## In Focus

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### Notable in *Neurology* this week

This issue features an article that evaluates the therapeutic and adverse effects of high-dose methyl-prednisolone compared to no steroids in patients with acute spinal cord injury; another determines that the Genot-PA score predicts hemorrhagic transformation in stroke patients treated with IV recombinant tissue plasminogen activator. A featured Views & Reviews article discusses the major immune-mediated and inflammatory syndromes that can affect the brainstem, focusing on distinguishing features of different brainstem conditions.

### **Articles**

## Declining malformation rates with changed antiepileptic drug prescribing: An observational study

Intake of some antiepileptic drugs during pregnancy can adversely affect fetal development. The prospective EURAP registry illustrated that rates of congenital malformations after prenatal antiepileptic drug exposure has declined gradually over a 14-year period. The reduction in teratogenic outcomes could be ascribed to a decline in the use of valproate.

Page 379

From editorialists Pennell & Meador: "Alterations in prescribing patterns attributed to the growing body of evidence over the last 2 decades have been reported by different study groups, but it is unclear if these changes have resulted in differences in the occurrence of MCMs."

Page 375; Patient Page, page e935

# Skeletal muscle MRI differentiates SBMA and ALS and correlates with disease severity

This article illustrates how amyotrophic lateral sclerosis (ALS) and spinal bulbar muscular atrophy (SBMA) show very different skeletal muscle MRI patterns. Disease and control participants underwent calf, thigh, and bulbar muscle MRI, including short tau inversion recovery (STIR) and 3-point Dixon imaging, to quantitate the muscle fat fraction. Patients with ALS exhibited atrophy and increased STIR signal, while patients with SBMA showed fat infiltration with a specific muscle involvement pattern.

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### A large case-control study on vaccination as risk factor of multiple sclerosis

The authors investigated a possible association between vaccinations and multiple sclerosis (MS) onset in a large population from south Germany. Patients had fewer vaccinations during the 5 years preceding MS diagnosis, showing no evidence supporting the hypothesis that vaccination is a risk factor for developing MS.

Page 386

From editorialists Yeh & Graves: "This study provides strong evidence to share with worried patients and families when faced with the question of whether a vaccine in the recent or relatively distant past triggered the individual's MS."

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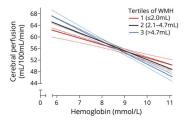
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## In Focus

# Hemoglobin and anemia in relation to dementia risk and accompanying changes on brain MRI



Anemia is a common problem in elderly patients that may have another harmful consequence. Low and high levels of hemoglobin and anemia are associated with increased long-term risk of dementia. Similarly, abnormal hemoglobin levels relate to worse structural connectivity and small-vessel disease on brain MRI. Common measurements still reveal new insights.

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NB: "Mystery Case: Bilateral alopecia as clue to diagnosis of Gomez-Lopez-Hernandez syndrome in a 38-year-old man," p. 408. To check out other Resident & Fellow Mystery Cases, point your browser to Neurology.org/N and click on the link to the Resident & Fellow Section. At the end of the issue, check out the Resident & Fellow Clinical Reasoning article discussing the diagnosis of an infantryman presenting with right hand and arm weakness that began during deployment in Iraq. This week also includes a Resident & Fellow Teaching NeuroImages article titled "Isolated and persistent hiccup by tiny ischemia at dorsolateral medulla."

### **NEW EPISODE**



August 27, 2019

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# A large case-control study on vaccination as risk factor of multiple sclerosis (see p. 386)

- 1. A large case-control study on vaccination as risk factor of multiple sclerosis
- 2. What's Trending: Zika update 2019

In the first segment, Dr. David Lapides talks with Dr. Bernard Hemmer about his paper on a large case-control study on vaccination as risk factor of multiple sclerosis. In the second part of the podcast, Dr. Stacey Clardy focuses her discussion with Dr. Amanda Grennell on a Zika update for 2019.

Disclosures can be found at Neurology.org.



### Spotlight on the August 27 issue

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