

The University of Texas

Health Science Center at Houston

Medical School

Intracardiac Echogenic Focus

What is an intracardiac echogenic focus?

An intracardiac echogenic focus (ICEF) is a bright white spot seen in the baby's heart during an ultrasound. There can be one or multiple bright spots and they occur when an area of the heart muscle has extra calcium. Calcium is a natural mineral found in the body. Areas in the body with more calcium, like bones and muscles, look brighter on ultrasound.

Can an ICEF cause problems for the pregnancy?

An ICEF itself does not cause problems in the pregnancy or after delivery. An ICEF is not considered a heart defect or an abnormality and does not affect how the heart works. No additional doctor appointments or imaging is usually necessary. An ICEF is considered normal variation and seen in 20% (1 in 5) of pregnancies depending on the ethnicity.

Could an ICEF mean the baby has other health concerns?

If an ICEF is the only finding on ultrasound, it is most often thought to be normal variation. Rarely a baby with an ICEF may have a chromosome condition such as Down syndrome. Down syndrome is a genetic condition that causes intellectual disabilities and an increased risk for health problems. In babies where a chromosome condition is suspected, there are usually other ultrasound findings or abnormal blood tests present.

Do I need to consider additional testing?

In most pregnancies, this finding does not significantly increase the chances of a chromosome condition. If you have already had normal blood testing (such as non-invasive prenatal testing, first trimester screening or quad screening) and an ICEF is the only finding on ultrasound, the chance for a chromosome condition is still under 1%. In these cases, additional testing and ultrasounds are not indicated and the finding can be considered a normal variant. If you have not had any testing for chromosome conditions in the pregnancy, there are tests available to provide additional information about these risks now that an ICEF has been identified on ultrasound.

Where can I get more information?

You can speak with your OB or a genetic counselor if you have additional questions about this ultrasound finding. To schedule a genetic counseling appointment, please call 832-325-7133.