

to age or sex. Occipital or temporo-parietal impacts caused more cases of olfactory dysfunction than frontal impacts. Of 66 retested after periods ranging from 1 month to 13 years, 24 (36%) showed slight improvement, 45% were unchanged, and 18% were worse. Parosmia, or perversion of smell, occurring in 40% of patients immediately after the trauma, decreased to 15% during an 8 year follow-up. Volumes of olfactory bulbs and tracts measured by MRI were smaller than controls in male, but not female, patients. (Doty RL, Yousem DM, Pham LT et al. Olfactory dysfunction in patients with head trauma. Arch Neurol Sept 1997;54:1131-1140). (Reprints: Richard L Doty PhD, Smell and Taste Center, University of Pennsylvania Medical Center, 5 Ravdin Pavilion, 3400 Spruce St, Philadelphia, PA 19104).

COMMENT. Patients with head trauma who lose their sense of smell rarely regain normal olfactory function, whereas those who complain of distortions of smell usually recover over time. Head trauma male patients with olfactory dysfunction have MRI evidence of greatly reduced olfactory bulb and tract volumes. The apparent selective sparing of female olfactory structures may be explained by lesser severity of trauma or a protective effect of estrogens.

SEIZURE DISORDERS

X-LINKED INFANTILE SPASMS

Two unrelated families with X-linked infantile spasm syndrome were studied genetically by two-point and multipoint linkage analyses at the University Hospital Gasthuisberg, and Center for Human Genetics, University of Leuven, and University of Antwerp, Belgium. The disease gene was located to the distal part of the short arm of the X chromosome, between Xpter and Xp11.4. (Claes S, Devriendt K Lagae L et al. The X-linked infantile spasms syndrome (MIM 308350) maps to Xp11.4-Xpter in two pedigrees. Ann Neurol Sept 1997;42:360-364). (Respond: Dr JJ Cassiman, Center for Human Genetics, University of Leuven, Campus Gasthuisberg, Herestraat 49, B-3000 Leuven, Belgium).

COMMENT. West syndrome may rarely occur in families as an X-linked inherited disorder.

Zonisamide (ZNS) for infantile spasms. ZNS monotherapy was effective in the control of spasms in 4 of 11 patients treated at 11 centers in Japan. (Suzuki Y, Nagai T, Ono J et al. Epilepsia Sept 1997;38:1035-1038).

AUTOMATIC NEONATAL SEIZURE DETECTION BY EEG

EEGs obtained from 55 newborns, recorded at the Montreal, Sydney, and Texas Children's Hospitals, were reviewed by 3 types of automatic analysis of sequential epochs aimed at detecting rhythmic paroxysmal discharges, repetitive spike patterns, arrhythmic runs of spikes, and low frequency discharges, and the methods are reported from the Montreal Neurological Institute, and the Montreal Children's Hospital, Canada. Initial evaluation detected 71% of seizures and 78% of seizure clusters, and the false detection rate was 1.7%/hour of recording. (Gotman J, Flanagan D, Zhang J, Rosenblatt B. Automatic seizure detection in the newborn: methods and initial evaluation. Electroenceph clin Neurophysiol Sept 1997;103:356-362). (Respond: Dr J Gotman, Montreal Neurological Institute and Hospital, 3801 University St, Montreal, PQ, H3A 2B4 Canada).