

Heart Biopsy After Heart Transplant

Heart Biopsy

A biopsy is a procedure in which your transplant cardiologist will take a tiny sample of your heart tissue. A sample will come from the inner surface (endocardium) of your heart.

A heart biopsy is that it is the most helpful test to tell if your body is rejecting your new heart. This test can help your cardiologist find rejection in its earliest stage, even before you notice any symptoms.

The biopsy is done in the Catheterization Lab, on the third floor of the Abbott Northwestern Hospital Heart Hospital. You will be awake for the procedure.

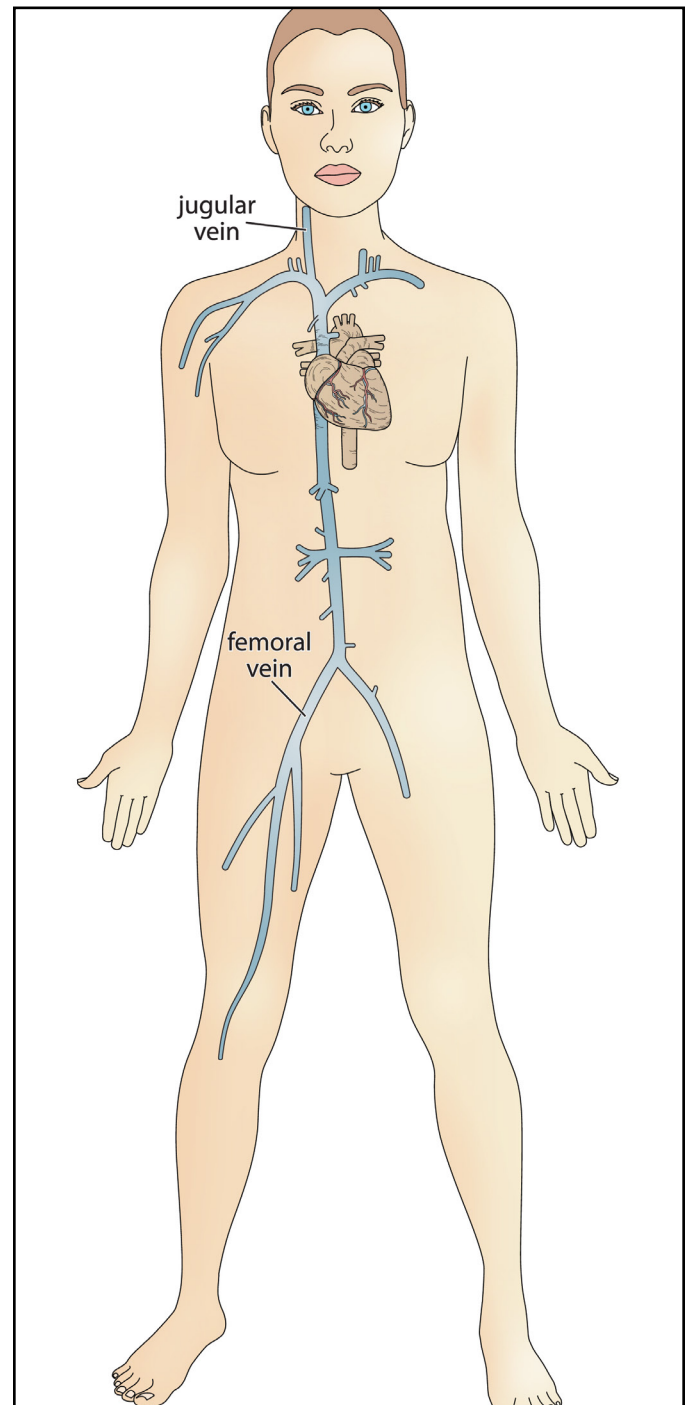
Biopsy Risks

Risks of a heart biopsy are low. But it's important to tell the nurse or doctor if you have:

- shortness of breath
- chest pain
- dizziness
- weakness.

Before the Procedure

- You will wear a hospital gown.
- You will lie on an exam table.
- You may be given medicine to help you relax.



