



# A Guide to Your Cardioversion

Please bring this book with you on the day of your procedure



**THE OHIO STATE UNIVERSITY**  
WEXNER MEDICAL CENTER



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### Patient and Visitor Guide

To prepare for your visit, please visit [wexnermedical.osu.edu/patient-and-visitor-guide](http://wexnermedical.osu.edu/patient-and-visitor-guide) and learn about available resources, including:

- For Patients tab: Billing and Financial Assistance
- For Visitors tab: Locations and Parking (such as [driving directions](#) to Richard M. Ross Heart Hospital) and Visitor Policies (such as [Hotel Accommodations](#) information sheet).

For a digital copy of this book, please visit [go.osu.edu/pted4205](http://go.osu.edu/pted4205).

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**Talk to your doctor or health care team if you have any questions about your care.**

For more health information, go to [wexnermedical.osu.edu/patiented](http://wexnermedical.osu.edu/patiented) or contact the Library for Health Information at 614-293-3707 or [health-info@osu.edu](mailto:health-info@osu.edu).

# Welcome

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Ohio State Richard M. Ross Heart Hospital has heart rhythm specialists, called **electrophysiologists**. They, along with the other members of your electrophysiology (EP) healthcare team, are dedicated to providing you with personalized care to treat your symptoms of abnormal, rapid heart rhythm, also known as **arrhythmia**.

Our goal is to restore your normal heart rhythm. A cardioversion procedure converts an abnormal heart rhythm back to a normal rhythm by delivering an electric shock to the heart.

Some rhythm problems that the cardioversion procedure may help include **atrial fibrillation**, **atrial flutter**, **ventricular tachycardia** and **supraventricular tachycardia**. Medicines are also used to treat these rhythm problems, sometimes in combination with a cardioversion procedure.

## Contact information

**Ross Heart Hospital**  
452 West 10th Avenue  
Suite 1052  
Columbus, OH 43210

### Hours of operation:

Monday - Friday  
8:00 am to 4:30 pm  
Closed weekends and all  
major holidays

### Phone numbers:

Main: 614-293-8916  
Toll-free: 877-478-2478  
Fax: 614-366-1315





# Cardioversion

- Your procedure is scheduled for \_\_\_\_\_ (date) at \_\_\_\_\_ AM/PM.
- **Please arrive at \_\_\_\_\_ AM/PM (your check-in time), so we can prepare you for your procedure.**
- If you need to change the time of your procedure, please call Scheduling at 888-293-7677.
- Expect to be at the hospital for about 6 hours to prepare for, have and recover from your procedure. The cardioversion itself takes about 5 minutes. You may also have a test called a trans-esophageal echo or TEE before your cardioversion. This test takes about 10 to 30 minutes.
- If you have questions, you may call the nurse at \_\_\_\_\_.

## Preparing for your procedure

- **If you take warfarin (brand names Coumadin or Jantoven), you may need to have weekly blood work (PT/INR) with the doctor who is managing your medicine. The INR level needs to be in your treatment range for 4 weeks before this procedure. Please have your doctor fax these weekly results to \_\_\_\_\_.**
- **If you are to take Pradaxa, Eliquis, Xarelto or Savaysa for anticoagulation (also known as blood thinners), take these medicines exactly as ordered.**
- **If you have diabetes and take medicines, please review the information on pages 8 to 11 of this book.**
- **Do not smoke or use tobacco products for 24 hours before your procedure.**
- **Do not eat or drink anything 6 hours before your procedure.**
- **Do not stop any medicines unless directed by your doctor.**
- Please bring your medicines in their bottles to the hospital with you.
- Arrange to have a responsible adult, at least 18 years old, with you to get you home from the hospital after your procedure. **You will not be allowed to drive after the procedure.**
- If you are pregnant, think you may be pregnant or are breastfeeding, tell your doctor right away.
- Please leave all valuables, including jewelry, at home.

## Trans-esophageal echo (TEE)

On the day of your cardioversion, your doctor may schedule you for a test called a **trans-esophageal echo or TEE**. You will have this test before your cardioversion.

A TEE checks for blood clots in your heart. The test also shows the doctor how well the valves and chambers of the heart are working.

The TEE is done with a flexible tube that creates pictures of your heart using sound waves. The sound waves come through the end of the tube, called a probe. This tube is put into your mouth and down into your esophagus (food pipe). The esophagus is located near the heart.

Preparing for a TEE is the same as preparing for your cardioversion procedure, so there are no more steps to take to prepare for this test.

## On the day of your procedure

- You may take your scheduled medicines with small sips of water **the morning of your procedure.**
- Report to the **Ross Heart Hospital**, located at 452 West 10th Avenue, Columbus, OH 43210. Valet parking is available, or you may park in the **SafeAuto Hospitals Garage**, which is attached to the hospital. The garage's address is 1585 Westpark Street, Columbus, OH 43210.
- The adult who will be taking you home after the procedure needs to be with you.
- **Arrive at your check-in time**, so we can prepare you for your procedure. This time is often **2 hours before the start of your procedure.**
- **Register in the main lobby.**

## During your procedure

### Staff will:

- Explain the procedure to you and answer any questions that you may have.
- Get a health history. If you are having the TEE, you will be asked if you have problems with your esophagus, problems swallowing or cancer of the esophagus.
- Review your medicine list.
- Check your blood pressure, pulse and breathing rate.
- Start an IV (intravenous) line in your arm to give medicines during the procedure.
- Ask you to remove your dentures if you have them.

