Agenesis of the septum pellucidum

Patient Information Series – What you should know, what you should ask.

What is an agenesis of the septum pellucidum?

Agenesis of the septum pellucidum means that the walls of a small fluid filled space located in the middle of the brain are not seen on ultrasound. Those walls usually attach to the corpus callosum on top (a portion of the brain that connects the left and the right sides of the brain), and the fornix (a normal bundle of nerves in the brain) at the base. They are between the CSP (the fluid filled space) and the anterior horns of the lateral ventricles (two of the normal fluid filled space in the brain). It can often be associated with other changes in the area, most often a change in the nerves to the eyes and a small organ called pituitary, which produces many hormones.

How does an agenesis of the septum pellucidum happen?

It is usually not known why this happen. Most cases happen by chance. In some cases, a change in a specific part of the genetic make-up of the fetus (the area called HESX1) is found as the likely explanation for the finding. In other cases, an infection or exposure to a chemical is the suspected cause. It can also be seen in cases where there are many other anomalies in the brain that prevents is formation or lead to its collapse.

Should I have more tests done?

If agenesis of the septum pellucidum is suspected, you should be offered a thorough examination by ultrasound of the brain of the fetus. This sometimes can include scanning with a vaginal probe. Many women will also be offered an MRI (magnetic resonance imaging) test to obtain different images of the brain and the area around the septum pellucidum using a different machine which is safe in pregnancy.

What are the things to watch for during the pregnancy?

Once this is found, there is no need to change your pregnancy care. Ultrasound will likely be repeated later in the pregnancy to assess for any changes to the appearance of the brain.

What does it mean for my baby after it is born?

How the baby does after it is born depends on the other findings in the brain. If a severe anomaly is the cause for the finding, the baby may have significant problems. In 1 out of 4 cases, it is associated with problems with the nerves to the eyes and the pituitary gland. If this is the case, vision can be decreased, certain hormones may be missing but most children will have normal intelligence. If it is completely isolated, meaning that there are no other changes in the brain, the outcome is similar to the general population.

Will it happen again?

Unless there is a genetic cause for this finding, the risk of it happening again is very low.

What other questions should I ask?

- Does this look isolated?
- How often will I have ultrasound examinations done?
- Is an MRI an option?
- Should I consider more tests during the pregnancy?
- Is there any reason for my baby to be born in a different hospital?

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