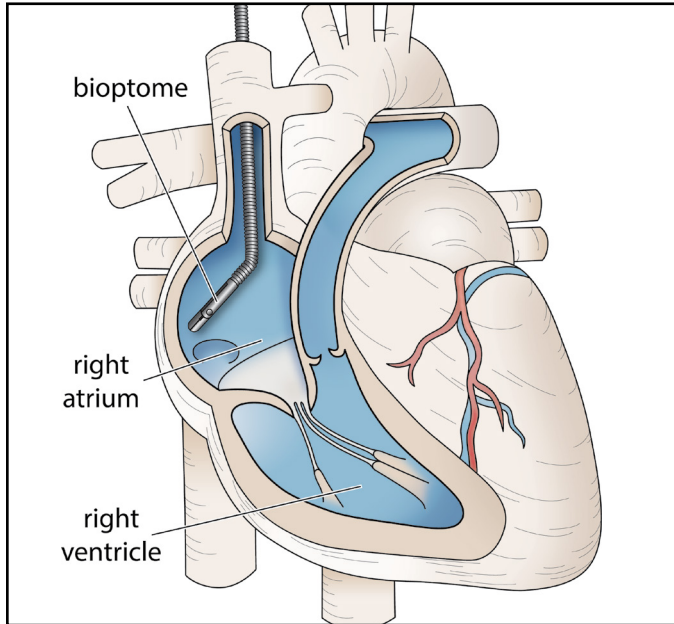
The cardiologist will insert the needle with biptome through your neck or groin. He or she will decide which site to use.

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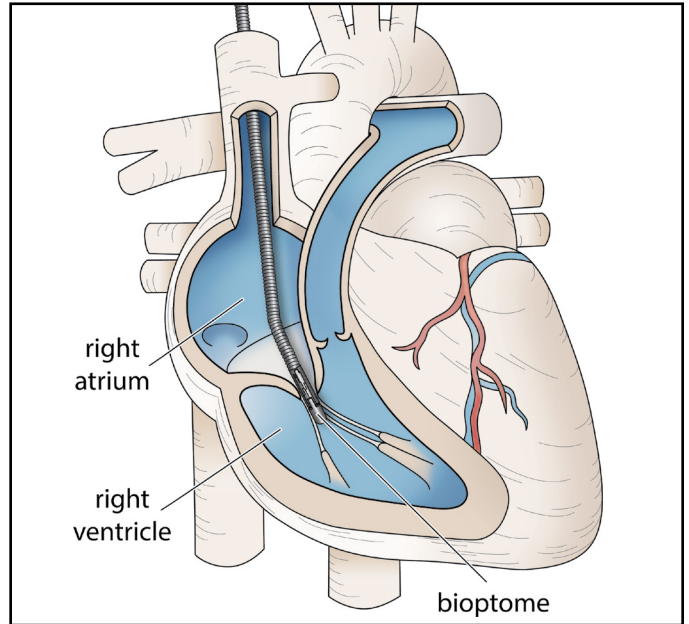
During the Procedure

- Your neck or groin will be cleaned with a special solution. (See drawing on page 1.)
- The cardiologist will inject some numbing medicine into the skin over a vein in your neck or groin.
- The cardiologist will insert a needle into your vein. He or she will put a bioptome through the needle to collect the tissue sample. (See drawings A-D.)

