

An arrhythmia is an irregular rhythm of a heartbeat. This typically falls under a heart that beats too quickly (tachycardia), too slowly (bradycardia), or has an irregular pattern with missing heartbeat or premature heartbeat. The most common type of arrhythmia is atrial fibrillation (A-fib), which causes a fast heartbeat or tachycardia of more than 100 bpm. Arrhythmias that start in the ventricle include ventricular tachycardia and ventricular fibrillation. These are serious, often life-threatening arrhythmias since the ventricles do most of the pumping.

The heart has four chambers — two upper chambers (atria) and two lower chambers (ventricles). Within the upper right chamber of the heart (right atrium) is a group of cells called the sinus node. The sinus node is the heart's natural pacemaker. It produces the signal that starts each heartbeat. In a regular heart rhythm, the sinoatrial node generates an electrical signal that travels from the sinus node through the two upper heart chambers (atria) causing the upper heart chamber (atria) to contract and pump blood. The signal then passes through the atrioventricular (AV) node that is between the upper and lower chambers to the lower heart chambers (ventricles). The movement of the signal causes ventricles to squeeze (contract), sending blood to your heart and body.

The normal range for a heart rate is 60 to 100 beats a minute. A frequent irregular rhythm can affect heart function and render the heart not able to pump enough blood to the body. An arrhythmia may be harmless and patients may feel a fluttering or racing heart. However, when an arrhythmia affects the ventricles, the lower chambers of the heart, is always dangerous. Patients may experience symptoms of dizziness, fainted, anxiety, chest pain or discomfort, difficulty breathing, weakness or confusion.

Tachycardia & Afib

Tachycardia is the medical term for a heart rate over 100 bpm. Many types of irregular heart rhythms can cause tachycardia. There are many types of tachycardia, with the most common being Afib.

Afib is an irregular and often very rapid heart rhythm (arrhythmia) that can lead to blood clots in the heart. Afib increases the risk of stroke, heart failure and other heart-related complications. It is the leading cause of stroke, heart attack and embolism if patients have other underlying conditions.

During atrial fibrillation, the heart's upper chambers (the atria) beat chaotically and

Typical heart rhythm

Atrial fibrillation (AFib)

Irregular impulse

AV node

Typical heartbeat

Atrial fibrillation

irregularly — out of sync with the lower chambers (the ventricles) of the heart. For many people, Afib may have no symptoms. However, Afib may cause a fast, pounding heartbeat (palpitations), shortness of breath or weakness, chest pain, in some patients, nervousness and feelings of impending doom. Episodes of atrial fibrillation may come and go, or they may be persistent.

In atrial fibrillation, the signals in the upper chambers of the heart are chaotic. As a result, the upper chambers shake (quiver). The AV node is then bombarded with signals trying to get through to the lower heart chambers (ventricles). This causes a fast and irregular heart rhythm. The heart rate in atrial fibrillation may range from 100 to 175 beats a minute.

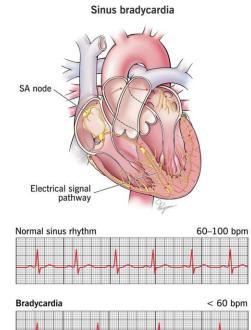
Problems with the heart's structure are the most common cause of atrial fibrillation, because the structure damage and scarring or nodules can block or disturb the electrical signal transmission. Possible causes of

such structure damage and scar or nodule formation include coronary artery disease, heart attack, heart valve issues, high blood pressure, previous heart surgery, sleep apnea, thyroid disorders, use of stimulants, and viral infections.

Bradycardia

Bradycardia is defined as a heart rate of less than 60bpm. Bradycardia often occurs when the signal in the heart slow down or are blocked. This can happen due to an atrioventricular block – when the hearts electrical signal does not move correctly from the upper chambers to the lower chambers. Bradycardia may not cause any symptoms but some experience dizziness, weakness, lack of energy, or fainting spells.

Bradycardia is often associated with damage to the heart tissue from some type of heart disease. This can occur from a heart attack, inflammation of the heart's tissues, underactive thyroid, imbalance of potassium or calcium, inflammatory disease, and certain medications.



Premature Ventricular Fibrillation

Premature ventricular contractions (PVC), also known as premature beats, are extra, abnormal heartbeats that originate in the ventricles. PVC is caused by a premature discharge of electrical impulses to the heart's ventricles that causes an extra beat to occur before a normal heartbeat would. After a premature heartbeat, blood begins to fill the ventricle. The additional amount of blood in the heart gives the next beat extra force, making it feel stronger. Symptoms include heart palpitations that feel like a fluttering or flip-flopping in the chest.

This arrhythmia is not dangerous in healthy people because it usually has little impact on the heart. But in people with heart problems, such as a heart valve disease, or those who have had a heart attack, it can trigger more dangerous arrhythmias. These can include ventricular tachycardia or ventricular fibrillation.

