

### **Ultrasound vs MRI for detecting intracranial hemorrhage in preterm neonates.**

Investigators at Johns Hopkins Hospital studied 12 premature neonates with a mean gestational age of 32 weeks, comparing US and MRI for detection of grade I-III germinal matrix hemorrhage (GMH) and PVH. US had high sensitivity (100%) and specificity (93%) in detecting grade III GMH but poor sensitivity (0%) in detection of intraventricular hemorrhage (grade II GMH). US is first line of imaging for brain injury in the evaluation of premature neonates with suspected intracranial hemorrhage, but usefulness of MRI and susceptibility-weighted imaging for predicting long-term neurological outcome remains to be determined [1].

#### **References.**

1. Intrapiromkul J, et al. *J Neuroradiol.* 2013 May;40(2):81-8.

## **AUTOIMMUNE DISORDERS**

### **RITUXIMAB IN AUTOIMMUNE CNS DISEASE**

Investigators at University of Sydney, Australia, and 14 international centers assessed the utility and safety of rituximab in 144 children (median age 8 years, range 0.7-17; 103 female) with autoimmune and inflammatory disorders of the CNS. These included NMDAR encephalitis in 39 patients, opsoclonus myoclonus ataxia syndrome in 32, neuromyelitis optica spectrum disorder in 20, lupus erythematosus in 18, and other neuroinflammatory disorders in 35. A standardized questionnaire and Rankin Scale were used for a retrospective evaluation of treatment outcome. Infusion adverse events occurred in 18/144 (12.5%), including anaphylaxis in 3, and infection in 11 (7.6%), 2 of whom died. Benefit was reported in 125 (87%) patients, greater in patients treated early. The off-label use of rituximab should be restricted to disorders having significant morbidity and mortality. (Dale RC, et al. Utility and safety of rituximab in pediatric autoimmune and inflammatory CNS disease. *Neurology* 2014 Jul 8;83(2):142-50).

COMMENTARY. Suggested guidelines for rituximab treatment in children with neuroimmunologic conditions are listed in an editorial [1]. Originally approved by the FDA in 1997 for the treatment of B-cell non-Hodgkin lymphoma and later for rheumatoid arthritis, more recently it has been used in a variety of autoimmune disorders including multiple sclerosis.

#### **References.**

1. Chitnis T, Waubant E. *Neurology.* 2014 Jul 8;83(2):111-2.

## **ENCEPHALITIS / ENCEPHALOPATHY**

### **DYSPLASTIC NEURONS IN OVARIAN TERATOMAS IN NMDAR ENCEPHALITIS**

Investigators at University of Toronto, Canada, report detection of atypical (dysplastic) neuronal elements in 4 of 5 teratomas resected from cases with NMDAR