

Letter to the editor

## Cavum septum pellucidum in patients with first episode psychosis and individuals at high risk of psychosis

Dear Editor,

We read the article by De Souza Crippa et al. [2] (European Psychiatry 2006; 21:291–299) with great interest. This group compared the prevalence, size and volume of cavum septum pellucidum (CSP) in patients with schizophrenia and healthy controls using magnetic resonance imaging (MRI). They could not find differences between groups in the frequency (presence) of small CSP (less than 6 mm); however, if they considered only large CSPs with a length of more than 6 mm, CSPs were more common among patients than controls. They conclude that the clinical significance of a CSP depends more on its magnitude than whether it is present or absent.

In a previous study [1] we found a significantly higher proportion of radiological findings in patients with first episode psychosis and individuals at high risk of psychosis compared to healthy controls. Based on radiological inspection, MRI scans were evaluated by two neuroradiologists for the presence of brain abnormalities independently. Findings were categorized as (a) normal variants, i.e. findings within the realm of normal variations, or (b) pathological findings, i.e. findings requiring medical review or that were regarded as potentially relevant to psychiatric disorders. Forty percent ( $n = 12$ ) of the first episode patients and 35% ( $n = 13$ ) of the individuals at high risk of psychosis compared with 12% ( $n = 3$ ) of healthy controls had findings such as hyperintense or hypointense lesions, atrophy, subdural effusions, hyperintense cortical zones, cavernoma or small lacunas. The frequency of any finding was significantly higher in both the first episode ( $p < 0.05$ ) and the high-risk group ( $p < 0.05$ ) than in the healthy controls. There was no significant difference between the first episode patients and the individuals at high risk.

When we focused specifically on the prevalence of CSP, we found in subjects with first episode psychosis 3.3% (1 of 30) of CSPs compared to no CSPs in the control group. Additionally, we found a prevalence of 5.7% (2 of 35) of CSPs in a group of individuals at high risk of developing psychosis. In contrast to the De Souza Crippa et al.'s study (European Psychiatry 2006; 21:291–299), we used qualitative rather than a quantitative approach that may have caused less positive findings. In particular, we may have found only the relatively large CSPs.

However, our results could support the neurodevelopmental hypothesis of schizophrenia, showing a higher prevalence of radiological findings, including CSPs, neuroepithelial cysts and Virchow-Robin spaces. We suggest using a broader look, searching for any type of radiological abnormality, instead of focusing on CSPs only. Radiological abnormalities in patients with first episode psychosis and individuals at high risk suggest a common underlying cerebral disruption that may result in an enhanced vulnerability towards psychosis.

### References

- [1] Borgwardt SJ, Radue EW, Götz K, Aston J, Drewe M, Gschwandtner U, et al. Radiological findings in individuals at high risk of schizophrenia and patients with first episode psychosis. *Journal of Neurology, Neurosurgery, and Psychiatry* 2006;77:229–33.
- [2] De Souza Crippa JA, Zuardi AW, Busatto GF, Sanches RF, Santos AC, Araujo D, et al. Cavum septum pellucidum and adhesio interthalamica in schizophrenia: an MRI study. *European Psychiatry* 2006;21:291–9.

Stefan J. Borgwardt\*

Anita Riecher-Rössler

Psychiatric Outpatient Department,  
University Hospital Basel, Switzerland

\*Corresponding author. Psychiatric Outpatient Department,  
University Hospital Basel,  
Petersgraben 4, 4031 Basel,  
Switzerland.

Tel.: +41 61 265 5040; fax: +41 61 265 4588.

E-mail address: [sborgwardt@uhbs.ch](mailto:sborgwardt@uhbs.ch) (S.J. Borgwardt)

Stefan J. Borgwardt

Ernst-Wilhelm Radue

Neuroradiological Department,  
University Hospital Basel, Switzerland

Stefan J. Borgwardt

Institute of Psychiatry, King's College London, UK

15 November 2006

Available online 16 January 2007