status is pretty useless. What is important is the intracellular level of magnesium found in the heart tissue. This level can be closely approximated by measuring the magnesium content in cells scraped from under the tongue. About 85% of afibbers who have had this test done were found to be deficient in magnesium so it is fairly safe to conclude that most afibbers suffer from a magnesium deficiency. For testing resources see Appendix I.

Magnesium is found in many foods (see Appendix C); however, supplementation is usually necessary as well in order to reach an intake of 600 – 800 mg/day of elemental magnesium. I believe chelated magnesium (Albion process), soluble magnesium citrate (Natural Calm), and magnesium orotate are the most bioavailable sources in solid form. Magnesium/bicarbonate water is an excellent source and drinking 1.5 L/day of this water will provide about 230 mg/day of highly-bioavailable elemental magnesium. Kidney failure patients should avoid magnesium supplementation. Magnesium needs vitamin D for best utilization so supplementing with vitamin D3 (cholecalciferol) is a good idea when daily sun exposure is not possible.

Chronic Inflammation

Chronic inflammation of the heart lining and a high blood level of the inflammation marker C-reactive protein (CRP) is a common occurrence among afibbers. It is important to rule out chronic inflammation as a precipitating cause and this can be done by having a simple blood test for CRP. If the CRP level indicates the presence of an inflammation then steps should be taken to eliminate it. There are many natural anti-inflammatories that will help do this (see Chapter 14) and the protocol I used myself (see Chapter 20) should also be helpful.

Mercury Intoxication

Mercury toxicity is probably fairly common due to the prevalence of amalgam (silver) dental fillings and the increasing levels of mercury found in many types of fish. A hair analysis can establish whether or not you are suffering from mercury toxicity. If you have amalgam fillings, gold crowns or metal bridgework it is a good idea to have a holistic dentist check out your dental work. Dissimilar metals in the mouth can create galvanic currents that may be powerful enough to set off PACs or even afib episodes. Mercury is constantly leached from amalgam fillings and may, in sensitive individuals, be a possible initiator of PACs or afib episodes. If you do decide to have dental work done to replace amalgam fillings please follow the recommendations for removal and detoxification presented in Chapter 14.

Oxidative stress

An important underlying cause of atrial fibrillation may be oxidative stress and can, to a large extent, be ameliorated by supplementing with antioxidants. The most important of these are vitamin C (500-1000 mg 3 times daily), natural-source, mixed tocopherols (vitamin E) in doses from 400-800 IU/day, selenium (200 micrograms/day), coenzyme Q10 (60-180 mg/day) and alpha-lipoic acid (100-300 mg/day). Although not an antioxidant, supplementation with 1.5-3.0 grams/day of L-carnitine may also be useful.

Cortisol and DHEA

The hormones cortisol and DHEA (dehydroepiandrosterone) may both play a key role in LAF. Cortisol levels are known to be high during afib episodes and older men with afib have been found to have exceptionally low levels of DHEA. It is a good idea to have a blood or saliva test to determine cortisol and DHEA levels. Low DHEA levels can be corrected by supplementation with DHEA, but this should only be done under the careful supervision of a

physician. Cortisol levels can be kept in check by avoiding stress and always ensuring a good night's sleep in a totally dark bedroom.

4. Determine what kind of LAF you have

It is essential that you begin keeping an accurate log of your afib episodes once their frequency exceeds 2 or 3 a year. This log should list the date and time when the episode began, how long it lasted, what you were doing when it first started, and what you were doing a short time prior to its onset. This information is needed to ascertain whether you have the vagal, adrenergic or mixed kind of paroxysmal (intermittent) LAF. It is obviously not feasible or terribly useful to keep a log for permanent afib although it may be appropriate if you have periods when symptoms are more or less pronounced than usual. Once you have established a pattern for your episodes you can determine the type of LAF that you are dealing with and adjust your management strategy accordingly. See Chapter 5 for details on the different types of LAF.

