Efficacy of a specific polyunsaturated fatty acids (PUFA) combination in the multimodal management of children with autism spectrum disorders

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Introduction

The «Center of Developmental and Pediatric Neurorehabilitation» (C.D.N.) in Biel, Switzerland, and the NCWDRCH cooperate very closely since July 2005, especially emphasising the complementary medical approach of the multimodal management of children with autism spectrum disorders (see abstract for the EACD 2011). The complementary approach is a valuable alternative because many Albanian patients have no access to medications (e.g. risperidone, methylphenidate). Even if available these medications often cause unacceptable adverse effects.

Background

ADHD, dyslexia, dyspraxia (Richardson 2004) and autism spectrum disorders (ASD) (Bell 2004) are among other connected to fatty acid deficiencies and imbalances. Vancassel et al (2001) described lowered ω-3 fatty acid levels in plasma and in erythrocytic membrane phospholipids in children with ASD compared with healthy children. Several studies stated that the formulation of Equazen™ eye q, based on the specific combination of the long-chain ω-3 fatty acids eicosapentaenoic (EPA) and docosahexanenoic acid (DHA) and ω-6 fatty acid γ-linolenic acid (GLA) with a ratio of 9:3:1, significantly improved the behaviour symptoms of children with ADHD and developmental coordinati

Methods

Since 2008 a total of 18 boys and 9 girls, aged between 3-10 years with autism spectrum disorders have been treated for at least 6 months with Equazen™ eye q (2-6 capsules /chews or 5-15ml liquid/per day). All patients continue this dietary supplementation after the open-label therapeutic essay as a part of the multimodal treatment. In the first 6 months all other therapies (e.g. occupational therapy, special education, medication (6 of 11 patients of the C.D.N. with risperidone) were kept unchanged. At the beginning and every 3rd month the multidisciplinary group (pediatrician, psychologist, special educator) and the parents measured the children’s behaviour using the autism behaviour checklist (from Krug, Arick and Almond), rating scales for hyperactivity and stereotypical behaviour (Aberrant Behaviour Checklist, ABC).

References
