

2017

# Brugada Syndrome

**Inherited Heart Disease Clinic**



[www.nshealth.ca](http://www.nshealth.ca)

## **What is Brugada syndrome?**

Brugada syndrome is a rare inherited (passed from one generation to the next) condition. It is associated with an ECG pattern called a Brugada sign. People with Brugada syndrome are at risk of arrhythmias that may cause syncope (fainting) or sudden death. Brugada syndrome affects more men than women and symptoms usually start around age 40, although symptoms have been reported in patients from birth to 84 years old.

## **What causes Brugada syndrome?**

Brugada syndrome is a genetic inherited disease. People with family members who have this disease have a 50:50 chance of inheriting it. If your Brugada syndrome is inherited, your doctor may recommend genetic counselling for you and your family.

Brugada syndrome is caused by an abnormality in one of the genes that produce the channels (doors) that control the entry of sodium (salt) into the heart's cells. Certain medications may also cause the disorder.

**Symptoms:** People with Brugada syndrome have different symptoms. Some have a family member die suddenly at a young age. Others have a history of fainting spells, seizures, palpitations, chest pain and/or blackouts.

**If you or any of your family members have any of these symptoms, talk with your doctor.**

## **Diagnosis**

The 2 main tests that help to determine if you have Brugada syndrome are:

**Electrocardiogram (ECG):** An ECG is an electrical tracing of your heartbeat. It is used to measure different parts of the electrical tracing picture.

**Exercise Stress Test (EST):** Your blood pressure, heart rate and heartbeat are recorded while you are walking on a treadmill.

In some patients, a procainamide test will be suggested. Procainamide is a sodium channel blocking medication used to treat heart rhythm disorders. A procainamide test lets the doctor see certain electrical patterns. Procainamide is given through an intravenous (IV). ECGs are done before, during and after the procainamide infusion to check for changes. This test is done in the hospital and usually takes about 2-3 hours.

**Genetic testing:** This may be offered to some people with this kind of heart rhythm problem. Your doctor or genetic counsellor will talk about this with you.

Other tests may also be needed or suggested by your cardiologist (heart doctor). Your cardiologist will talk about this with you.

## **Treatment**

Inherited causes of Brugada syndrome are not curable, but some treatments may make you feel better. Your treatment will depend on your medical and family history and how you are feeling. Your doctor will review all of your test reports. Together, you and your doctor will decide on the best treatment for you.

### **Treatments may include:**

- Lifestyle advice, such as avoiding medications that can make the condition worse (visit [www.brugadadrugs.org](http://www.brugadadrugs.org) for a full list of drugs to avoid)
- Treating fever with acetaminophen (Tylenol®)
- Implantable cardioverter defibrillators (ICDs) may be offered to patients at high risk of sudden cardiac arrest (heart stops beating).

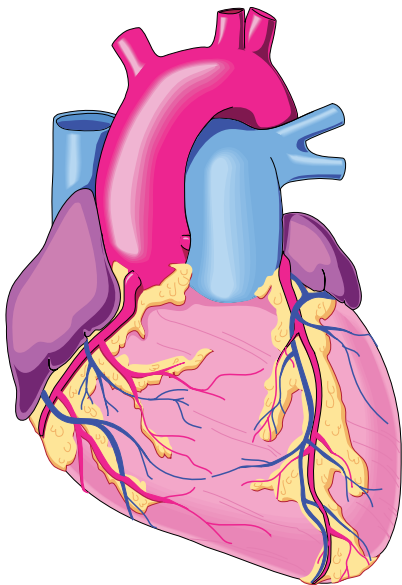


## Can I still do my normal activities?

Below are some general guidelines.

These may vary from person to person:

- **AVOID** strenuous (hard) exercise, as this can often trigger blackouts.
- **DO NOT** do any competitive sports.
- **KNOW** the medications that can make the problem worse. Some of these are over-the-counter medications. An updated list can be found at: <http://www.crediblemeds.org> or [www.brugadadrugs.org](http://www.brugadadrugs.org).
- **Make sure your family and friends are aware of your condition** and symptoms, and that they know what to do if you have symptoms.



**What are your questions?**

**Please ask. We are here to help you.**

## More information:

- › [www.sads.ca](http://www.sads.ca)
- › [www.brugadadrugs.org](http://www.brugadadrugs.org)
- › [www.crediblemeds.org](http://www.crediblemeds.org)
- › [www.heartsinrhythm.ca](http://www.heartsinrhythm.ca)

## Clinic staff

- Dr. Martin Gardner MD, FRCP(C), FCCS
- Dr. Chris Gray MD, FRCP(C)
- Dr. Ciorsti MacIntrye MD, FRCP(C)
- Victoria Newman-Burd RN, BSN, CCRP
- Dr. Sarah Dyack MD, FRCP(C), FCCMG
- Amy Crowley MS-CGC
- Natasha VanInderstine MS-CGC
- Ann Fearon RN

### Looking for more health information?

Find this pamphlet and all our patient resources here:

<http://library.nshealth.ca/PatientGuides>

Contact your local public library for books, videos, magazines, and other resources. For more information, go to <http://library.novascotia.ca>

*Nova Scotia Health Authority promotes a smoke-free, vape-free, and scent-free environment.*

*Please do not use perfumed products. Thank you!*

### Nova Scotia Health Authority

[www.nshealth.ca](http://www.nshealth.ca)

*Prepared by:* Inherited Heart Disease Clinic, QEII, Halifax ©

*Illustration by:* LifeART Super Anatomy 1 Images, Copyright © 1994,  
TechPool Studios Corp. USA

*Designed by:* NSHA Library Services

The information in this brochure is for informational and educational purposes only. The information is not intended to be and does not constitute health care or medical advice. If you have any questions, please ask your health care provider.

WG85-1773 Created October 2017

The information in this pamphlet is to be updated every 3 years or as needed.