Objective
The cavum septum pellucidum (CSP) is a fluid-filled cavity found between the leaves of the septum pellucidum. Abnormalities in the CSP detected postnatally are associated with neurodevelopmental delay, mental retardation, and neuropsychiatric disturbances. The growing use of prenatal imaging led to an increase in prenatal detection of CSP abnormalities. A wide CSP detected prenatally was associated with aneuploidy. The aim of the present study is to describe the different abnormalities of the CSP detected prenatally, the clinical prenatal related factors, morphologic characteristics of fetal MRIs, and neurodevelopmental outcome evaluation.

Methods
This is an observational retrospective study of 39 women who were referred for fetal brain MRI due to a CSP abnormality detected in an US examination between 2011 and 2015. Data collected included: prenatal history, MRI features, sonographic follow up, and neurodevelopmental outcome using Vineland II adaptive behavior scale.

Results
Most of the cases (34/39) had an abnormal CSP on MRI. They were divided into 4 groups according to the CSP abnormality on MRI: narrow CSP (n=23), wide CSP (n=7), septal agenesis (n=3), and CC agenesis (n=1). Only 4/12 cases that were referred with US diagnosis of absent CSP were confirmed by MRI, the rest had narrow CSP. Follow up was performed in 24 cases with an abnormal CSP and 4 cases with a normal CSP on MRI. All cases had a normal neurodevelopment.

Conclusion
To our knowledge this is the first study that examines the outcome in a narrow and a wide CSP detected prenatally. It appears that there is a spectrum of normal development and closure of the CSP. An abnormal width of the CSP prenatally, without an associated fetal abnormality such as aneuploidy, appears to have a normal outcome. A MRI should be offered when an absence of the CSP is suspected on US to rule out a narrow CSP which carry good prognosis.