Finding answers about unexplained fainting
“For about 15 years, Lloyd’s friends and family thought he was clumsy. Each spring, he seemed to have an unusual accident. Once, he tumbled down the stairs and needed 14 stitches. Another time he fell off a ladder and broke four ribs. Then there was the time when he hit the ground while removing a screen from his truck...”
“After Debbie fainted the first time, she didn’t think much about it. As a cardiac nurse, she knew there were many reasons people faint. But the fainting continued, and within a couple of months she was passing out three times a day...”

“After a long day outside on a hot day in May, Kelli became dizzy and fainted. When she came to, she assumed she was dehydrated from spending hours in the sun. She drank an energy drink and thought nothing more of the event. Two weeks later, while driving, Kelli felt the same feeling in her chest that she felt prior to fainting and passed out again...”

For more about these and other personal stories about unexplained fainting, visit MonitorYourHeart.com/stories
A common problem that affects 1 million people in the United States every year,\textsuperscript{1} fainting accounts for 1-3\% of emergency department visits and 6\% of hospital admissions.\textsuperscript{2}

**CAUSES OF FAINTING:**
Fainting can be caused by many things. Many patients have a medical condition they may or may not know about that affects the nervous system or heart. You may also have a condition that affects blood flow through your body and causes your blood pressure to drop when you change positions (for example, going from lying down to standing).\textsuperscript{3}

**THE RISKS OF UNEXPLAINED FAINTING**
Some causes of fainting are harmless but other causes can be serious. Cardiac causes, such as abnormal heartbeats, are among the most serious causes of fainting. Fainting could be a warning sign of a potentially serious heart condition. Whether you faint once or repeatedly without any explanation, you should talk to your doctor.

Fainting is a sudden loss of consciousness that occurs when blood pressure drops and not enough oxygen reaches the brain. This loss of consciousness is sometimes called “passing out” or “blacking out.” Your healthcare provider may use the medical term syncope (pronounced SIN koe pee) when referring to your fainting. Most often, a fainting episode is brief and consciousness is regained in a few minutes, although there may be a period of confusion.
CARDIAC MONITORING CAN UNLOCK THE ANSWER

If your doctor suspects that your fainting is heart related, cardiac monitoring may be necessary. Cardiac monitoring is used to either identify or rule out a heart rhythm disorder and to determine the right course of treatment.

Types of cardiac monitoring vary in terms of how long they can be used and how information is captured. Common types of cardiac monitoring systems include:

- Holter Monitors
- Event Recorders
- Mobile Cardiac Telemetry Systems
- Insertable Cardiac Monitoring Systems

HOLTER MONITOR
A portable external monitor that includes wires with patches that attach to the skin. It continuously measures and records the heart's activity for 1-2 days.

EVENT RECORDER
A recorder worn on the body for up to 30 days. It typically requires activation by pushing a button to record the heart's activity.

MOBILE CARDIAC TELEMETRY
A wearable monitor that automatically detects, records and transmits abnormal heart rhythms for up to 30 days.

INSERTABLE CARDIAC MONITOR
An insertable monitor placed just under the skin that automatically detects and records abnormal heart rhythms for up to 3 years.
Simple
Easily apply the peel-and-stick wearable sensor yourself. It’s like an adhesive bandage that can be worn day and night—even in the shower.

Wireless
Communicates through a cellular network to the Medtronic Monitoring Center via the Transmitter you carry with you.

Discreet
The sensor can be worn beneath your clothing at work, at play or while sleeping.

Heart data is recorded with the SEEQ wearable sensor

The Transmitter sends data wirelessly to the Medtronic Monitoring Center

Cardiographic technicians are available 24/7 to watch for unusual activity

Clinical reports are made available to your doctor

UP TO 30 DAYS OF CARDIAC MONITORING

The SEEQ Mobile Cardiac Telemetry (MCT) System includes a self-adhesive wearable sensor that continuously monitors your heart, records irregular heart rhythms and communicates through a hand-held transmitter to the Medtronic Monitoring Center for review.
The Reveal LINQ System includes a small insertable cardiac monitor (or ICM) that continuously monitors your heart, records irregular heart rhythms and provides data to your doctor through a bedside transmitter called the MyCareLink™ Patient Monitor.

**Discreet:** The Reveal LINQ ICM is not visible in most patients.

**Easy:** The MyCareLink Monitor uses a cellular signal and a power outlet.

**MRI Compatible:** The Reveal LINQ ICM is safe for use in an MRI setting.

Heart data is recorded with the Reveal LINQ ICM.

