Weight Gain on Valproate May Be Normal Growth

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LOS ANGELES — Children taking sodium valproate for epilepsy may not be as vulnerable as adults to the significant weight gain associated with the medication, said Cia M. Sharpe, M.D.

In an effort to uncover possible clinical predictors of weight gain associated with valproate in the treatment of epilepsy, Dr. Sharpe and colleagues at the University of California, San Diego, conducted a chart review of 109 patients aged 2-20 years with valproate-treated epilepsy.

The investigators assessed body mass index (BMI) changes in the treated population by computing *z* slopes representing mean changes in BMI percentile for age at each available visit for each patient.

Using univariate analysis, they looked at the relationship between the *z* slopes and predictors of weight gain, including pretreatment BMI percentile for age, average valproate dose, average serum valproate level, standard or extended release formulation, age at onset of epilepsy, duration of valproate treatment, seizure disorder type, concurrent use of other medication, gender, and ethnicity—none of which proved to be useful predictors, Dr. Sharpe reported in a moderated poster session at the annual meeting of the Child Neurology Society.

Over the 2-year period, "there were no significant correlations between potential predictors of [weight gain] and *z* slope," Dr. Sharpe said. Additionally, "the mean *z* slopes were less than expected, at –.006 per year, and only 25 of the 109 patients had sufficient BMI changes to increase their *z* score by 0.5 or more."

While seemingly significant gains in weight have been reported with valproate therapy in children, "the increases may prove to be normal growth when change in BMI percentile for age is calculated," Dr. Sharpe concluded. ■