Francesco Muntoni, The Dubowitz Neuromuscular Centre, First Floor, UCL, Institute of Child Health. 30 Guildford Street, London, UK, E-mail: f.muntoni@ich.ucl.ac.uk).

COMMENT. This study demonstrates good correlation between muscle MRI and muscle histologic changes in boys with DMD. It validates muscle MRI as a tool for selection of patients with sufficiently preserved EDB muscle for clinical trials of IM injections of an antisense oligonucleotide (AO) to induce dystrophin production.

VASCULAR DISORDERS

ARTERIAL ISCHEMIC STROKE STUDY OF RISK FACTORS

Data from the International Pediatric Stroke Study were analyzed by researchers at Royal Children's Hospital, Melbourne, Australia, and other centers. Risk factors (RFs) for arterial ischemic stroke (AIS) and their characteristics were identified in a total of 676 patients. RFs included arteriopathies (53%), cardiac disorders (31%), infection (24%), acute head and neck disorders (23%), acute systemic disorders (22%), chronic systemic conditions (19%), prothrombotic states (13%), chronic head and neck disorders (10%), atherosclerosis-related RFs (2%), other (22%), and none was identified in 9%. RFs were multiple in 52% patients. Prevalence of RFs varied with geography and with age: arteriopathy was relatively less prevalent in Asia and prothrombotic states more prevalent in Europe; cardiac disease was most prevalent in preschoolers, arteriopathies in children 5 to 9 years old, and chronic head and neck disorders were highest in children aged 10 to 14 years. Arteriopathies were associated with focal signs and multiple infarcts, and cardiac disease with hemorrhagic conversion. (Mackay MT, Wiznitzer M, Benedict SL, Lee KJ, deVeber GA, Ganesan V, Arterial ischemic stroke risk factors: the International Pediatric Stroke Study. Ann Neurol Jan 2011;69:130-140). (Respond: Dr Mark T Mackay, Children's Neuroscience Centre, Royal Children's Hospital, Flemington Rd, Parkville, Victoria, Australia 3052, E.mail: mark.mackav@rch.org.au).

COMMENT. RFs, especially arteriopathy and cardiac disorders, are common in childhood AIS. Emphasis of investigation and preventive therapies may be determined by geographical and age-related prevalences of risk factors.

OUTCOME OF CEREBELLAR HEMORRHAGE IN PRETERM NEWBORNS

Long-term neurodevelopmental outcome of preterm infants with cerebellar hemorrhages detected only on MRI was studied at University of California, San Francisco. Of 131 preterm newborns evaluated by cranial ultrasound and MRI, cerebellar hemorrhage was seen on ultrasound in 3 and confirmed on MRI. An additional 10 cerebellar hemorrhages not detected by ultrasound were seen on MRI. Three newborns died in the nursery, 2 with ultrasound-detected cerebellar hemorrhages. Of 128 survivors, 94 underwent periodic neurodevelopmental exams until age 3-6 years (mean 4.8). Of 8 newborns with cerebellar hemorrhage seen only on MRI and assessed at age 3-6 years (mean 4.8).