



Tri-City Pediatric Cardiology, P.C.



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Sinus Arrhythmia

When you hear the term ‘sinus arrhythmia’, I’m sure you are thinking “Oh no my child has a serious problem” or “arrhythmia!?! That is not good!” Well we are here to tell you that luckily, this is a normal finding and is heard in most young people.

Typically, we will describe the rhythm of the heartbeat as either "regular", which means there is the same amount of time between beats, or “irregular” meaning that the time between each beat sounds different. The most common reason a young person has a less predictable time between beats is sinus arrhythmia. This simply means that the heart rate speeds up while breathing in, then slows back down when you breathe out.

So, what causes this? This is due to a pressure difference in the heart while breathing in and out. There is less pressure with breathing in, which causes your heartbeat to increase, and then high pressure while breathing out, which causes your heartbeat to decrease.

Sinus arrhythmia typically starts to become less noticeable as become adults. This may be because as we age our hearts get older and just stop making these small adjustments. This is why we cannot listen to a child and expect their hearts to sound the same as an adult’s. This difference can often confuse people who are more used to what a normal adult heart sounds like and may be confused by this alternating fast and slow beat pattern, thinking it’s abnormal.

Your child has this diagnosis of sinus arrhythmia and you are thinking:

- What does this mean now?
- Will this cause any problems for them?
- Do they have any restrictions relating to sports or extracurricular activities?
- Do they need medication to treat this?

Again, no worries! This is a normal finding and a sign of a young, healthy heart. They have no restrictions and can run, play, and do whatever their hearts desire! Since this is not actually a problem there are no medications needed nor any type of treatment for sinus arrhythmia. For any further questions or concerns, please let us know!

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