

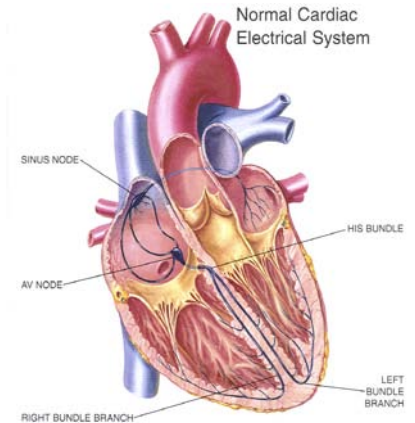
Supraventricular Tachycardia (SVT)

What is SVT?

Normally, the heart beats in a rhythmic coordinated fashion in order to pump blood effectively to the body. The term “arrhythmia” means a loss of this regular rhythm controlling the pumping of the heart.

Supraventricular tachycardia (SVT) is the most common type of arrhythmia in children. SVT occurs in infants and children everywhere, even in those who are otherwise healthy. SVT causes the heart to beat very rapidly – sometimes faster than 300 times per minute – which does not allow the heart to pump blood effectively.

SVT is usually due to an extra electrical pathway in the heart that may cause a short circuit. Children with SVT need to be taken to the hospital for control of their arrhythmia and may be followed by doctors for a long period of time. SVT can be stopped with medicine, but because the short circuit still exists, the arrhythmia can occur over and over again. In order to prevent recurrences of SVT, most infants will be given daily medicine. The family needs to be aware of what to watch for in case the SVT recurs.



What is the cause of SVT?

In the normal heart, a mass of special cells in the right atrium produce electrical impulses that travel to the rest of the heart, causing the heart to beat.

In SVT one of two things can cause the fast heart rate:

- There is an extra electrical circuit in the atria
- An extra cell in the atria fires too quickly

How Do I Know If My Baby is Having SVT?

When your baby is having SVT, the heart rate will be much faster than normal, you may not even be able to count it using your stethoscope. You will feel the heart pounding when you place your hand on your baby's chest. Your baby may also be irritable and refuse to eat or sleep. You may notice fast breathing or grunting sounds.

How Can I Treat My Baby for SVT?

There are a few things you can try at home to treat your baby's fast heart rate:

1. **On the advice of your baby's Cardiologist** - Place an ice pack on your baby's forehead and hold it there for 15 seconds. A bag of frozen peas or a bag of crushed ice works well. (Always keep on hand in the freezer).
 - Check to see if the heart rate has slowed down to what it usually is.
 - If not, repeat the ice treatment one more time.
2. If you can, try holding your child upside down for 2 minutes.

Be sure to support your baby's head when you do this.

If these treatments do not work, take your baby to an emergency department.

What Should I Do When I Take My Baby To The Hospital?

When you take your baby to the hospital:

- Take along all your child's medicine.
- Ask the doctor to take an electrocardiogram (EKG).

Is There Any Other Special Care For My Baby?

- Treat your baby as you would any other child.
- Make sure to give medications on time.
- Learn how to count your baby's heart rate with a stethoscope - practice every day.
- Special medications may help to decrease the number of episodes of SVT.

When your baby has a spell of SVT, record the episode in a diary. Include:

- Date and time of spell
- How long the spell lasted
- Any symptoms your baby has during the spell
- How you treated the spell and what worked

***Talk to your doctor before giving your child any “over the counter” cold medicines or cough syrups.**

References:

Green A., Kitchen B., & Ray T. (2005). Supraventricular tachycardia in children: symptoms distinguish from sinus tachycardia. *Journal of Emergency Nursing*, 31(1), 105-8.

Hanisch D. (2001). Pediatric arrhythmias. *Journal of Pediatric Nursing*, 16(5), 351-62.

Variety Children's Heart Centre. (2001). *Caring for Your Baby with Supraventricular Tachycardia (SVT)*. Winnipeg, MB: Variety Children's Heart Centre.