possible in the course of the disease. The longer the delay before diagnosis and appropriate treatment, the worse the prognosis. The best known dermatological change is Gottron's sign, an erythema over the knuckles. Gottron's rash is a scaly, violaceous rash on various areas of the body including the hands, elbows, and knees as well as a heliotrope rash on the eyelids. Calcinosis occurs in 13% of childhood cases but in less than 5% of adult cases of polymyositis. No therapy has proved effective for calcinosis and occasionally, surgical excision of painful calcific areas has been necessary. When polymyositis develops during pregnancy the incidence of fetal loss is 32%. Women with a history of inactive polymyositis should be warned that pregnancy might exacerbate the disease. Myositis has been reported with human immune deficiency virus infection and may closely mimic the myopathic changes seen in polymyositis. (Bunch TW. Polymyositis: A case history approach to the differential diagnosis and treatment. Mayo Clin Proc Nov 1990; 65:1480-1497).

> COMMENT. A good review of polymyositis and dermatomyositis in children is provided by Pachman LM (Juvenile dermatomyositis. Peditr Clin North Am 1986; 33:1097-1117). An edited summary of a combined clinical staff conference at the NIH (Plotz PH et al. Current concepts in the idiopathic inflammatory myopathies: Polymyositis, dermatomyositis, and related disorders. Ann Intern Med July 1989; 111:143-156) provides an excellent review of biopsy findings, causes, pathogenesis, studies on humoral immunity, and treatment.

MRI IN CHILDHOOD DERMATOMYOSITIS

The demonstration of muscle involvement using the MRI in four patients with dermatomyositis is reported from the Departments of Radiology and Pediatrics, University of Michigan Hospitals, Ann Arbor, MI. Ages ranged from 4½ to 18 years (median 8 years). The affected muscles had increased signal intensity on the T2 weighted images and normal appearance on the T1 weighted sequence. The mean intensity ratio for the patients with dermatomyositis differed significantly from that of four normal control children. Muscle groups with higher intensity ratios had lower scores on functional testing. Follow-up MRI scans demonstrated normal findings after treatment, coincident with progressive clinical improvement. (Hernandez RJ et al. Magnetic resonance imaging appearance of the muscles in childhood dermatomyositis. J Pediatr Oct 1990; 117:546-50).

> COMMENT. The authors concluded that the MRI may be useful in the evaluation of dermatomyositis in children because it 1) is noninvasive, 2) has clear signal changes in affected muscle, 3) shows positive results at an early stage, 4) is a guide for biopsy, and 5) may assist in monitoring of the disease progress. The MRI appearances of muscles affected by hypotonic syndromes and muscular dystrophies differ from those of muscles affected by dermatomyositis. Ultrasound has been used in the diagnosis of patients with muscular dystrophy.