

From Me and My Friends, to You and Yours Inappropriate Sinus Tachycardia (IST)

Each slide has the top half in pink and the bottom half in sky blue, with all text in black in a white box. Titles are in black with a blue shadow

Slide 1 - What is IST?

Inappropriate Sinus Tachycardia (or IST) is a type of arrhythmia (abnormal heart rhythm) where a person's heart rate is unusually high at rest and can rapidly increase without any reason to explain why. Normally, a resting heart rate is between 60-100 beats per minute. With IST, a person's heart rate is over 100 beats per minute at rest. Some people with IST have a normal heart rate at rest but it will increase rapidly with minimal exertion. This can cause symptoms such as palpitations, fatigue, exercise intolerance, and shortness of breath.

To explain IST, it can be helpful to break down the name:

Inappropriate - without a trigger or reason that can explain the reaction

Sinus - IST starts in the sinus node which is where normal heart rhythm is generated (therefore, there are no abnormalities picked up on an EKG other than a fast rate)

Tachycardia - a fast heart rate, over 100 beats per minute at rest

The exact cause of IST is not fully known and whilst it is not a life-threatening condition, it can be debilitating and difficult to treat. Treatments typically include medication and management of symptoms. Some people who don't respond to these treatments can potentially be a candidate for catheter ablation done but this is not always successful.

Slide 2 - How does IST affect my body?

IST affects my body constantly. My heart rate increases with minimal movement (often exceeding well over 200 beats per minute) which makes it difficult to walk or stand for long periods of time. This makes everyday life a little bit more difficult, especially when it comes to commuting to and from university. I get symptoms such as palpitations, fatigue, vision blackouts, dizziness, chest pain, fainting, and shortness of breath. These symptoms get worse with exercise and have made it more difficult for me to do the things that I love to do - dance, gymnastics, walking/hiking. I take medications daily to try and combat this but unfortunately, I have had difficulty finding the right ones that will work for me. Side effects are another factor with some medications causing side effects like changes in blood pressure, nausea, and worsening of asthma.

Slide 3 - How does IST affect me mentally?

When my symptoms are at their worst, it is often really difficult for me to take part in the hobbies that I love. It is very frustrating to have to stop in the middle of a ballet class, or to have to sit down while out with friends due to symptoms. It can also be difficult to explain to some people and I can feel anxious or embarrassed about having to sit or lay down. Sitting on the side lines is always difficult when you're watching everyone else be able to do the things you love with ease and the frustration only grows when you don't respond to medication or other treatments.

When you're dealing with a chronic illness, you can experience burn out when things become too overwhelming and exhausting. I struggle with this a lot!

Slide 4 - How does IST impact my life?

IST is something that is with me 24/7. Due to fatigue, I have learned to pace myself when it comes to studying and other necessary duties. Whenever I am going somewhere with friends or family, I make sure that there are lifts/elevators instead of just stairs and that there are places to sit down if needed. This allows me to rest if needed and helps me to avoid passing out! Public transport can be challenging if there aren't many seats available so I have to factor in all of these variables in order to make my trips easier on my body. Most importantly, I try to keep doing all of the things I love whilst listening to what my body tells me! This is not only beneficial to my physical health, but it helps my mental health immensely.

In university, I utilise the disability service and have accommodations in place for exams and laboratory exercises. Some of these accommodations seem simple, such as sitting exams on campus in a smaller room and being able to sit down during labs, but they have helped so much. They help me to be able to perform at my best ability!

Slide 5 - What can friends do to support you?

First aid: Some people with IST are prone to fainting. Knowing how to react, what to do, and who to call is of great help! These situations can be scary but panicking only makes the situation worse. Ask your friend what you should do if they pass out - they'll know best how you can support them. If you can, it is a good idea to brush up on your first aid skills by attending a course!

Understand: Sometimes plans may fall through due to symptoms. Sometimes a person with IST may have to sit down to rest for a few minutes. Sometimes a person with IST is able to do an activity one day but isn't able to do it another. Living with IST can be isolating, unpredictable, and frustrating!

Include: Allow the person with IST to decide what they can and cannot handle - they know their body best! Still invite them to hang out, to events, to parties, etc. Even if we can't attend for whatever reason, that invite will mean the world.

Slide 6 - Find out more

<https://www.heartrhythmalliance.org/aa/us>

The Heart Rhythm Alliance is an organisation dedicated to improving awareness on heart rhythm disorders with a focus on improving diagnosis, treatment, and quality of life for patients. They host an awareness week each year (World Heart Rhythm Awareness Week) with various themes to encourage greater public awareness on arrhythmias. They also share Stories from the Heart where patients can share their experiences and read of other's experiences living with heart rhythm disorders.

Your national heart foundation.

Most countries have a charity that is focused on heart conditions. Here in Ireland, it is the Irish Heart Foundation and in the UK it is the British Heart Foundation. Find your local heart foundation to see what supports they provide such as national helplines and information/advice on how to manage your condition. Consider making them the focus of your next fundraising activity as these organisations often rely on donations!

(Find Out More continues onto slide 7)

Studies

If you're like me and enjoy reading all the latest research, there are countless studies on IST available. Good places to look for these studies include Journals of the American College of Cardiology (<https://www.jacc.org/>) and the National Center for Biotechnology Information (<https://www.ncbi.nlm.nih.gov/>).

Slide 7 - About the author

Imogen (she/her) is 19 and lives in Dublin, Ireland. She is a biomedical science student who loves dancing, reading, and travelling!

Get involved!

Making a resource like this for your own condition is really easy - all you have to do is fill out a template with some questions, and then we do the rest! If you'd like to get involved with making one, DM us or email us thelunaprojectuk@gmail.com