Atypical Eating Disorder

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DESCRIPTION OF THE DISORDER

Selective eating and food refusal are patterns of behavior commonly observed in toddlers and young children. By the second year of life, most children demonstrate a relatively erratic appetite characterized by frequent shifts in food preferences along with a general tendency to assert their independence. In most cases, parents are informed that this pattern is normal, and that for children ages 1 to 5 years, eating at each meal is not necessary to achieve a normal weight gain of about 5 pounds per year (Smith, 1977). However, selective eating and food refusal in an infant or a young child with a predisposition for hypoglycemia can produce devastating effects.

In general, hypoglycemia is usually significant when the blood glucose concentration is less than 40 mg/dL. Especially during the period of active brain growth, depriving the brain of glucose, its primary fuel, can result in permanent neurological sequelae. Although sometimes asymptomatic, many children with hypoglycemia exhibit pallor, sweating, irritability, weakness, and mental confusion. Prolonged or severe episodes may result in convulsions or coma (Cornblath & Schwartz, 1966). When the onset of hypoglycemia is first noticed after the first 18 months of life, it is commonly due to the child’s inability to adapt to prolonged fasting.

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a condition referred to as ketotic hypoglycemia or functional fasting hypoglycemia (Senior & Wolfsdorf, 1979). This condition often is manifest during a lengthy period of fasting, such as sleep subsequent to the child’s having missed or refused the evening meal. Alternatively, sleeping later than usual and/or missing breakfast can result in similar changes. The child may become irritable or unarousable, or first may draw attention during a generalized motor seizure. Although typically absent, a history of head trauma, seizures, preceding illness, or possible ingestion of medications or alcohol should be excluded in each case.

Following administration of glucose, the child’s symptoms resolve quickly in most cases. The initial blood glucose level is low, and ketones are found in the urine. When measured, levels of hormones and other metabolic parameters are normal.

Children with ketotic hypoglycemia are typically healthy and active. The mainstay of treatment for this disorder is to avoid prolonged fasting. The diet should be well balanced and calorically adequate for the child’s chronological age. Often, late evening snacks are given to decrease the duration of fasting during sleep. Parents should be warned to prevent the child from sleeping late into the morning and from skipping meals.

Special concerns arise when children with ketotic hypoglycemia suffer illnesses characterized by anorexia and vomiting or when they voluntarily refuse food intake. The specific case described in the following section involved refusal of food by a young boy diagnosed with ketotic hypoglycemia.

CASE IDENTIFICATION

Ben, a 2½-year-old boy, was diagnosed with ketotic hypoglycemia following his presentation in a semicomatose state at a local emergency room. He was admitted to the hospital with generalized seizures, at which time the second author, a pediatric endocrinologist, was called upon as a consultant by the child’s pediatrician.

During hospitalization, Ben responded well to intravenous glucose therapy and was able to rapidly resume oral feeding without problems. His parents, both well educated and in their early 30s, were quite receptive to treatment recommendations, which consisted of frequent feedings and home glucose monitoring.

Within 2 weeks following Ben’s discharge from the hospital, his parents indicated that they were experiencing some inconvenience in following the recommended guidelines for treatment. Ben was originally to have been awakened at 11 p.m. for a late evening snack. Not only did this