Understanding Chemical Cardioversion

Cardioversion is a procedure that is done to return your heartbeat to a normal rhythm. It's done when the heart is beating very fast or irregular. This is called an arrhythmia. Chemical cardioversion uses medicine to change the heart's rhythm. The medicine is given through an IV (intravenous) line or by mouth.

Why chemical cardioversion is done

An arrhythmia can cause problems such as fainting, stroke, or heart attack. It can also cause sudden cardiac death. Chemical cardioversion can help treat several kinds of arrhythmias.

It's most often used to treat atrial fibrillation (AFib). With AFib, the atria of the heart quiver instead of pumping normally. People with AFib may feel out of breath easily, feel tired, and have a very fast heartbeat. They are also at increased risk for stroke.

Chemical cardioversion can also help treat other kinds of arrhythmias. These include:

- Atrial flutter
- Supraventricular tachycardia
- Atrial tachycardia
- Ventricular tachycardia

All of these arrhythmias can cause heart rates that are too fast. This can prevent the heart from pumping enough blood.

But your healthcare provider may **not** want you to have cardioversion if you:

- Have minor symptoms or no symptoms
- Are an older adult with limited activity
- Have had AFib a long time
- Have other major health problems and can't take blood-thinning medicines

Other treatments might be better for you. These may include heart rate control only with other medicines.

If you do have chemical cardioversion and it does not work, you may have electrical cardioversion. This resets the heart rhythm with an electrical shock.

How chemical cardioversion is done

The procedure may be done in a hospital. Or it may be done in a healthcare provider's office with heart monitoring capabilities. A healthcare provider will give you medicine. The medicine used is based on your type of arrhythmia and your overall health. It may be given by an IV line through a vein in your arm or hand. Or you may take it by mouth.

Risks of chemical cardioversion

Every procedure has risks. The risks of chemical cardioversion include:

- New arrhythmias that may be more dangerous than the original problem
- Slowed heart rate or pauses in the heart rhythm

- Cardiac arrest
- The original arrhythmia happening more often
- Dislodged blood clot that can cause stroke, a blocked artery (embolism), or other problems

In some cases, your risk for blood clots may be lowered with medicines (blood thinners) to help prevent clots. You may be given this medicine for 3 to 4 weeks before the procedure. In most cases, you should take this medicine for at least 4 weeks after the procedure. A procedure called a transesophageal echocardiogram (TEE) may be done before a chemical cardioversion to make sure there are no clots in your heart before attempting to restore normal heart rhythm.

Your own risks may vary based on your age, the type of arrhythmia you have, and your overall health. Talk with your healthcare provider about which risks apply to you.

The medicines used for chemical cardioversion also have risks and side effects. Talk with your healthcare provider about the risks and side effects of the medicine you will be given.