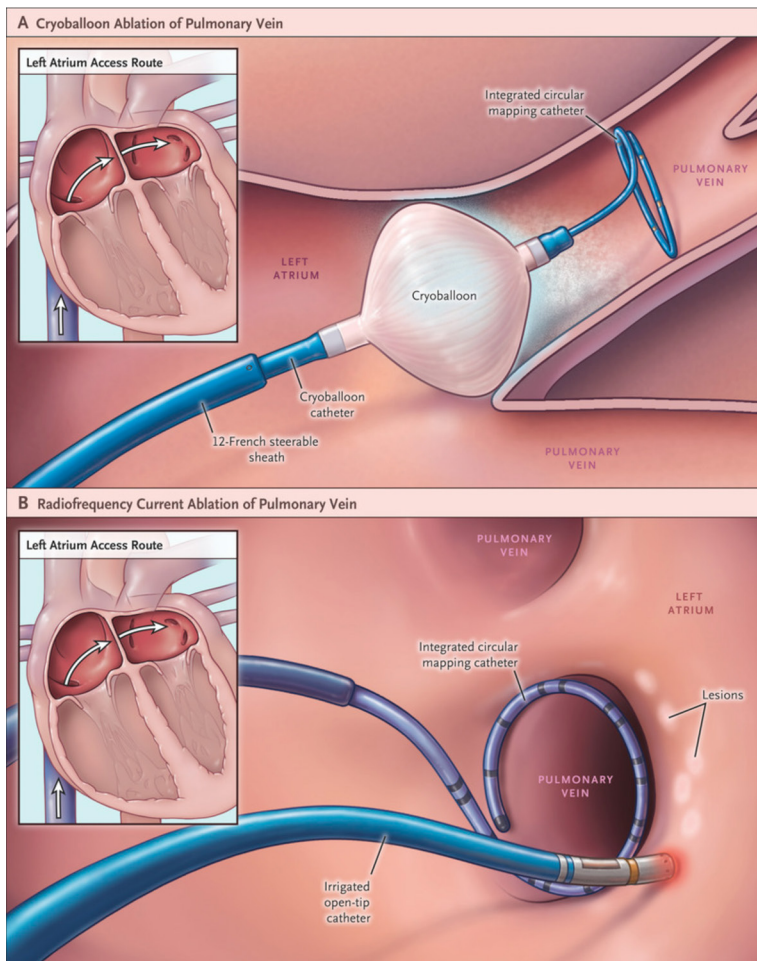


# ATRIAL FIBRILLATION ABLATION

Ablation for atrial fibrillation attempts to electrically isolate the pulmonary veins from the body of the left atrium. Electrical signals that originate within the pulmonary veins have been shown to trigger atrial fibrillation.

Ablation isolates the veins by creating a circular line of scar around each vein. This has been shown to reduce the frequency of atrial fibrillation and symptoms of atrial fibrillation. There are two commonly used catheter-based techniques to achieve pulmonary vein isolation.



## Cryoballoon Ablation

In this technique, a single catheter is advanced into the left atrium from the femoral vein in the groin. The tip of the catheter has a balloon that contains a refrigerant. The tip is advanced into the entrance of each vein. The balloon is then inflated, and the refrigerant is frozen. This effectively freezes the tissue that is in contact with the balloon in a circumferential fashion. In contrast to radiofrequency energy, which uses heat to create scar, cryoablation uses freezing to create scar.

## Radiofrequency Ablation

With this technique, catheters are advanced into the left atrium from the femoral vein in the groin. Radiofrequency (RF) energy is used to heat the tissue around the pulmonary veins in a point by point fashion to create a circular scar around each vein, or around groups of veins. Testing is then performed to ensure that each vein is effectively isolated from the body of the left atrium.

## **Risks & Complications:**

- Bleeding
- Stroke
- Damage to esophagus
- Infection
- Damage to heart muscle
- Damage to pulmonary veins

## **Recovery:**

- On the day of procedure: you will have to rest and lay flat strictly for 1 hour and continue resting for an additional two hours during which you may have the head of the bed raised before you can get up and walk around. This is to allow the access site at the femoral vein to clot sufficiently and prevent bleeding.
- When you go home: minimize your activity in the first three days following your procedure
- Avoid lifting anything heavy >10 lbs or bending over. You can then gradually begin returning to your usual activity level as tolerated.

## **When to call your doctor:**

- Fever >100.4F
- Persistent cough
- Trouble swallowing
- Shortness of breath
- Coughing up blood
- Severe chest pain

## **Signs of Stroke → call 911 if any sign of stroke**

- Weakness/numbness, tingling or loss of feeling in face/arm/leg
- vision changes
- trouble speaking or understanding others
- confusion
- loss of balance, impaired coordination
- feeling of spinning or blackouts
- severe headache

References: Heart Rhythm Society. (2021, Feb) <https://upbeat.org/common-treatments/catheter-ablation>