### Trans-esophageal echo (TEE)

- You will be asked to lie on your left side. A pillow will be placed behind your back for support.
- The doctor will apply a gel-like medicine to numb your throat and stop your gag reflex. The doctor may also spray your throat with a medicine to numb your throat.
- You will be asked to bite on a guard to protect the tube and your teeth. Then the doctor will place the tube into your mouth.
- The nurse will give you medicine through your IV to help you relax.
- Your blood pressure, pulse and breathing rate will be checked during the test. You may also be given oxygen through a tube in your nose.
- Sometimes the probe is placed into the stomach. This may cause you to feel some pressure.

## Cardioversion

- You will be asked to lie on your back.
- Your blood pressure, pulse and breathing rate will be checked during the procedure.
- You will be given some medicine in an IV that will make you completely asleep during the procedure.
- Cold gel pads will be put on your chest that are connected to the machine that will deliver the electric energy.
- After you are asleep, the doctor will use the machine to deliver the shock to your heart. This shock is a small amount of electricity that goes through your skin to the heart.

## After the procedure

The nurses will continue to check your blood pressure, pulse and breathing rate for the next hour or until you are fully awake. It is normal for you to feel drowsy at this time due to the medicines you were given. You may also feel some discomfort on your chest where the pads were placed. When you are fully awake, you will be offered ice chips and water.

**If you had a TEE**, the numbing medicine that you were given will leave your throat numb for a time after the procedure. The nurse will check your gag reflex after 1 hour by watching you take a sip of cold ice water to see if you can safely swallow. **Do not drink or eat anything for 1 hour after the procedure or until your nurse says that it is safe.** The most common side effect of a TEE is a sore throat.

You will be given discharge instructions. These will be reviewed with you and your family member. Most patients are discharged home within 2 hours after their procedure.

## Home care

- The medicines that you were given during your procedure may make you sleepy and forgetful. To prevent problems for the **first 24 hours**:
  - Do not drive.
  - Do not drink alcohol.
  - Do not make any important decisions.
  - Do not work around the stove, machinery or power equipment.
- Rest for 24 hours after you get home. You should have someone with you to help you the first night you are home. After 24 hours, you can return to your normal activities.
- The medicines used for sedation may make you feel nauseated.
  - Start with clear liquids, which is anything that you can see through, such as tea, jello, broth and ginger ale.
  - As you feel better, you may add soft foods, such as pudding and ice cream.
  - When you no longer feel nauseated, you may try your normal diet. You should be back to eating your normal meals after 24 hours.

## **Other instructions**

- If the skin on your chest is sore, you may use hydrocortisone cream as needed. Follow the instructions on the package for use.
- If you had a TEE and have a sore throat, you may use throat lozenges or sprays as needed. You may also take acetaminophen (Tylenol) as needed for discomfort. Follow the instructions on the packages for use.
- Follow up as directed with your cardiologist.

# Type 1 Diabetes: Medicines before Tests or Surgery

If you are not sure how to adjust your diabetes medicines, talk to your doctor or nurse before your test or surgery date. Follow your doctor's directions if they are different than these guidelines.

**Diabetes medicines may need to be stopped or changed before a test or surgery.** This is important for your health. There is less of a chance for infection or other problems if your blood sugar is in the normal range before a test or surgery.

- **If you are on a clear liquid diet the day before your test or surgery**, call your doctor to check if you need to make other changes to your medicine dose.
- **Check your blood sugar the morning of your test or surgery.** If it is above 250 or less than 70, call your doctor for more instructions. High or low blood sugars may result in a delay or cancellation of your test or surgery that day.
- **Tell your nurse that you have diabetes** when you arrive at the test area or at pre-operative holding area.



## Your insulin

These are general guidelines for how to take insulin before tests or surgery. Many patients with type 1 diabetes need a small reduction in basal insulin before tests or surgery. Check with your doctor to see how much insulin you need and if you need to follow different guidelines.

- ☐ **If you take Humalog/Admelog (lispro), Novolog (aspart), Apidra (glulisine), Fiasp (aspart) or Regular insulin, do not take the dose the morning of your test or surgery.**
  - You can start your usual dose after your test or surgery when you are able to eat and drink.
  - Plan to check your blood sugar at least 4 times each day for the next 1 to 2 days after your test or surgery.
- ☐ **If you take Levemir (detemir), Lantus (glargine), Basaglar (glargine), Tresiba (degludec), or Toujeo (glargine) insulin, reduce your dose either the evening before or the morning of your test or surgery to 80%.**

If you multiply your usual dose by 0.8, that gives you the reduced dose. For example, if your usual dose is 32 units,  $32 \times 0.8 = 25.6$ . Your reduced dose would be about 26 units. A reduced dose chart is on the next page for your reference.

