What is an echogenic focus?

An echogenic focus is a “bright spot” in the heart that can be seen on an ultrasound. Most of the time an echogenic focus is seen in the left ventricle of the heart. This is NOT a heart defect, it does NOT change the function of the heart, and it does NOT cause heart disease. Usually the bright spot is a small calcium deposit and is a normal finding.

The heart is divided into four chambers as shown below.

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          Right
          atrium
          Left
          atrium

          Right
          ventricle
          Left
          ventricle
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Occasionally, an echogenic focus is seen in a different area of the heart, or more than one bright spot is seen. If this is the case for you, your physician or genetic counselor will talk to you more about this today.

How common is it?

An echogenic focus is a common finding on prenatal ultrasounds. The chance of finding an echogenic focus depends upon position of the baby, the age of the baby, and the picture quality of the ultrasound. At UNC, an echogenic focus is seen in approximately 20% (1 in 5) of all second or third trimester ultrasounds.

Why is it important?

If mothers have other risk factors, an echogenic focus may suggest that the baby has a higher chance of having a chromosome change such as Down syndrome. In cases like this, more testing will be offered to you.

What should I do now? (Provider, please check appropriate box)

- [ ] Low Risk
  - In most pregnancies, this finding does NOT increase the chances of a chromosome change enough to be a reason for more testing such as amniocentesis.
  - Today, a very detailed ultrasound was performed to look for anything else that would make us concerned about a chromosome change in your baby.
Nothing else was found.

- If we were not able to clearly see all parts of your baby’s body on the ultrasound, you may be asked to come back for another ultrasound later in your pregnancy.

☐ Your ultrasound showed other reasons to be concerned about your baby

- Your doctor and genetic counselor will explain to you what the ultrasound showed.
- You have the option of having amniocentesis today to determine for sure if your baby has a chromosome change.

☐ You will be at least 35 years of age on your due date

- We know that the chance of having a baby with a chromosome change increases in older mothers. Your genetic counselor has (or will) discussed these risks with you already.
- You have the option of having amniocentesis today to determine for sure if your baby has a chromosome change.
- If you are not sure if you should have amniocentesis, you may want to discuss maternal serum screening with your genetic counselor or doctor today. This screening may help give you more information about the chances of a chromosome change and help you decide if amniocentesis is right for you.

☐ You had a maternal serum screen that showed a higher chance for Down Syndrome

- You have the option of having amniocentesis today to determine for sure if your baby has a chromosome change.

* If you have not yet had a maternal serum screen, or do not know the results, please speak with your doctor or other health care provider.

What is amniocentesis?

Amniocentesis is a procedure that can test to see if your baby has the correct number of chromosomes. Using ultrasound, the doctor passes a thin needle through your abdomen into the sac of fluid that surrounds the baby (amniotic fluid). Skin cells that the baby sheds into this fluid are used to study the number of chromosomes present. Results of an amniocentesis take about two weeks and are very accurate.

The chance of a complication from having an amniocentesis (such as leakage of amniotic fluid, bleeding, significant cramping, infection, or miscarriage) is approximately 0.5% or 1 in 200 times the procedure is performed.

What if I need more information?

If you have any questions about your ultrasound today, please do not hesitate to ask. If you would like more information or have additional questions about amniocentesis or other testing options, we would be happy to schedule you an appointment with a prenatal genetic counselor at UNC. Appointments can be scheduled by calling (919) 843-6095. The prenatal genetic counseling office can be reached at (919) 966-2229.