

Sinus Arrhythmia

One of the most common arrhythmias is a sinus arrhythmia. It involves cyclic changes in the heart rate during breathing. It is very common in children and often found in young adults. Patients with sinus arrhythmia do not experience any cardiovascular symptoms.

The sinus node rate can change with inspiration/expiration, especially in younger people. The heart rate speeds up with inspiration (since it inhibits your vagal nerve) and decreases with expiration (stimulates your vagal nerve).

Symptom

Symptoms of SSS are caused by the frequent alternation of rapid and slow heart beat, resulting in palpitation (pounding heart beat), fainting, fatigue, and shortness of breath.

Need to know

Everything that causes atrial fibrillation and atrial flutter can cause sick sinus syndrome. Age is the number one risk factor for developing SSS. It is frequently exacerbated by the use of medications (i.e., digoxin, beta blocker, calcium channel blocker). The main purpose of these medications is slow down the fast heartbeat in this syndrome, but the often inevitable trade-off is excessive slowing of the heart rate to the point of needing pacemaker.

Prevention

In patients with predominantly a slow heart rate problem, pacemaker is the treatment option of choice. There are no reasonable medical alternatives as no medications can speed up the heartbeat effectively and safely on a long term basis. For those with both fast and slow heart rate problem, medications used to control the rapid heartbeat in this syndrome often slow the heart rate to the point of requiring a pacemaker. This is the classic

"rock and hard place" scenario where if left untreated, the rapid heart rate can potentially lead to other serious consequences. Very frequently, patients end up with a combination of medications plus pacemaker.

Edited by NDU medical office

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