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Recurrent brief depression in celiac disease

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Dear sir,

As demonstrated recently, celiac disease may be considered as a significant risk factor for mood disorders [1]. A study of 36 adult celiac patients from the Internal Medicine Department of the University of Cagliari (Sardinia, Italy) and 144 healthy controls from the community celiac patients showed significantly elevated risks for major depressive disorders (OR = 2.7), dysthymic disorders (OR = 6.2), adjustment disorders (OR = 5.3) and panic disorders (OR = 7.3). We hypothesised that the association may be due to malabsorption of tryptophan leading to a decreased central serotonin synthesis [2]. Other mechanisms may also be related to the autoimmune pathogenesis of celiac disease [1]; cytokines produced by immune reactions may exert an effect on brain circuits related to mood regulation; several neuroendocrine secretory systems are involved in the control of immune reactions. Therefore, there may be an important pathogenetic links between autoimmune disease and affective disorders [3,4].

A new epidemiological study in Sardinia identified another important group of affective disorders, Recurrent Brief Depression (RBD), as being very common in the community with a lifetime prevalence rate of 7.6% (males 5.8%, females 9.0%); RBD was especially prevalent in young adults aged 18 to 24 years and strongly associated with major depression (combined depression) [5], suicide attempts and substance abuse [6]. Comparable to double depression [7] combined depression is a more severe disorder than pure major depression. RBD is therefore a relevant health problem as shown in previous studies [8]. Today there is still no large scale investigation of RBD, although various community surveys [6] and the large World Health Organization (WHO) study on psychiatric diseases in general medical practice showed a considerable prevalence of RBD in all collaborative sites [9]. Consequently, new data on RBD are of great interest.

The data collected for the study on affective disorders and celiac disease [1] allowed also to diagnose RBD according to ICD-10 criteria [10]. We found association between RBD and celiac disease, which were even stronger (OR = 7.6; 95% C.I. 3.2–17.8) than those with major depression (OR = 2.7) and comparable to that of dysthymia (OR = 6.2). Of the 36 celiac patients, 36.1% versus 6.9% of the 144 controls manifested RBD. Men and women with celiac disease showed similar rates of RBD (3/9 = 33.3% and 10/27 = 37.0%); among women the association was significant (OR = 7.3; 95% C.I. 2.6–20.5).

The high prevalence of RBD and its strong association with major depressive disorder, suicidality and substance abuse meets requirements for collocation into the spectrum of mood disorders. Celiac disorder may be an important model for studying association between mood disorders and contribute to the understanding of the pathogenesis of RBD and mood disorders in general.

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