



This family education sheet explains what to expect if doctors are considering performing a Fetal Cardiac Intervention (FCI) for your fetus' heart problem.

Key points

- A FCI might help your fetus' heart condition.
- We have a process to decide if a FCI is right for you and your fetus.
- If the team finds that a FCI is a good option for you, you'll be seen at both Boston Children's Hospital (by the cardiology team) and Brigham and Women's Hospital (by the high-risk obstetrical team). The hospitals are connected by an indoor bridge and are easily accessible.

What is a fetal cardiac intervention?

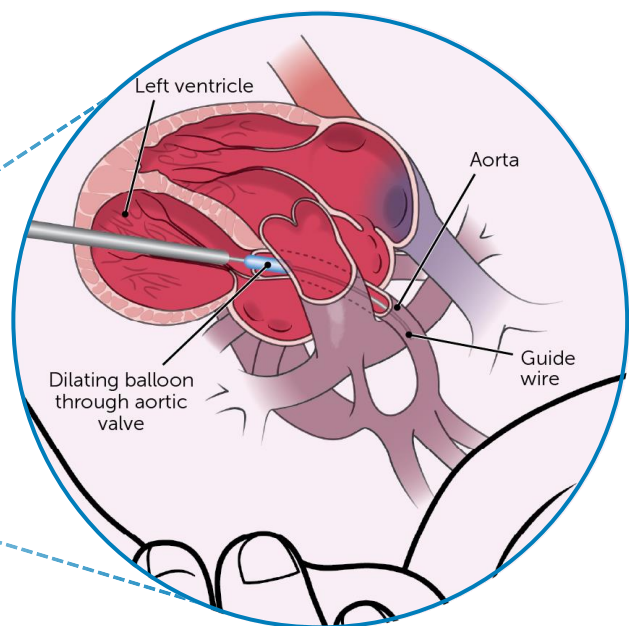
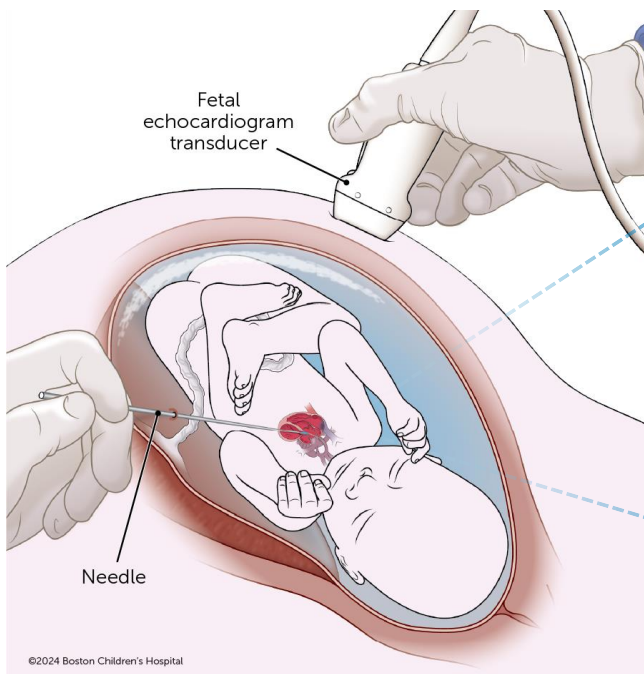
A fetal cardiac intervention is an *in utero* (inside the uterus) procedure that can help treat your fetus' heart condition before they're born.

What is your experience doing these procedures?

Boston Children's Fetal Cardiology Program, along with Brigham and Women's maternal-fetal specialists, performed the first successful FCI in 2001. Years later, the hospitals continue to lead the field of FCI care with our experience and expertise.

How is a fetal cardiac intervention performed?

- The procedure takes place in a Brigham and Women's Hospital obstetrical operating room. The cardiology team from Boston Children's joins the high-risk obstetrical team from Brigham and Women's to perform the FCI.
- The procedure starts by you (the pregnant person) having an epidural for anesthesia.
- You will be awake, but able to get medication to feel more relaxed. You can listen to music on headphones.
- The fetus is positioned in your uterus in a way that the FCI team can access the tiny target in the fetus' heart.
- Anesthesia medication is given to the fetus.
- Our team will insert a long needle, like an amniocentesis needle, through the uterus and into the fetus' chest and heart (see Figure 1.)
- We thread a balloon catheter through the needle, across the narrowed valve and then inflate the balloon to dilate the narrowed valve.
- Balloon dilation opens the valve to increase blood flow with the goal of promoting growth for the remainder of the pregnancy.



(Figure 1.)

What happens before the procedure?

- First, we'll find out if a fetal cardiac intervention is right for you and your fetus.
- Our team will review your local fetal echocardiogram images remotely and call you to discuss the findings and possible treatment options.
- If we decide that your fetus is eligible for the FCI procedure, you will come to Boston for a full day, in-person evaluation at Boston Children's and Brigham and Women's. This usually happens the day before the planned FCI procedure.

In-person evaluation at Boston Children's:

- The day before the procedure, you'll have a fetal echo at Boston Children's and an in-person consultation with Wayne Tworetzky, MD, our director of the Fetal Cardiology Program, and his team, including Fetal Cardiology Coordinator Terra Lafranchi, NP-C, Megan Watroba, RN, and our social work team. They'll talk to you about the risks and benefits of the FCI procedure.
- You'll also have a consultation with a Boston Children's interventional cardiologist and sign forms to give permission (consent) for the procedure.

In person evaluation at Brigham and Women's:

- After the Boston Children's evaluation, you'll have a prenatal ultrasound exam at Brigham and Women's and an in-person consultation with Louise Wilkins-Haug, MD, director of Brigham and Women's Maternal-Fetal-Medicine department or Stephanie Guseh, MD. They'll talk to you about the risks and benefits of the FCI procedure.
- You'll meet with team members from Brigham and Women's maternal anesthesia, neonatal ICU (depending on how many weeks pregnant you are), finance, fetal nursing and social work teams.
- If you and your fetus are candidates for FCI, we'll explain the risks and benefits of the procedure in detail during these consultations. You'll need to sign consent forms.

What is the timeline for the evaluation and fetal cardiac intervention procedure?


Your schedule will depend on your personalized treatment plan, but the entire process can last between 4-6 days. Each step below usually happens in one day, and in this order:


1. **Day one:** If you live outside the area, fly or drive to Boston and stay overnight. If you're flying to Boston, wait to buy your airline tickets until we tell you that we have a plan for the fetal cardiac intervention.
2. **Day two:** You'll have the all-day evaluation at Boston Children's and Brigham and Women's.
3. **Day three:** You'll have the fetal cardiac intervention procedure at Brigham and Women's and you'll stay in the hospital that night.
4. **Day four:** You'll have a follow-up echocardiogram at Boston Children's and then leave (be discharged). If you live outside the area, we recommend staying some place nearby 1 night before traveling home.
5. **Travel back home.**



Learn more about the Fetal Cardiology Program.

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