PVCs can be caused by alcohol or caffeine intake, emotional or physical stress, or cold or allergy medications that contain pseudoephedrine, which stimulates the heart. Recent research has also shown PVC can be caused by underlying myocardial inflammation. In prospective study including 107 patients with frequent symptomatic premature ventricular contractions (>5000/24 h) and no known ischemic heart disease, 51% of patients presented with myocardial inflammation. Inflammation of the heart's tissues can cause reduced blood flow to the heart which can set off the premature signal in the ventricles. Long standing inflammation can lead to tissue degeneration and scar tissue which further disrupts the electrical signals within the heart. Other heart conditions such as coronary artery disease, heart failure, and heart attack also increases the risk for PVCs.

Wellness Recommendation

In TCM, an arrhythmia with an irregular pattern with missing heartbeat or premature heartbeat is caused by a Heart Qi deficiency. PaceKeeping Formula enhances Heart Qi and helps the heart muscles contract coordinately. Herbal ingredients in PaceKeeping have been shown to have beneficial effects on cardiovascular diseases through various mechanisms, such as anti-oxidation, anti-arrhythmia, and improving microcirculation. Patients can experience symptom improvement in 1 week. 2-6 weeks of treatment is required to have significant improvement and sustained results.

In TCM, tachycardia with an increased heart rate is caused by Heart Yin deficiency. Millennium Formula can help bring the heartbeat to the normal range by nurturing the heart Yin and improving the electrical flows. Patients can experience symptom improvement in 1 week. 1-3 months of treatment is required to have significant improvement and sustained results.

For Afib involving heart structure damage including the sinoatrial node, King Formula is also recommended to nurture the sinoatrial node and repair damage. Anginen is also recommended to help dissolve nodules or scars in the sinoatrial node, the atrioventricular (AV) node, as well as the heart muscle.

In TCM, bradycardia is caused by cold damp accumulation in the heart due to Heart Yang Deficiency. Myogen formula nurtures Heart Yang and helps clear cold damp in the heart and remove the accumulated metabolic wastes in the heart. Herbal ingredients in Myogen have been shown to regulate cardiac enzymes, cytokines, oxidative stress, and coagulation. Used in combination with B-2 and Qi Booster, it helps clear the myocardium and pericardium inflammation, improve the strength of the heart and increase the heartbeats to normal range. CV is also required if there are atherosclerotic conditions. Herbal ingredients in CV have been used widely in the treatment of cardiovascular disease. They contain a wide range of cardiovascular and other pharmacological effects, including antioxidative, anti-inflammatory, endothelial protective, myocardial protective, anticoagulation, vasodilation, and anti-atherosclerosis, as well as significantly help to reduce proliferation and migration of vascular smooth muscle cells. Patients can experience symptom improvement in 3-7 days. 3-6 weeks of treatment is required for significant improvement and sustained results.

For patient with mild PVC, the wellness recommendation includes PaceKeeping. If the patients cause of PVC is due to myocardial inflammation, CV, B-2, Qi Booster, and Myogen are also recommended. Myogen formula nurtures heart Yang and helps clear cold damp in the heart, and remove the accumulated metabolic wastes in the heart. Used in combination with CV, B-2 and Qi Booster, it helps clear the myocardium and endocardium inflammation, improve the strength of the heart and resume the normal heartbeats. For mild and moderate case, 4-6 weeks of the protocol is required for significant improvement and sustained results. For severe cases, after the initial 4-6 weeks of protocol, it is recommended to have an additional 2-3 months of protocol with Myogen and Myonin in combination with PaceKeeping or other formulas depending on the individual's condition. Myonin nurtures heart Yin to help repair myocardium damage. If there is scarring, King and Anginen are also recommended.

Protocol Summary

Condition	Recommendation
Arrhythmia with an irregular pattern	PaceKeeping
Afib	PaceKeeping, King, Anginen
Tachycardia (not Afib related)	PaceKeeping, Millennium
Bradycardia	Myogen, B-2, Qi Booster (additional: CV for atherosclerosis)
Premature Ventricle Contractions	PaceKeeping (additional: CV, Myogen, B-2, Qi Booster for myocardial inflammation, coronary artery disease, heart failure) (additional: Myonin for severe cases) (additional: King, Anginen for scarring)

Selected Case Studies

Case 1: Successful Arrhythmia Treatment Ronald Mullen, AP, FL

A 55-year-old female patient has been experiencing palpitations, tightness and discomfort through the chest region along with periodic heart flutters. The symptoms were sometimes accompanied by dizziness causing her to feel exhausted afterwards. The symptoms started two months ago and have not subsided. She has been under a great deal of stress and grief since the sudden death of a close family member.

Upon examination her blood pressure appeared normal but she had a very pronounced skip to her pulse suggesting that further testing was needed. We recommend she see her family doctor for further examination. He recommended an EKG confirming a heart arrhythmia.