- **If you are not sure, ask your doctor how much insulin you should take.** Take \_\_\_\_\_ units of \_\_\_\_\_ on the night before or the morning of your test or surgery.
- If you are able to eat and drink after your test or surgery, take your usual evening dose.
- Plan to check your blood sugar at least 4 times each day for 1 to 2 days after your test or surgery.



- ☐ **And your test or surgery is less than 3 hours**, you and your doctor may decide to keep the pump on.
- Place the catheter in a location away from the area where the test or surgery will occur.
  - Consider using a temporary basal profile based on 0.8 of your usual basal. Reduce the basal rates down by multiplying the set basal rates by 0.8, starting with the 12:00 midnight basal rate through the test or surgery and recovery. **Discuss this with your doctor.**
  - Return to your usual basal rates after the test or surgery when you are able to eat and drink.
  - Plan to check your blood sugars more often for the next 1 to 2 days after your test or surgery.
- ☐ **And your test or surgery is longer than 3 hours or your doctor takes you off the insulin pump**, take \_\_\_\_\_ units of \_\_\_\_\_ on the morning of your test or surgery.

# Type 2 Diabetes: Medicines before Tests or Surgery

If you are not sure how to adjust your diabetes medicines, talk to your doctor or nurse before your test or surgery date. Follow your doctor's directions if they are different than these guidelines.

**Diabetes medicines may need to be stopped or changed before a test or surgery.** This is important for your health. There is less of a chance for infection or other problems if your blood sugar is in the normal range before a test or surgery.

- **If you are on a clear liquid diet the day before your test or surgery,** call your doctor to check if you need to make other changes to your medicine dose.
- **Check your blood sugar the morning of your test or surgery.** If it is above 250 or less than 70, call your doctor for more instructions. High or low blood sugars may result in a delay or cancellation of your test or surgery that day.
- **Tell your nurse that you have diabetes** when you arrive at the test area or at pre-operative holding area.

## Your oral diabetes medicines

These are general guidelines for how to take insulin before tests or surgery. Check with your doctor to see how much insulin you need and if you need to follow different guidelines.

- ☐ **If you are having a test or surgery that includes IV contrast dye and you take Glucophage, also called metformin, or any other medicine that has metformin in it, such as Metaglip, Glucovance, Avandamet or ACTO plus Met:**
  - Do not take metformin the day of your test or surgery. You should take your last dose on \_\_\_\_\_(date).
  - Do not take this medicine for 2 days after your test or surgery. Restart this medicine on the third day after your test or surgery.
  - If you are not sure if you will have a test with IV contrast, call your doctor to find out.
- ☐ **If you are having a same day test or surgery and you take other diabetes pills:**
  - Do not take your diabetes pills in the morning before your test or surgery.
  - If your test or surgery is done before noon and you are able to eat and drink, take your morning diabetes medicine after your test or surgery.
  - If your test or surgery is done after noon and you are able to eat and drink, take your diabetes medicine at the next scheduled time. You will skip your morning dose.
- ☐ **Check your blood sugar at least 4 times each day for the next 1 to 2 days after your test or surgery.**



## If you take insulin

- ❑ **If you take Humalog (lispro), Novolog (aspart), Apidra (glulisine), Fiasp (aspart) or Regular insulin:**
  - Do not take the dose the morning of your test or surgery.
  - You can start your usual dose after your test or surgery when you are able to eat and drink.
  - Plan to check your blood sugar at least 4 times each day for the next 1 to 2 days after your test or surgery.
- ❑ **If you take Levemir (detemir), Glargine or Lantus (glargine), Basaglar (glargine), Tresiba (degludec), or Toujeo (glargine) insulin:**
  - Cut your dose in half the evening before or the morning of your test or surgery. For example, if your usual dose is 32 units,  $32/2 = 16$ . Your reduced dose would be 16 units.
  - **If you are not sure, ask your doctor how much insulin you should take.** Take \_\_\_\_\_ units of \_\_\_\_\_ on the night before or the morning of your test or surgery.
  - If you are able to eat and drink after your test or surgery, take your usual evening dose.
  - Plan to check your blood sugars at least 4 times each day for 1 to 2 days after your test or surgery.
- ❑ **If you take NPH, 70/30, 75/25, or 50/50 insulin:**
  - Reduce your evening dose the day before your test or surgery to 50%. **If you are not sure, ask your doctor how much insulin you should take.**
  - Also, reduce your morning dose by  $\frac{1}{2}$  or 50% of your usual dose the day of your test or surgery. For example, if your usual morning dose is 30 units, you would take only 15 units. Take \_\_\_\_\_ units of \_\_\_\_\_ the morning of your test or surgery.
  - If you are able to eat and drink after your test or surgery, resume your usual evening dose.
  - Plan to check your blood sugars at least 4 times each day for 1 to 2 days after your test or surgery.



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