What is a septo-optic dysplasia (SOD)?

It is a rare structure of the fetal brain in which the optic eye tracts are altered with a possibility of poor vision after birth. In some cases, the endocrine (hormone) functions are sometimes disturbed.

How does a SOD happen?

It appears when a little anterior structure of the brain is abnormal. This anterior part is the cavum septum pellucidum (CSP). When the cavum is abnormal, the lateral walls of this cavity are absent, causing underdevelopment (agenesis) of the cavum septum pellucidum (ASP).

When is an ASP suspected?

ASP is suspected in most cases during the mid-trimester fetal ultrasound scan. It can be confirmed by MRI. When the diagnosis of ASP is established, it is necessary to complete a full examination of the brain by US and MRI to confirm that the ASP is isolated. Genetic tests may be discussed on the case and situation.

What is the prognosis of ASP?

In most isolated cases of isolated ASP, the prognosis is favorable. The prognosis during pregnancy is established by a study of the optic nerves (US and MRI). However, ruling out the diagnosis of SOD in the fetus is not possible in 100% of cases.

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

In most cases when the optic nerves are normal: the baby will have a good vision. However, the definitive prognosis will be established postnatally by eye (ophthalmologic) evaluation and blood test for the hormone function. The recurrence risk of this condition in a subsequent pregnancy is extremely low.

Last updated August 2023

