How is Brugada syndrome treated?

There is no cure for Brugada syndrome, but there are treatments that can control fast heart rhythms. Treatment includes a pacemaker called an internal defibrillator (ICD) (to identify and treat fast heart rhythms).

If you have Brugada syndrome:

- If you have a fever (temperature above 38^0 C/100.4^0 F), take **acetaminophen** (like Tylenol®).
- If you have an illness that causes diarrhea (loose, watery poop) and vomiting (throwing up), **avoid dehydration (not having enough fluids) and salt loss (not having enough salt).**
  - › If you get dehydrated or lose too much salt, take an oral (by mouth) rehydration solution (salt).
- **Do not** drink alcohol.
- **Do not** use recreational drugs.
- Some prescription and over-the-counter medications can make Brugada syndrome worse. See the list of **drugs to avoid** at:
  - › www.brugadadrugs.org/drug-lists
- **Tell your family members that you have Brugada syndrome**. It can be hereditary and they may need to be tested for it.
- **Tell your loved one(s), and any support person(s) that you have Brugada syndrome.** Tell them what to do to help you if you have symptoms.

More information about Brugada syndrome:

The Canadian Sudden Arrhythmia Death Syndromes (SADS) Foundation

- › www.sads.ca
- › Includes a booklet you can download called *Cardiac Channelopathies* that has information about Brugada syndrome.

BrugadaDrugs.org

- › www.brugadadrugs.org

Looking for more health information?
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Connect with a registered nurse in Nova Scotia any time:
Call 811 or visit https://811.novascotia.ca
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Call 211 or visit http://ns.211.ca

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Prepared by: Inherited Heart Disease Clinic, QEII
Illustrations by: Dr. David C. Lee
Designed by: Nova Scotia Health Library Services

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Brugada Syndrome

Inherited Heart Disease Clinic

nova scotia health
www.nshealth.ca

How does the heart work?

The heart is a hollow organ made of muscle. It has 4 chambers: 2 at the top **(atria)** and 2 at the bottom **(ventricles)**.

Blood flows from the body into the top chambers. The blood is pumped to the bottom chambers, and is then pumped back out to the body.

Electric signals that pass through the heart muscle control the pumping of the chambers. This electrical activity is called the heart rhythm.

Heart cells have special channels that work like doors. These channels open and close to let electrical signals flow through the heart cells.

What is Brugada syndrome?

Brugada syndrome is a rare disease that can change your heart's electrical activity.

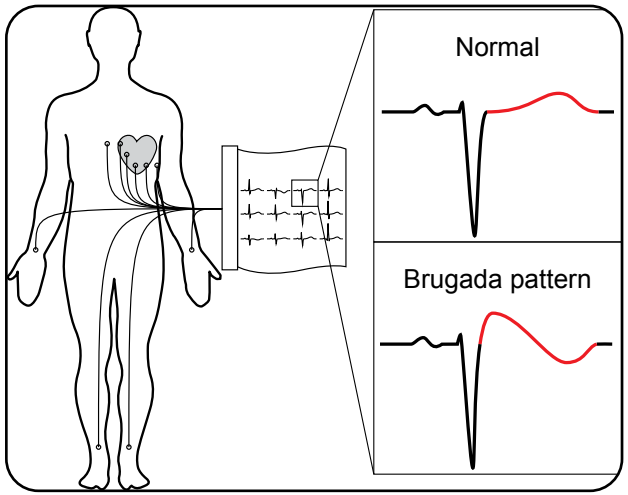
With Brugada syndrome, the channels in your heart cells do not open and close the way they should. This can cause abnormal heart rhythms. **These abnormal heart rhythms are dangerous**. Your heart may beat so fast that it cannot pump blood out to your body. The abnormal heart rhythms can make you collapse (faint). **If the rhythm does not stop, it can cause sudden death**.

What causes Brugada syndrome?

Brugada syndrome can be caused by:

- changes in your genes. Brugada syndrome can be hereditary (passed from parents to their children).
- some medications.

Sometimes the cause of Brugada syndrome is not known.



Most people with Brugada syndrome start to have symptoms as young adults, but it can happen at any age.

It is important to tell your health care provider if you had a relative who died suddenly at a young age. This could have been caused by Brugada syndrome.

What are the symptoms of Brugada syndrome?

Symptoms may include:

- Fainting
- Seizures (brief, abnormal, excessive [too much] discharge of electrical energy in the brain)
- Palpitations (feeling like your heart is jumping, racing, or fluttering)
- Blackouts (passing out or not being able to remember a certain amount of time)

How is Brugada syndrome diagnosed?

Health care providers use different tests to diagnose Brugada syndrome.

You may have some of these tests:

Electrocardiogram (ECG/EKG): A recording of your heart rhythm for 10 to 20 seconds. Brugada syndrome causes a Brugada pattern on your ECG/EKG (see image).

Exercise stress test: A recording of your heart rhythm and blood pressure while you run on a treadmill.

Procainamide challenge: Procainamide is a medication used to treat heart rhythm disorders. You will be given procainamide through an intravenous (IV) tube into a vein in your arm using a needle. You will also be given three ECGs/EKGs:

- one before you get the IV.
- one while you are getting the IV.
- one when the IV is finished.

Your cardiologist (heart doctor) will use these ECGs/EKGs to check for the Brugada pattern. This test is done in the hospital and usually takes about 2 to 3 hours.

Your cardiologist may want you to have other tests when they are diagnosing you. They will talk with you about this, if needed.

Genetic testing and family screening

If your cardiologist thinks changes in your genes caused your Brugada syndrome, they may ask if you would like to talk with a genetic counsellor about genetic testing.

Your cardiologist may also want to ask other members of your family to test for Brugada syndrome. They may ask you to help by giving letters to your family members.