Ketogenic diet treatment with a formula based on oils and medium chain triglycerides in pediatric patients with refractory epilepsy: Experience in Colombia. [Spanish, English]

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Abstract:

Objective: To describe clinical features, response to the treatment using ketogenic diet (KD) for refractory epilepsy with a formula based on fats and medium chain triglycerides (KetoVOLVE) in Colombia. Methods: Retrospective descriptive cross study. 76 patients with refractory epilepsy, 41 met inclusion criteria. Results: Age: range 4 months-18 years. Male 56% (23) Hometown: Capital district and 11 cities in Colombia. 100% refractory epilepsy: focal symptomatic 39%, unspecified 34.1%, West 17.1%, 7.3% Lennox-Gastaut, Dravet 2.4%. Etiology: epileptic encephalopathy 41.5%, hypoxic ischemic encephalopathy 14.6%, hemimegalencephaly 4.9%, migration disorder 4.9%, microcephaly 4.9%, cortical displasia 2.4%, schizencephaly 2.4%, GLUT1 deficit 2.4%, Cytomegalovirus 2.4%, hemiatrophy 2.4%, congenital toxoplasmosis 2.4% bacterial meningitis 2.4%, Rasmussen 2.4%, nonketotic hyperglycinemia 2.4%, viral encephalitis 2.4%, hypothalamic hamartoma 2.4%. Type of crisis: focal 18.9%, tonic + atypical absences 16.2%, myoclonus + focal 13.5%, focal + spasms 8.1% focal tonic 8.1%, focal complex + myoclonus 5.4%, tonic+atonic 5.4% generalizedtonic 5.4%, other 10.8%. Seizures improvement: disappearance 18.9%. Seizures decrease >50%: 71%; Adverse effects: constipation 7 patients (18.4%), reflux 3 patients (7.9%), hypercholesterolemia 2 patients (5.3%). Conclusions: Improvement of epileptic seizures 71%, with complete seizures control 18% of patients. Good tolerance and adherence to the use of the KetoVOLVE formula, mild and short lasting side effects. There is a better response to ketogenic diet among patients with epileptic encephalopathy, hypoxicischemic encephalopathy and patients with

gastrostomy.