major impact on patient management. EV-PCR has a sensitivity and specificity of virtually 100%. Perhaps EV-PCR’s greatest asset is that it helps the clinician identify those patients that do not need further medical interventions more rapidly than clinical judgement alone. This is especially true in the youngest infants who may not show CSF pleocytosis. To be most cost-effective, the EV-PCR should not be ordered until the CSF data are available. Although it was not prospective and it did not include a detailed economic analysis, this study certainly suggests that enteroviral PCR can yield substantial clinical and financial benefits and that PCR will likely supplant viral culture for the diagnosis of viral meningitis.

Editors’ Note
These authors studied all patients for whom a PCR test was ordered and note that some of the tests appear to have been unwarranted (eg, for patients who did not have clinical criteria suggestive of EV central nervous system disease.) Only 4 of 98 patients older than 1 month had a positive EV-PCR without pleocytosis, whereas 11 of 24 neonates had a positive CSF EV-PCR in the absence of pleocytosis. To fully understand the utility of EV-PCR testing, a prospective study is needed in order to derive optimal criteria for testing.

References

Nonalcoholic Steatohepatitis Associated with Childhood Obesity

Nonalcoholic steatohepatitis (NASH) occurs commonly in adults in association with obesity, hyperlipidemia, and adult onset diabetes mellitus, and is known to be a cause of hepatic fibrosis and cirrhosis. The natural history and clinical presentation of NASH in children and adolescents is unknown. Rashid and Roberts report their 10-year experience of 36 children (21 male, 15 female) diagnosed with NASH. The median age was 12 years with a range of 4-16 years of age. Thirty patients (83%) were obese, with a mean weight of 147% of ideal body weight. Two patients had diabetes mellitus at the time of diagnosis, while 2 more later developed diabetes mellitus. Thirty of 36 (36%) had acanthosis nigricans (all but one was obese). Thirty-three of 36 patients (92%) had elevated ALT values (mean 179 +/- 31 U/L with normal <40 U/L) although none of the 36 patients had signs or symptoms of chronic liver disease. Hypercholesterolemia (7/36) and hypertriglyceridemia (11/36) were relatively common features of NASH. Hepatic ultrasound was obtained in 31 patients, and 24 (77%) showed abnormalities including hepatomegaly and increased echogenicity suggestive of fatty infiltration. Liver biopsy was performed in 24 patients and all patients had significant macrovesicular lipid deposition. Inflammation was present in 88%, and fibrosis/cirrhosis in 75%. One 10-year-old patient had significant cirrhosis noted at biopsy. There were no predictive indicators separating the fibrosis/cirrhosis group from those children who did not have fibrosis at time of biopsy. In the follow-up of 21 patients it was noted that 6 patients lost weight and all of these patients had improvements in the AST level with normalization of values in 2 patients.

Editors’ Note
This report is a sobering reminder that obesity may be associated with the potentially life-threatening consequences of NASH although the long-term prognosis in children with this disorder remains unknown. The presence of hepatomegaly, hyperglycemia, abnormal liver enzymes, acanthosis nigricans, hyperlipidemia, and/or an abnormal hepatic ultrasound in an obese child/adolescent should prompt consideration of liver biopsy and aggressive dietary and behavioral/lifestyle intervention to lose weight. Several “take-home” messages need to be heeded: 1) obesity-associated NASH does occur in children and may be associated with significant liver disease; 2) acanthosis nigricans is a cutaneous marker of potential hyperinsulinemia and may be associated with NASH; 3) an abnormal ultrasound of the liver (enlargement and/or increased echogenicity) in an obese patient should trigger consideration of NASH; 4) an abnormal liver ultrasound cannot separate those patients with and without hepatic fibrosis/cirrhosis – only a liver biopsy can do this; 5) liver enzymes do not predict fibrosis and/or cirrhosis in patients with NASH; 6) weight loss can improve obesity-associated NASH; 7) although NASH does occur in non-obese children, its prevalence is increased in obesity and should be considered in all obese children. This report provides further evidence supporting aggressive therapeutic measures with respect to early weight control in children.

References
Nonalcoholic Steato-hepatitis Associated with Childhood Obesity

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