Cyclic Vomiting Syndrome and Migraine in Children

A recent study by Lin et al. attempted to clarify the link between migraine and cyclic vomiting syndrome (CVS). The group decided to pursue this study because of the high prevalence of migraine in children with cyclic vomiting syndrome and because CVS is considered a precursor to migraine. Cyclic vomiting syndrome is an episodic nausea with non-bilious vomiting disorder characterized by recurrent stereotypic symptoms with disease-free intervals. For the study, thirty years of records for a chosen hospital were reviewed for cases of pediatric CVS. Clinical evaluations, including age of onset, sex, family history, symptoms and duration during attacks, frequency, trigger events, electroencephalogram data, treatment and subsequent development of migraine were assessed from chart records and telephone interviews. Thirty five children were enrolled in the study and their age of onset ranged from 2 to 17 years while their frequency of attacks ranged from 1 to 36 times per year. A subgroup of twenty children was then assessed for migraine development. A total of seven children in the subgroup later developed migraines while the remaining thirteen did not. It was found children in the migraine-positive group had an average CVS onset age which was younger than that for the migraine-negative group. Children who later developed migraine had a CVS onset age of 5 ± 1.7 years while those who did not develop migraine had an onset age of 8.9 ± 3 years. It was also found that co-morbid headache during CVS attacks was more common in the migraine-positive group. These findings led the group to conclude that children with younger onset age and headache during CVS attacks may have increased risk of migraine development. The group also stated that large-scale prospective studies are warranted to further clarify the relationship between CVS and migraine.