

Great Lakes Heart Center of Alpena Patient Education Handout

Cardioversion is procedure for restoring the hearts rhythm. During electrical cardioversion electric current is used to reset the heart's rhythm. The current is delivered to the body using patches applied to the chest wall.

Electrical cardioversion is highly effective in treating recent-onset atrial fibrillation, restoring a normal rhythm in 86%. The success rate can be further enhanced to 94% by initiating treatment with antiarrhythmic medications prior to cardioversion.

Cardioversion is also more likely to be successful if:

- The patient is young.
- Done for the first episode of atrial fibrillation.
- Atrial fibrillation has been present for less than a year.

Cardioversion is less likely to succeed if:

- Atrial fibrillation has been present for more than a year.
- The patient has enlarged cardiac chambers.
- If the patient has congestive heart failure or an underlying cardiomyopathy.
- Significant valve problems are present.
- The patient has had recurrent episodes of atrial fibrillation.

PREPARING FOR THE PROCEDURE

- Do not eat or drink 6 to 8 hours before the test.
- Wear loose clothing
- Admission the night before the test maybe required. In most cases however, the patient is admitted on the morning of the procedure.
- The procedure and its risks should be explained.
- Tell the doctor or nurse what medications the patient is taking, what medications the patient is allergic to and whether the patient has had problems in the past with sedatives.
- A witnessed, signed consent for the procedure is required.

Because you may receive sedation, have someone available to drive you home after the procedure!

HOW CARDIOVERSION PERFORMED

- The patients chest and back are prepared by careful cleaning and shaving.
- External defibrillation pads are then placed.
- IV sedation is then administered and if necessary breathing is assisted.
- An electrical shock is then delivered when the patient is well sedated. On occasion, additional shocks at higher energy may need to be delivered.
- Antiarrhythmic medications may be started after the procedure to reduce the risk of recurrence.
- After the procedure the patient is monitored to assure that the rhythm is stable.
- The patient is discharged when fully awake.

INDICATIONS

- Electrical cardioversion is performed as an emergency procedure when the heart is beating so fast and irregularly that it pumps inadequate amounts of blood to the body.
- Cardioversion can be performed as a scheduled procedure to treat arrhythmias such as atrial fibrillation that developed recently or that do not respond to medication. Prior to scheduled cardioversion, it is sometimes necessary to perform a transesophageal echocardiogram to be certain there are no existing blood clots in the heart.

COMPLICATIONS

Complications are uncommon but include:

- Cardioversion may dislodge a preexisting clot and cause a stroke. The risk of this occurring can be reduced by using anticoagulants.
- The procedure may not work, requiring additional attempts at cardioversion after antiarrhythmic medications are started.
- Cardioversion may cause the development of more serious arrhythmias.
- The sedatives given during the procedure can cause reactions.
- The procedure leaves a small skin burn where the paddles are placed.

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