5. Avoid triggers

There are many conditions and foods that may trigger an afib episode. You can either develop your own specific list of triggers through a long and often frustrating trial and error process or you can take advantage of the list of common triggers based on the experiences of fellow afibbers. The most important trigger, by far, is emotional and work-related stress. A full 94% of adrenergic afibbers and 56% of mixed afibbers listed this as their most important trigger in our most recent LAF survey. Alcohol consumption is another common trigger listed by 33% of vagal afibbers and 36% of mixed afibbers. Digestive problems and overeating (large meals) are triggers for 28% of vagal and 33% of mixed afibbers, but are much less bothersome for adrenergic afibbers. Exercise, on the other hand, is a trigger for about 40% of adrenergic and mixed afibbers, but only affects about 17% of vagal afibbers. Vagal afibbers are significantly more prone to having an episode while resting or sleeping (33%) than are adrenergic (0%) and mixed (7%) afibbers. Caffeine and cold drinks are other powerful triggers as are many foods and food additives. A list of other common triggers is given below.

Foods & Food Additives

- Cheese
- Spicy foods
- Chocolate
- Sugar
- Wheat
- MSG (monosodium glutamate)
- Aspartame (NutraSweet)

Other Triggers

- Overwork
- Inflammation
- Viral infection
- Dehydration
- Medications
- Hypoglycemia
- Bending over
- Sleeping on left side
- Coughing
- Burping
- Hot bath
- Nyquil (cold remedy)
- Electromagnetic radiation
- Toxic chemicals
- Changes in weather patterns
- Air travel
- Migraine
- Sex

Avoiding the triggers is perhaps the single most important step you can take in managing your LAF. Just as “AF begets AF” so does “normal sinus rhythm begets normal sinus rhythm”. The longer you can go without an episode the less likely it becomes that you will experience another.

6. Take stock and decide your future course of action

LAF is, for a few lucky people, merely a nuisance that has little effect on their life. For most of us though, LAF is far more than a nuisance – it is a life-altering, debilitating condition that ruins the quality of our lives. Each of us must determine the approach for dealing with it that makes the most sense to us. Some afibbers, especially if they are still working fulltime, may decide to go for “high-tech” approaches like the maze procedure or radiofrequency ablation. Others may opt for a pharmaceutical approach, some may just stoically accept their fate and do nothing, and some, and I believe this is the majority, will want to learn all they can about LAF in order to eventually come up with a non-surgical, non-drug based solution that is right for them.

7. Surgical approaches

The maze procedure and various forms of ablation therapies (see Chapter 12) have worked exceptionally well for some afibbers. The maze procedure, if done by skilled hands, has a 90% or better success rate, but the recovery period can be 2 months or longer. Radiofrequency ablation also works well if done by a skilled surgeon. Some clinics claim success rates of 80% or better, but the average success rate, according to our survey, may be closer to 50%. This is bound to improve as new techniques are developed and the possible problems of stenosis after pulmonary vein ablation is solved. AV node ablation and subsequent pacemaker implantation is still considered a very last ditch approach for lone afibbers.

8. Pharmacological approach

According to our surveys about 40% of all afibbers take no drugs to prevent or shorten episodes and, overall, they are no worse off than afibbers who do take drugs. The reason for this is two-fold – drugs generally don’t work that well for LAF and many afibbers are prescribed the wrong drugs for their particular type of LAF (vagal, adrenergic, mixed).

This does not mean that drugs cannot be helpful if they are tailored specifically to the individual. For example, many vagal afibbers have found that taking flecainide (Tambocor) or disopyramide (Norpace) on a regular basis tends to shorten their episodes considerably. It is not clear though whether they also tend to increase the frequency of episodes.

Metoprolol (Toprol, Lopressor), a beta-blocker, has been found useful by some adrenergic and mixed afibbers, but results are varied. Propafenone (Rythmol) may also be effective especially for adrenergic and mixed afibbers, but again efficacy is by no means assured.

Verapamil has been found useful by several afibbers in helping to control the heart rate during an afib episode.

