# Cavum Septum Pellucidum Et Vergae In Schizophrenia and Catatonia

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**Learning Objectives**:
1) Recognize the association a large CSP with a subgroup of schizophrenic patients
2) Raise awareness of possible increased susceptibility to psychosis associated with developmental anomalies in midline structures

**Case Summary**:
A male in his 20's with a history of schizophrenia and no known past medical history was brought to the hospital after being found on a bench non-responsive. Patient was given 3 doses of naloxone in the field with no response, evaluated in the emergency room, and admitted to the ICU. CMP, CBC, UDS, BAL, CXR, EEG and head CT no abnormalities. MRI revealed Cavum Septum Pellucidum et Verge. After three days he was medically cleared and transferred to the inpatient psychiatric unit. He had a flat affect, dysphoric mood, and poor oral intake and was trialed on citalopram and mirtazapine. After a few days the patient demonstrated catatonic symptoms of mutism, negativism, and immobility/stupor, and was not compliant with treatment. He showed a temporary response to a lorazepam challenge, however his catatonic state progressed to non-responsiveness, requiring transfer back to the medical floor. Ultimately decision for ECT treatment was made. He showed minimal response to olanzapine, methylphenidate, and high-dose lorazepam throughout the hospital stay. Five months after admission, permanent guardianship was obtained for ECT treatment consent when a family member was available, and the patient was transferred to JSUMC, where ECT was initiated with a significant effect for the patient after 6 sessions. After a total of 12 sessions of ECT, he was discharged, psychiatrically stable, on Invega sustena 156 mg IM monthly for psychosis, Zoloft 50 mg daily for depression, Ativan 0.5mg twice daily for catatonia prophylaxis and outpatient follow up.

**Conclusions**:
There have been reports of associations between large CSP and functional psychotic disorders, particularly schizophrenia as well as a case report of late-onset catatonia with no psychiatric history, associated with enlarged cavum septum pellucidum and cavum vergae with a response to ECT treatment. Our case appears to be the second case report of a large CSP and CV associated with catatonia. MRI findings of such anatomical variations found in susceptible individuals could further help to reshape the direction of patient care to provide effective treatment, reduce morbidity, mortality, and prolonged hospitalization as well as to avoid unnecessary interventions.