

COMMENT. Patients with epilepsy and pathogenic structural genomic microarray variants have an objectively more atypical face shape compared with those without. The authors suggest that an evaluation for facial dysmorphism should be part of the clinical work-up for epilepsy. The concept of a “facies epileptica” as defined by Turner (Turner WA. **Epilepsy: A Study of the Idiopathic Disease**. London: Macmillan and Co; 1907.), is now regarded as unacceptable. Given the heterogeneity of epilepsy, 3D stereophotogrammetry and dense surface models are not expected to identify a specific “face” associated with epilepsy, and actual facial shapes are as varied as the underlying pathogenic structural variants. An objective measure of face shape variation might be used in clinical selection of patients with epilepsy who should be considered for microarray chromosome analysis.

GENETIC NEUROLOGICAL SYNDROMES

EPILEPSY IN MLENKE SYNDROME

Researchers at the National Institutes of Health, Bethesda, MD; Children’s National Medical Center; and George Washington University, Washington, DC present 7 patients with Mlenke syndrome complicated by epilepsy. A review of 789 published cases of Mlenke syndrome with neurological complications identified epilepsy in 6 cases, with intracranial anomalies in 5. The intracranial anomalies were agenesis of the corpus callosum, hemimegalencephaly, and porencephaly. In the review of 58 patients with Mlenke syndrome in the Washington, DC cohort, 7 (12%) had epilepsy and 4 survived neonatal apnea. Patients with Mlenke syndrome should be monitored for apnea and seizures. Those with seizures or febrile seizures should undergo neuroimaging, preferably MRI. (Agochukwu NB, Solomon BD, Gropman AL, Mlenke M. Epilepsy in Mlenke syndrome: FGFR3-related craniosynostosis. **Pediatr Neurol** 2012 Nov;47(5):355-61). (Respond: Dr Mlenke, Medical Genetics Branch, National Human Genome Research Institute, National Institutes of Health, Bldg 35, Bethesda, MD 20892. E-mail: mamlenke@mail.nih.gov).

COMMENT. Mlenke syndrome has an autosomal dominant inheritance and is characterized by craniosynostosis, most commonly coronal uni- or bilateral, asymmetry of skull and face, sensorineural hearing loss, developmental delay, broad toes and thumbs, fusion of carpal and tarsal bones, hypertelorism, ptosis, strabismus, midface hypoplasia, and fronto-temporal bossing. The syndrome is caused by a mutation in the FGFR3 gene, with variable expressivity and phenotype. (Doherty ES, et al. Mlenke syndrome (FGFR3-related craniosynostosis): expansion of the phenotype and review of the literature. **Am J Med Genet A** 2007 Dec 15;143A(24):3204-15). Other craniosynostosis syndromes associated with the fibroblast growth factor receptors (FGFR) include Crouzon, Apert, and Pfeiffer syndrome. (Millichap JG. **Neurological Syndromes. A Compendium for Clinicians**. New York: Springer; 2013. In press).