

Enlarged Cavum Septum Pellucidum: Diagnosis, Implications, and Prognosis

Joana Sousa Nunes*, Rita Ladeiras, Luísa Machado, Adosinda Rosmaninho, José Manuel Furtado

Department of Obstetrics and Gynecology, Senhora da Oliveira Hospital, Guimarães, Braga, Portugal

SECTION 1 – QUIZ

Case description

A 40-year-old pregnant woman, nulliparous, with asthma controlled without daily medication and with no history of congenital malformations in the family, was referred to our obstetric department at the 19th week of gestation for pregnancy surveillance.

Relatively to the routine pregnancy examinations, it was not possible to execute the 1st-trimester screening due to a fetus crown–rump length of 92 mm at the time. The pregnant woman refused the invasive test, and it was done as the noninvasive prenatal test which showed a low risk of the trisomies 13, 18, and 21. The 2nd-trimester ultrasound (22w2d) highlighted an enlarged cavum septum pellucidum (CSP) of 5.9 mm of width and

9.1 mm of length (CSP ratio >1.5). This rectangular-shaped and fluid-filled cavity presented low density, being an anechoic structure in the anterior part of the brain cavity. Besides that, there was a hyperechogenic focus in the left cardiac ventricle [Figures 1 and 2]. At the 3rd-trimester ultrasound (32w3d), the intracardiac focus disappeared. Besides that, CSP width measurement has grown to 8.7 mm, CSP length has decreased to 8.7 mm (ratio of 1), and its appearance has become as an anechoic square-shaped structure [Figure 3]. The pregnant woman was submitted to a fetal complementary magnetic resonance study at 34 weeks and 1 day, which diagnosed an enlarged CSP (11.5 mm) and

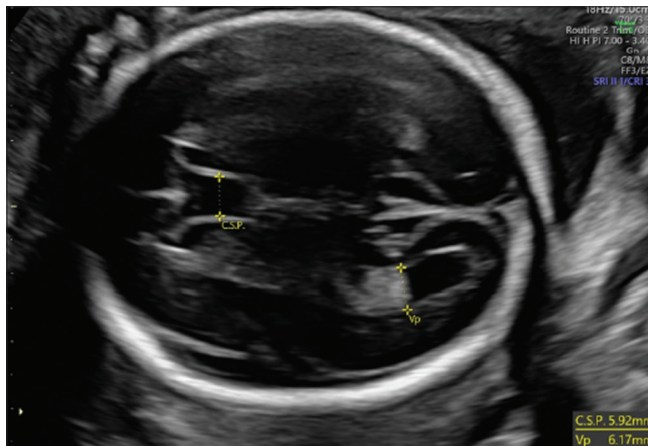


Figure 1: 2nd-trimester ultrasound image of cerebral transventricular transverse plan. A rectangular-shaped and anechoic cavum septum pellucidum with 5.9 mm of width and 9.1 mm of length and a normal cerebral lateral ventricle are shown. CSP: Cavum septum pellucidum

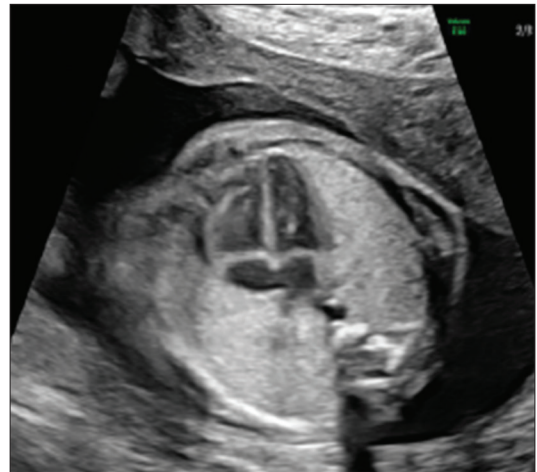


Figure 2: 2nd-trimester ultrasound image of transverse heart plan at the four-chamber view. A hyperechogenic focus in the left cardiac ventricle is present

Address for correspondence: Dr. Joana Sousa Nunes,
Department of Obstetrics and Gynecology, Senhora da Oliveira Hospital,
Guimarães, Braga, Portugal.
E-mail: joanasousanunes@hotmail.com

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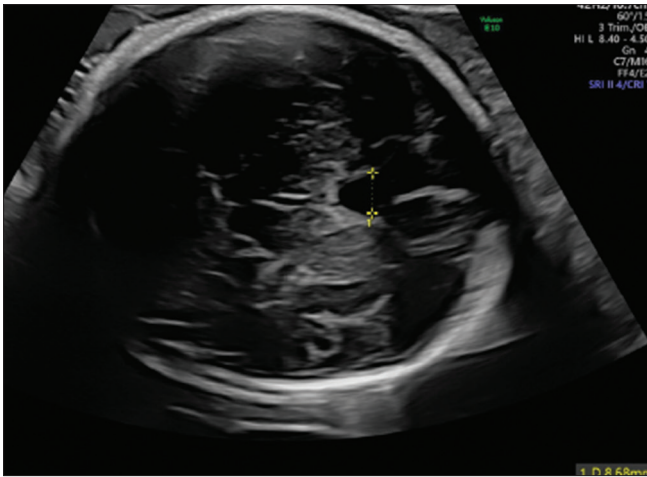


Figure 3: 3rd-trimester ultrasound image of cerebral transventricular transverse plan. A square-shaped and anechoic cavum septum pellucidum with 8.7 mm of width and 8.7 mm of length is shown

a small cystic aspect formation with hyposignal on T1 and hypersignal on T2 [Figure 4].

What is your diagnosis?

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given her consent for her images and other clinical information to be reported in the journal. The patient understands that her

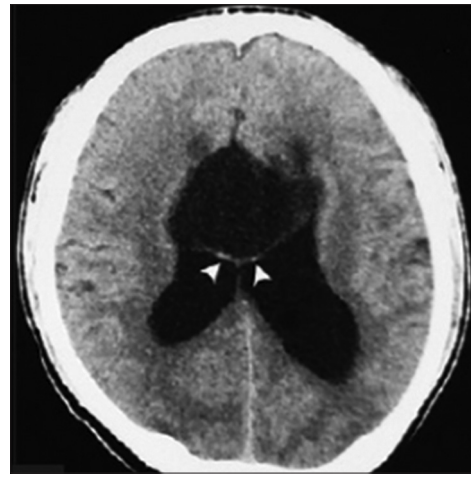


Figure 4: Magnetic resonance scan of the cerebral transventricular transverse plan showing of the cyst within the cavum septum pellucidum - hypodense cystic lesion with marginal calcification (arrowheads) and hypointense signal on T1

name and initials will not be published and due efforts will be made to conceal her identity, but anonymity cannot be guaranteed.

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Nil.

Conflicts of interest

There are no conflicts of interest.