Sotalol (Betapace), digoxin (Lanoxin), and amiodarone (Cordarone) are either totally ineffective or have serious side effects. They should be avoided.

For afibbers who are acutely aware of the onset of an episode, the “on-demand” approach may work well. This involves taking 200 mg of flecainide or propafenone within 5 minutes of the onset. For best results crush the tablet(s) first and then swallow with lukewarm water. Normal sinus rhythm is usually regained within 2 hours using this method. Both flecainide and propafenone are powerful drugs so should only be taken after a thorough medical examination and under the guidance of a cardiologist.

9. The “natural” approach

At this stage of my research I believe that the natural approach most likely to be successful involves dietary changes and supplementation, particularly with magnesium and essential fatty acids (fish oils). Reducing stress and avoiding other known triggers is, of course, an integral part of this strategy.

A complete diet and supplement strategy is outlined in Chapter 16 and is summarized below. Please keep in mind that, while this approach has worked for at least three afibbers, there is no guarantee that it will work for everyone.

- Never, except at night, go for more than 3 hours without a meal or a light snack.
- Ensure that each meal and snack contains some protein.
- Adhere to a diet containing (as % of energy) about 30% protein, 30% fat (mono- and polyunsaturated fats mostly), and 40% carbohydrates. The “Zone Diet” advocated by Dr. Barry Sears meets this requirement.
- Ensure that the majority of carbohydrates consumed has a low glycemic load. No individual meal should have a glycemic load above 30 and total daily glycemic load should not exceed 75.
- Obtain most of the carbohydrates from fruits and vegetables rather than from grains and starches (oatmeal porridge is a notable exception).
- Avoid *trans*-fatty acids.
- Drink about 1 to 1.5 liters of water per day. Magnesium/bicarbonate water may be a good choice for many afibbers, but should be consumed sparingly, if at all, with meals as it may partially neutralize stomach acid (see Appendix G for details).
- Ensure high dietary intakes of potassium and magnesium and low to moderate intakes of sodium and calcium.
- If necessary, supplement with magnesium to ensure a daily intake of 400-800 mg of elemental magnesium.*
- If ectopic beat activity is excessive consider supplementing with potassium. I have personally found that slowly sipping a glass of apple juice containing 1-2 grams of potassium chloride (No-Salt) is highly effective in eliminating PVCs. Please do not supplement with potassium without your doctor’s approval.*
- Supplement with fish oil so as to obtain a minimum daily intake of 1500 mg of EPA (eicosapentaenoic acid) and 1000 mg of DHA (docosahexaenoic acid). Fish oil intake can be reduced once atrial fibrillation is under control.
- Supplement with 400-1000 IU/day of vitamin D3 (cholecalciferol) in order to ensure optimum magnesium uptake if daily sun exposure is limited.
- Take a daily multivitamin and additional supplements as appropriate for you (see Chapter 11).
- Avoid tyramine-containing foods (see Appendix H). This is especially important for adrenergic and mixed afibbers; perhaps less so for vagal afibbers.
- Avoid large meals and take pancreatic enzymes before dinner if your afib episodes tend to occur during digestive periods.

- Get 30-40 minutes of moderate exercise (brisk walking, etc.) every day. Prolonged or too vigorous exercise is not recommended as it creates excessive oxidative stress and will fan any existing inflammation. It is best to exercise during a period, which past experience has shown, to be the least likely for an afib episode to occur.

*** IMPORTANT NOTE:** Supplementation with magnesium is not recommended for people with kidney problems (renal failure). Supplementation with potassium should be approached with caution and not attempted without your doctor's specific approval if you have kidney problems or are taking potassium-sparing diuretics. Too much potassium can cause a fatal arrhythmia if the kidneys are unable to excrete the excess rapidly enough.

You should note a marked improvement in your condition in 6 to 8 weeks if the dietary changes and supplements are going to work for you. The dietary changes and supplements discussed above are all safe and usually well tolerated. Nevertheless, we are all different so please check with your physician before embarking on these changes.

FROM "Lone Atrial Fibrillation: Towards a Cure – Volume 1"