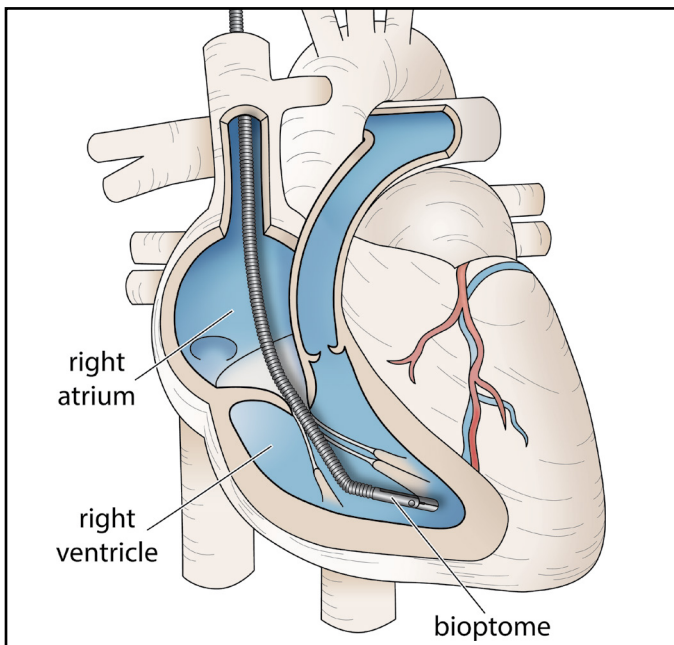
- You may feel a fluttering or tugging in your chest during the procedure.
- The cardiologist will remove the needle and the bioptome.
- Gentle pressure will be placed on the needle insertion site to stop any bleeding. A small dressing or bandage will be put on the area.
- Members of your health care team will watch you closely.
- The biopsy takes about 30 minutes.



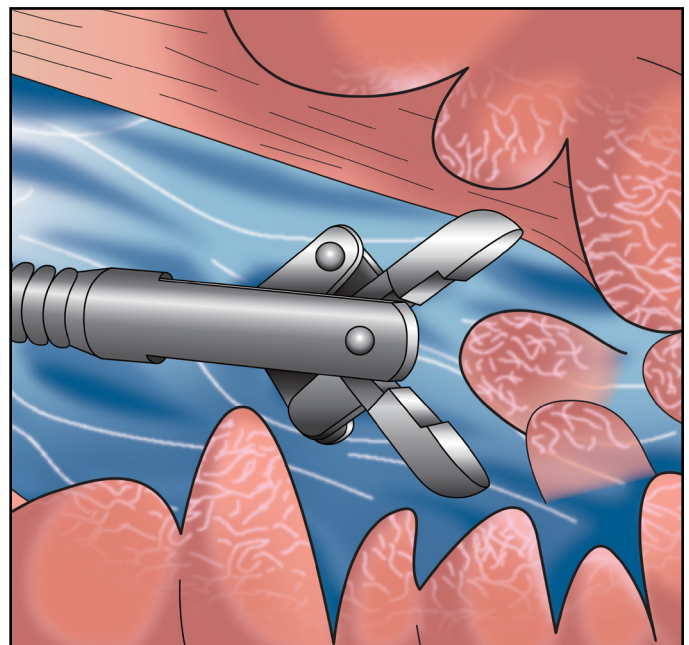
A. The cardiologist inserts a needle with a bioptome on the end. (The bioptome takes a tissue sample.)



B. The cardiologist guides the needle from the right atrium to the right ventricle.



C. The needle and bioptome are in place when they reach the inner surface (endocardium) of your heart.



D. The end of the bioptome takes a small tissue sample. The cardiologist then removes the needle and bioptome.

After the Procedure

- You may have other tests as needed. The transplant coordinator or one of your nurses will give you directions.
- The results of your biopsy will be known later in the day or the next day. The transplant coordinator will call you with the results.

When To Call the Transplant Department

If you have any bleeding or swelling once you get home:

- apply pressure to the area
- call the transplant department right away.

Heart Biopsy Schedule

Below is the general heart biopsy schedule after a transplant. Your cardiologist may change the schedule based on your health.

- first month: every week
- 2 to 3 months: every 2 weeks
- 4 to 6 months: every 4 weeks
- 7 to 12 months: once at 9 months
- after 9 months: biopsies will be done as needed. Your transplant doctor will give you a new schedule if you have an episode of rejection.

Biopsy Grading Scale

- **Grade 0R:** no rejection
- **Grade 1R:** mild rejection. The sample shows lymphocytes (white blood cells) with up to 1 area of heart cell injury.
- **Grade 2R:** moderate rejection. The sample shows 2 or more areas of lymphocytes with heart cell damage.
- **Grade 3 R:** severe rejection. The sample shows many areas of heart cell injury with other signs of heart cell damage.