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When Your Heart Suddenly Races

SVT is a fast heart rhythm that starts and stops suddenly. What to try at home, and when to go to the ER.

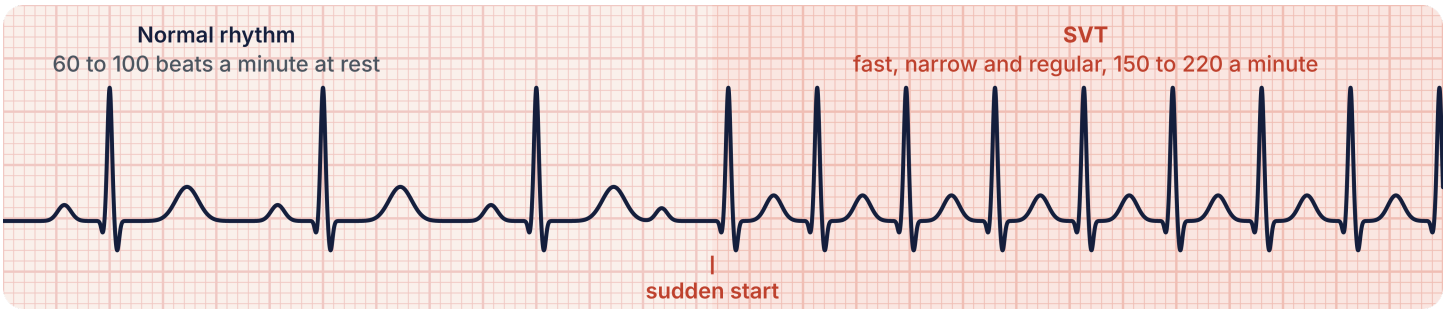
150–220
beats a minute during an episode, compared with 60 to 100 at rest

43%
of episodes stopped by the modified Valsalva in a trial, versus 17% with the standard version

95–98%
of people with the nodal type (AVNRT) cured by ablation

WHAT'S HAPPENING

A short circuit that switches on and off



Each normal heartbeat starts in the sinus node and passes through the AV node, a relay station, to the lower chambers. In SVT, an electrical loop forms in the upper heart and fires over and over, around the AV node (AVNRT) or through an extra pathway most people don't have (AVRT). It is not a heart attack, and in a structurally normal heart it doesn't damage the heart muscle.

THE FIRST THING TO TRY

The modified Valsalva, step by step

1. **Sit back and strain**
   Recline at about 45 degrees. Take a deep breath and blow hard against resistance for 15 seconds, enough to move the plunger of a 10 mL syringe.

2. **Lie flat, legs up**
   Right at the end of the strain, a helper lays you flat and lifts both legs straight up to 45 degrees for 15 seconds.

3. **Sit back and check**
   Sit back up for 45 seconds and check your pulse. When it works, the pounding stops. If a couple of tries don't stop it, see the back for when to go in.

Have a helper the first time, and watch the REVERT trial video linked in the full article. Don't try it while driving, and stop if you feel faint. If you're pregnant, had recent eye surgery or were told to avoid straining, ask your cardiologist first.

Have a plan

SVT is common and treatable, and in most people it isn't dangerous. Learn the modified Valsalva, know your triggers and know when to go to the ER. If episodes keep getting in the way of your life, ablation is an excellent option.

IF IT DOESN'T STOP

When to go in, and how SVT is treated

CALL 911

for any of these during an episode

Chest pain or pressure	Any chest pain or pressure during an episode, especially if it spreads to the jaw, shoulder or arm.
Short of breath	Severe shortness of breath, like you can't get a full breath, or wheezing.
Fainting	Fainting or nearly fainting, or feeling you can't keep yourself upright.
Confusion	Confusion, severe weakness or cold, clammy skin can mean your blood pressure is dropping.
You feel well, but it won't stop	Go to the ER, not urgent care, if it lasts more than about 15 to 30 minutes despite vagal maneuvers. No guideline sets an exact time.

IN THE EMERGENCY ROOM

Adenosine	The main drug, given as a fast IV push, and it works about 90% of the time. For about 10 seconds you may feel chest heaviness, flushing or a sense of doom. That means the drug is working, and it passes quickly.
IV calcium channel or beta blockers	Diltiazem, verapamil, metoprolol or esmolol, if adenosine doesn't work or isn't right for you. They last longer, which helps if episodes keep returning.
Cardioversion	A low-energy electrical shock under brief sedation. It's used right away if your blood pressure is dropping, and last if medications haven't worked. You won't remember the shock.

LONG-TERM OPTIONS

After a first episode	Often no treatment beyond learning the maneuvers and avoiding triggers, with an echocardiogram and a thyroid check.
Daily medication	A beta blocker, diltiazem or verapamil can make episodes less frequent and less severe for many people. It rarely stops them completely.
Catheter ablation	First-line for repeat episodes that cause symptoms. Thin catheters from leg veins map the short circuit and treat that tissue with heat or cold. It cures 95 to 98% of AVNRT and 93 to 95% of AVRT. About 3 or 4 in 1,000 need a pacemaker afterward because the AV node was injured.
Etripamil nasal spray	FDA-approved in December 2025 for use at home during an episode. In the RAPID trial it restored normal rhythm within 30 minutes about 64% of the time, versus 31% with placebo. It must be prescribed and started under supervision.

COMMON TRIGGERS

Caffeine, alcohol, dehydration, stimulant medicines such as pseudoephedrine decongestants, stress, short sleep, heat or cold, and an overactive thyroid. Sometimes there's no trigger. If your watch records rhythm strips, capture one during an episode and bring it to your visit.

READ THE FULL ARTICLE

damianrasch.com/supraventricular-tachycardia-svt

For education only, and not a substitute for advice from your own physician. Sources include the REVERT trial (Lancet 2015), the 2015 ACC/AHA/HRS and 2019 ESC SVT guidelines, the RAPID trial (Lancet 2023) and Peng and Zei (JAMA 2024).

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