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INCIDENCE RATE AND MORPHOLOGY OF CAVUM SEPTUM PELLUCIDUM IN PATIENTS WITH TREATMENT-RESISTANT SCHIZOPHRENIA, MAJOR DEPRESSION: A STRUCTURAL MRI STUDY

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Introduction: Several studies have independently suggested that schizophrenia patients are more likely to have an enlarged cavum septum pellucidum (CSP). However, neither finding has been consistently replicated.

Objectives: We recruited the relatively homogeneity population: treatment resistant schizophrenia (TRS) and treatment resistant depression (TRD). To investigate whether CSP was present more frequently in TRS or TRD patients than controls and the difference of CSP morphological characteristic between groups.

Methods: 1.5-Tesla MRI was used to evaluate the prevalence of CSP and morphology changes in 42 TRS, 45 TRD patients and 30 healthy controls. The CSP length, width and volume were measured using MRlcro and Analyze™ 8.1 software. A CSP equal to or greater than 6 mm in length was defined as big CSP.

Results: TRS Patients had a significantly higher prevalence (6%) of the big CSP than TRD patients (0%) or controls (3.3%) while no significant difference on the prevalence of all CSP (TRS: 64.3%, TRD: 48.9%, controls: 50.0%) or small CSP between groups. Compared with controls or TRD patients, the values of CSP maximum width in patients with TRS were significant lower and CSP length were higher. There was no significant difference in the CSP volume between groups.

Conclusions: The incidence in Big CSP in TRS patients was higher than that of TRS patients or controls. The small CSP may be a kind of normal variant. There were different CSP developmental characteristics between TRS and TRD patients based on the MRI study.