

The Efficacy and Tolerability of Classical Ketogenic Diet (CKD) in Paediatric Refractory Epilepsy – A Case Study

Subhasree Ray

SNDT Women's University, India

The study describes one paediatric patient of 72 months of age with refractory epilepsy, treated with classical ketogenic diet (CKD). CKD is a high-fat, low-carbohydrate, normal protein diet with an established efficacy for treating refractory epilepsy in paediatric population. Refractory epilepsy is defined as continuous seizures despite administration of 3 consecutive anti-epileptic drugs. The patient with diagnostic criteria of refractory epilepsy was seen at our neurology clinic and placed on CKD for 6 months to observe the efficacy and tolerability of the diet in controlling the seizures. The intervention included nutritional counseling, administration of ketogenic diet, assessing and improving the quality of life of the family and monitoring the vital biochemical parameters during the treatment. The child with progressive encephalopathy associated with repeated seizure episodes had a 75% seizure reduction in first 3 months and 90% seizure reduction along with remarkable cognitive development in last 3 months of the intervention. The number of anti-epileptic drugs has reduced from 5 to 2. The quality of life of the patient and the family is improved as the child started walking, communicating and responding to her parents. There were no reported incidents of nausea, vomiting, constipation or loose motions, which are typical side effects related to ketogenic diet administration as per several trials. The study suggests that the classical ketogenic diet is an effective and well-tolerated alternative treatment option for patients with refractory epilepsy and should be considered as a potential course of treatment in managing the disorder.

Biography:

Subhasree Ray is a PhD scholar from the department of Food Science & Nutrition, SNDT Women's University, Mumbai, India. Her research areas include ketogenic diet therapy, dietary management of neurodegenerative diseases, medical nutrition therapy, public health nutrition, food chemistry, probiotics, food toxicology and nutrigenomics. She has published 15 research articles so far and attended more than 12 National and International conferences. She has worked as one of the senior consultants in corporate health & wellness. She has also worked in the management of severe acute malnutrition along with the Govt. of India and UNICEF.