

bilirubin levels of 25 mg per deciliter or more. **N Engl J Med** May 4, 2006;354:1889-1900). (Respond: Dr Thomas B Newman, Kaiser Permanente Medical Center, Oakland, CA).

COMMENT. When treated with phototherapy or exchange transfusion, neonates born at or near term and having a total serum bilirubin of 25-30 mg/dL for less than 6 hours showed no increase in neurodevelopmental or behavioral problems at follow-up compared to controls. In an editorial, Watchko JF (**N Engl J Med** May 4, 2006;354:1947-1948) points out that factors other than serum bilirubin level and coexisting hemolysis can increase the risk of kernicterus: reduced albumin binding of bilirubin, low gestational age, glucose-6-phosphate dehydrogenase deficiency, and acidosis. These factors may lower the serum bilirubin level at which treatment is indicated. In 116 reported cases of kernicterus, 90 had total serum bilirubin levels of 30 mg/dL or more and 76 had levels of 35 mg/dL or more.

## **NEUROMUSCULAR DISORDERS**

### **SEVERITY AND OUTCOME OF MYASTHENIA GRAVIS**

Myasthenia gravis (MG) severity and long-term prognosis in seronegative, seropositive, and thymoma MG were studied retrospectively in 4 previously reported series of age and sex-matched consecutive patients at Haukeland University Hospital, University of Bergen, Norway. Patients were assessed annually and were followed for 30 to 40 years. Fifty-two early onset cases (34 thymectomized and 18 non-thymectomized) were followed for 39 years. Thymectomized patients showed remissions in 21/34, whereas only 4/18 non-thymectomized patients had remission. The presence of AChR antibodies correlates with a more severe MG. With proper treatment, especially early thymectomy for seropositive MG, the outcome and long-term prognosis is good in patients with or without AChR antibodies. Thymectomy is of benefit in early-onset MG, but not in late-onset MG. In early-onset MG, thymectomy should be considered soon after onset, and outcome is not influenced by muscle autoantibodies. In 43 late-onset cases, MG severity did not differ between thymectomized (21 cases) and non-thymectomized patients (12 cases). Thymoma (24 cases) and non-thymoma (24) MG have equal severity and outcome of MG. Ryanodine receptor (RyR) antibodies in thymoma MG and titin/RyR in non-thymoma MG may indicate a less favorable outcome. (Romi F, Gilhus NE, Aarli JA. Myasthenia gravis: disease severity and prognosis. **Acta Neurol Scand** May 2006;113 (Suppl 183):24-25). (Respond: Dr Fredrik Romi, Department of Neurology, Haukeland University Hospital, Bergen, Norway).

COMMENT. Thymectomy is of benefit in early onset MG but not in late-onset MG. In a study of 51 MG patients (35 juvenile cases) at the Massachusetts General Hospital, 18 (86%) of 21 who underwent thymectomy showed complete or partial remission (Millichap JG, Dodge PR. **Neurology** 1960;10:1007-1014). Of 14 patients in this series who were treated with medication alone, 13 (93%) obtained remission, and initial results were comparable to those treated surgically. Remission was sustained in only 2 (14%) of drug treated vs 6 (29%) thymectomized patients. The earlier the surgery, the better chance of remission (Andrews PI et al. **Neurology** 1994;44:1208-1214). **Arthrogryposis multiplex congenita** (AMC) is reported in 3 infants (including twins) born to a mother with MG. (Hoff JM et al. **Acta Neurol Scand** May 2006;113 (Suppl 183):26-27).