



Patient & Family Guide
2026

Brugada Syndrome

The Jordan Boyd
Inherited Heart Disease
Clinic



www.nshealth.ca

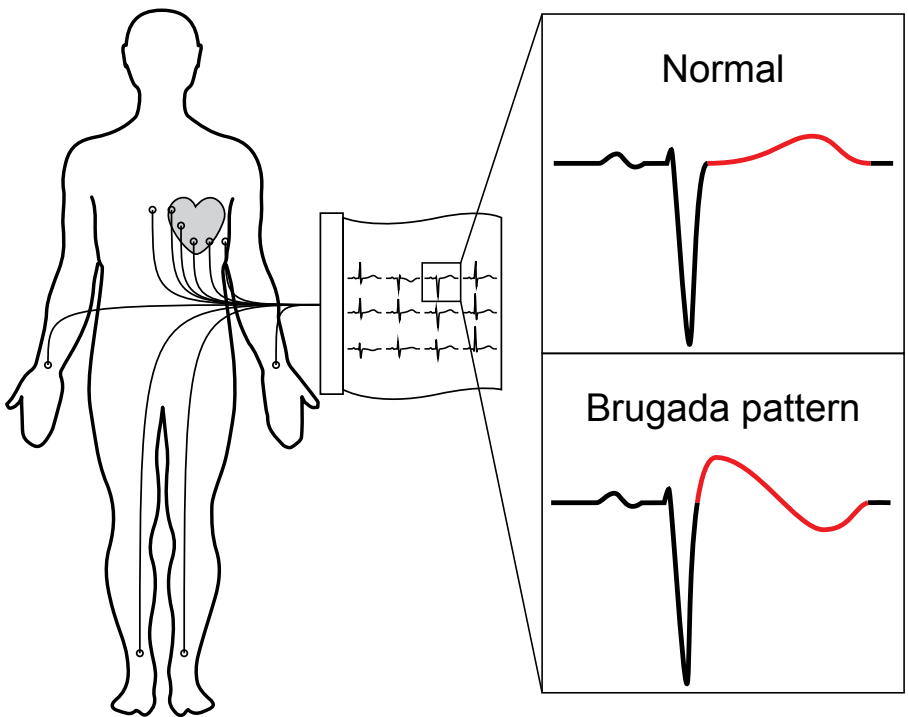
Brugada Syndrome

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 channels that work like doors. These channels must 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 normally. This can cause an abnormal heart rhythm.
- **An abnormal heart rhythm is dangerous.** Your heart may beat so fast that it cannot pump blood out to your body. The abnormal heart rhythm can make you 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. These changes can be hereditary (passed from parents to their children)
 - › Some medications
- Sometimes the cause is not known.
- Most people with Brugada syndrome start to have symptoms as young adults, but it can happen at any age.

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, 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 on page 2).
 - › **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 (I.V.) tube into a vein in your arm using a needle. You will also be given 3 ECGs/EKGs:
 - › 1 before you get the I.V.
 - › 1 while you are getting the I.V.
 - › 1 when the I.V. 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 (heart doctor) 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 give letters with information about Brugada syndrome to your family members.

How is Brugada syndrome treated?

- There is no cure for Brugada syndrome, but there are treatments that can control a fast heart rhythm.
- Treatment may include a pacemaker called an **internal cardioverter defibrillator (ICD)**. The ICD identifies a fast heart rhythm and slows your heart rhythm down to a safer speed.

If you have Brugada syndrome:

- If you have a fever (temperature above 38 °C or 100.4 °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). This can cause your body to lose too much salt.
 - › If you get dehydrated, drink a rehydration solution (like Pedialyte®).
- **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 ones, and any support persons, that you have Brugada syndrome.** Tell them what to do to help you if you have symptoms.

For more information about Brugada syndrome:

- **The Canadian Sudden Arrhythmia Death Syndromes (SADS) Foundation**
 - › www.sads.ca
 - › Has a booklet you can download, called *Cardiac Channelopathies*, with information about Brugada syndrome
- **BrugadaDrugs.org**
 - › www.brugadadrugs.org

This pamphlet is for educational purposes only. It is not intended to replace the advice or professional judgment of a health care provider. The information may not apply to all situations. If you have any questions, please ask your health care provider.

Find all patient education resources here:
www.nshealth.ca/patient-education-resources

Connect with a registered nurse in Nova Scotia any time:
Call 811 or visit: <https://811.novascotia.ca>

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