Because she prefers to use holistic treatments whenever possible, she asked if we could treat her using a natural approach. We started her on PaceKeeping and monitored her very closely. Once a week we evaluated her progress. After the first week, she started to show improvement and has made steady improvement each week since. At her last examination she had reached 99% improvement and was basically back to normal health. I suggested she take PaceKeeping for two more weeks to stabilize the treatment and make sure she reached 100% improvement. This patient has had an excellent response to the herbal protocol. She took the herbs for nine weeks. After the first week she started sleeping much better and as she healed, her body became much more relaxed. Today she is back to normal with a strong regular heart beat and lots of energy.

Case 2: Successful Improvement of Arrhythmia John Reynolds, Physician Assistant, NY

A patient with arrhythmia visited Integrated Health Services for treatment on October 29th 2014. He spoke with John Reynolds, a Physician Assistant who recommended that he start a treatment with Wei Laboratories PaceKeeping formula, beginning at half of the recommended dose. The patient started with one bottle of the PaceKeeping shortly after the visit. John saw the patient for his second visit two weeks after beginning the treatment, and he told John that he loves the PaceKeeping formula because he started

to really notice a difference with truly amazing results. He is even making more trips to the bathroom, which he finds exciting because he usually does not go that much. The PaceKeeping formula has not only helped his arrhythmia condition but has also kicked his kidney into a better gear.

The patient continued with 2 more bottles of the PaceKeeping formula, again at half of the recommended dosage, together with Johns other herbs after his second visit. The patient had his third visit one month later and reported that the Pacekeeping formula was definitely helping him since he felt at least 50% better. On January 23rd 2015, the patient reports a 80-90% improvement on his arrhythmia condition and very satisfied the treatment results.

<u>Case 3: Successful Treatment of Heart Palpitations and Stenosis</u> *Jack Kucheran, DC, CAN*

A 60-year-old male patient suffered from arrhythmia with irregular heartbeat and palpitations. Dr. Jack recommended a treatment with PaceKeeping Formula from Wei Labs. After finishing 2 weeks of treatment, the Patient noticed much less palpitations, but still experienced the occasional palpitations. The 3rd week treatment, however, did not make further improvement. The Patient still experienced 4-6 flutters daily. The Patient tried Myogen from Wei Labs and did not see any difference. Also tried CV Formula did not see any changed. Later on, the patient was diagnosed with an enlarged left ventricle. It made him cough when he experienced a skipped heartbeat. When he is active, he will not have the flutters. It comes up only when he is inactive and exercising can get rid of it. The Doctor believed his heart had some dampness. CV, B-2, Qi, Myogen from Wei Labs, were recommended to take at 1/3 dose in combination with the PaceKeeping. After one-month treatment with the combined 5 formulas, the heart palpitations that the Patient had for several years were finally cleared up completely.

The same patient also experienced neck pains while working on his heart. Even though the patient had been given different types of treatment including adjustment, active release on the neck, and laser, he still had a very intense tingling sensation shooting down his arm to his pinky finger whenever doing head extension. He also had pain in his scapula. Doctor believed the condition was caused by stenosis in the cervical spine or some disc injury or degeneration, so he recommended Wei Labs WHITEE Patches, LCB and Brown with the patch being applied at C7-T1, C8 nerve root.

After the 1st month of treatment, the patient reported a really intense electrical shock feelings. There was no significant changes on other symptoms. Doctor believed the herbs needed to have better access to the injured area. So during the 2nd month, the patch was switch to the front of the neck. However, the patient did not see much results. In the 3rd month, the patch was switched to the back of the neck again. But it was applied at C6 - T2 area. He did 3 days on and 2 days off, instead of 2 days on and 1 day off. After 2 weeks he got an electrical shock feeling if he extended his neck along the C7-C8 cervical route.

Considering the age of the patient, the Doctor recommend to add low dose of Xcel to the kidney function. M-Strong is also recommended to and boost his kidney yang and enhance erectile function. With the addition of kidney formula, the patient saw an increase in the tingling in the hands and fingers initially. He does weights and tries to keep strong. When he does chin ups, he is having problems with his grip strength. With the M-Strong, he noticed he had more energy and is able to do chin ups with enough grip strength the first day. He also noticed that there was the odd time when he got a deep ache in his triceps and occasionally down the last two fingers on the right hand.

After finishing the 3rd month, his erection function is doing much better. the Patient reported some improvement in the disc. He had one day when he felt a definite improvement on the nerves in his arm. The

Patient continued the treatment with WHITEE Patch, LC Balancer, Brown, Xcel and M-Strong at half dosage for an additional month. KS was also added to the treatment to help remove some heat symptoms. After the 4th month, the Patient finally was starting to see a significant change. All the symptoms were gone. The only thing left was the tingling and numbness when he tilts head back and to the right. But it was much better and not as intense before. On the 5th month treatment, the Patient experienced a light set back because the Patient had overdone in terms of stretching. Then continued to the 6th month treatment with the all intake formula being taken at 1/3 dosage. The Patient reported 95-98% better after the 6th month treatment

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