You go to bed near your MyCareLink Monitor.

Your data is shared with the MyCareLink Monitor.

Your doctor can access your data.

Your doctor will contact you if necessary.

All surgical procedures carry risks, but those associated with the Reveal LINQ System are rare. Since the ICM is inserted just under the skin, there is a small risk of infection and/or sensitivity.
Learn more about Medtronic heart monitoring options, read patient stories and find answers at MonitorYourHeart.com

Please talk to your doctor if you are interested in finding out more about the SEEQ System or the Reveal LINQ System.

References

Additional Device Information
Reveal LINQ™ Insertable Cardiac Monitor
The Reveal LINQ Insertable Cardiac Monitor is an implantable patient-activated and automatically-activated monitoring system that records subcutaneous ECG and is indicated in the following cases:
- patients with clinical syndromes or situations at increased risk of cardiac arrhythmias
- patients who experience transient symptoms such as dizziness, palpitation, syncope, and chest pain, that may suggest a cardiac arrhythmia

The device has not been tested specifically for pediatric use.

Possible risks associated with the implant of the Reveal LINQ Insertable Cardiac Monitor include, but are not limited to, infection at the surgical site, device migration, erosion of the device through the skin and/or sensitivity to the device material.

Treatment with a Reveal LINQ Insertable Cardiac Monitor is prescribed by your physician. This treatment is not for everyone. Please talk to your doctor to see if it is right for you. Your physician should discuss all potential benefits and risks with you. Although many patients benefit from the use of this treatment, results may vary. For further information, please call the Medtronic toll-free number at 1 (800) 551-5544 (7:00 a.m. to 7:00 p.m., Monday–Friday, Central Time) or see the Medtronic website at www.medtronic.com.

Patient Assistant
The Patient Assistant is intended for unsupervised patient use away from a hospital or clinic. The Patient Assistant activates the data management feature in the Reveal Insertable Cardiac Monitor to initiate recording of cardiac event data in the implanted device memory.

Operation of the Patient Assistant near sources of electromagnetic interference, such as cellular phones, computer monitors, etc., may adversely affect the performance of this device.

Medtronic MyCareLink™ Patient Monitor
The Medtronic MyCareLink Patient Monitor is a prescription product indicated for use in the transfer of patient data from some Medtronic implantable cardiac devices based on physician instructions and as described in the product manual. The MyCareLink Patient Monitor transmissions to the CareLink™ Network are subject to cellular service availability. The MyCareLink Patient Monitor must be on and in range of the device in order to wirelessly receive data from your implanted device. This product is not a substitute for appropriate medical attention in the event of an emergency and should only be used as directed by a physician.

The Medtronic CareLink Service is prescribed by your physician. This service is not for everyone. Please talk to your doctor to see if it is right for you. Your physician should discuss all potential benefits and risks with you. Although many patients benefit from the use of this service, results may vary. For further information, please call CareLink Patient Services at 1 (800) 929-4043 (8:00 a.m. to 5:00 p.m., Monday–Friday, Central Time) or see the Medtronic website at www.medtronic.com.
**SEEQ™ Mobile Cardiac Telemetry System**

**Indications**
The Medtronic SEEQ™ Mobile Cardiac Telemetry (MCT) System is intended to continuously measure, record and periodically transmit physiological data. The System is indicated for those patients who require monitoring for the detection of non-lethal cardiac arrhythmias, such as, but not limited to, supraventricular tachycardias (e.g., atrial fibrillation, atrial flutter, paroxysmal SVTs), ventricular ectopy, bradyarrhythmias and conduction disorders. The SEEQ MCT System monitors, derives and displays: ECG, Heart Rate.

**Contraindications**
- Patients with known allergies or hypersensitivities to adhesives or hydrogel
- Patients with potentially life-threatening arrhythmias, or who require inpatient/hospital monitoring

**Warnings and Precautions**
- Do not reapply the Wearable Sensor (it is meant for one-time use)
- For a complete list of precautions, please refer to the Instructions for Use document

See the device manual for detailed information regarding the indications, contraindications, warnings, precautions, and potential complications/adverse events. For further information, please call Medtronic at 1 (800) 328-2518 and/or consult Medtronic’s website at www.medtronic.com.

**Caution:** Federal law (USA) restricts these devices to sale by or on the order of a physician.

The SEEQ™ MCT System and the Medtronic Monitoring Center are provided by Medtronic Monitoring Inc., a wholly owned subsidiary of Medtronic.