

**PERVASIVE DEVELOPMENTAL DISORDERS WITH EPILEPSY AND CELIAC DISEASE:
ROLE OF THE GASTROINTESTINAL THERAPY ON THE OUTCOME OF EPILEPSY**

F. Balzola¹, N. Spagna², C. Sanna¹, F. Torta², C. Davico², R. Vittorini², E. Rain²,
M. Gandione², R. Rigardetto², M. Rizzetto¹, G. Capizzi²

¹San Giovanni Battista Hospital, Turin, Italy

²Regina Margherita-Sant'Anna Hospital, Turin, Italy

¹ *San Giovanni Battista Hospital, Turin, Italy*

² *Regina Margherita-Sant'Anna Hospital, Turin, Italy*

Notwithstanding the association between epilepsy (E) and Celiac Disease (CD) or Pervasive Developmental Disorders (PDD) has been already described; few data are available on the correlation between CD, PDD and E. We evaluate in 28 PDD pts (22 M, 6 F; mean age 19.75 yrs) with E and severe gastrointestinal symptoms (GS) (abdominal pain, constipation/diarrhea) the presence of CD and the possible influence of its therapy on E. According to the duodenal biopsy, CD (Marsh I-II) was present in 8 out of 28 pts (29%). All the 28 pts were treated with gluten-free diet (GFD) and continued their ongoing antiepileptic drugs. After 6 months of GFD the resolution of GS and an improvement of behavioral symptoms were reported in both the 8 CD pts and the 20 without CD. Five out of 8 CD pts (62%) showed a significant reduction of E frequency. Although the small number of the pts enrolled, the presence of a possible gluten-sensitive enteropathy among PDD pts with GS and E was confirmed in a significant number of pts and for this reason a careful CD screening has to be considered at the diagnosis of PDD. Interestingly, the GFD induced in all the pts a consistent clinical improvement not only in the CD pts but also in those in which the GS could represent an aspect of a lower bowel permeability alteration. These preliminary data pointed out the crucial role of the possible altered intestinal permeability as an immunologic/toxic trigger for E and even PDD pts.