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A summary of recently published articles in the *Neurology*[®] Resident & Fellow Section

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May 1, 2018, Issue

Medical ethics in the field of pediatric neurology is explored in this issue's Right Brain article. This issue features 2 Clinical Reasoning cases. The first explores the differential diagnosis of a middle-aged woman with dysarthria and ataxia. The second patient presented with seizures associated with pregnancy.

Finally, the Teaching Video NeuroImage describes an autoimmune disorder affecting the peripheral nervous system.

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Clinical Reasoning: A 60-year-old woman with ataxia

A 60-year-old woman presented 4 days after onset of difficulty speaking. Her tongue was not moving as usual and speech was slurred. In hospital, she had difficulty with walking, tending to fall to the left. Her only medical history was irritable bowel syndrome.

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Clinical Reasoning: A 22-year-old postpartum woman with new-onset seizures and headache

A 22-year-old right-handed woman with no relevant medical history presented 7 days after delivery of her first child with new-onset seizures. Her pregnancy was unremarkable and she received standard prenatal care. During spontaneous vaginal delivery of her healthy full-term baby she developed fever, tachycardia, and cough.

Page e1631

Right Brain: Withholding treatment from a child with an epileptic encephalomyopathy

Since late 2016, the case of Charlie Gard, a child with a mitochondrial DNA depletion syndrome, whose family has fought to get him experimental nucleoside therapy, has been highly publicized. In this article, we dissect the ethical considerations associated with Charlie's family's request to treat him with experimental nucleoside replacement therapy.

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Teaching Video NeuroImages: Acquired focal neuromyotonia in LGI1 autoimmunity

We present the case of an 81-year-old woman who was initially diagnosed with corticobasal degeneration due to cognitive symptoms along with an abnormal left hand posture. Ultimately the hand posture was diagnosed as neuromyotonia. The detection of LGI-1 immunoglobulin G antibody was helpful to support a diagnosis of peripheral nerve hyperexcitability.

Page e1636

May 8, 2018, Issue

The use of personal electronic devices in health care continues to increase. In this issue's Opinion and Special Article, neurology residents describe a nominal and potentially helpful use of the built-in camera on smartphones. The clinical cases from this issue cover a variety of topics including neuro-endocrinology, neuroinfectious diseases, and stroke.

Opinion and Special Articles: Amateur fundus photography with various new devices: Our experience as neurology residents

Times are changing in the way we secure and share patient fundus photographs to enhance our diagnostic skills in neurology. The use of a fundus camera and smartphones to secure good quality fundus photographs of patients presenting with headache to the emergency department is discussed.

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Clinical Reasoning: Accumulating endocrinopathies in a car salesman

A 65-year-old car salesman was referred to our neurology outpatient clinic because of a pituitary mass. Two years before referral, the patient had developed symptoms of polyuria and polydipsia, decreased endurance while working out, fatigue, loss of body hair, and erectile dysfunction.

[Page e1720](#)

Clinical Reasoning: A 48-year-old woman with confusion, personality change, and multiple enhancing brain lesions

The authors present the case of a 48-year-old woman who presented with confusion and personality change, was found to have multiple intracranial masses on imaging, and ultimately was diagnosed with HIV, cerebral toxoplasmosis, and systemic *Mycobacterium tuberculosis*.

[Page e1724](#)

Teaching NeuroImages: Rupture and spontaneous resolution of a P1 perforator pseudoaneurysm

A 47-year-old man with a history of smoking and hypertension had severe, sudden headache. Head CT showed subarachnoid hemorrhage. Progressive ophthalmoplegia developed without alteration of consciousness.

[Page e1730](#)

May 15, 2018, Issue

This issue includes a collection of 4 clinical cases. The first highlights potential side effects from the immunomodulatory therapies. Next, a young woman presented with a constellation of symptoms including ataxia, seizures, and progressive cognitive decline. The Pearls & Oysters article provides guidance on the management of refractory autoimmune encephalitis. Finally, the Teaching Video NeuroImage describes a pediatric movement disorder case.

Clinical Reasoning: A 77-year-old man presenting with episodic expressive aphasia

This report presents the case of a man who had reactivation of giant cell arteritis (GCA) leading to severe intracranial stenosis and stroke after starting an immune checkpoint inhibitor for treatment of metastatic cancer. Given that immune checkpoint inhibitors are gaining popularity in the treatment of many solid tumors, it is becoming increasingly important to recognize and treat immune adverse events, such as GCA reactivation, associated with immunomodulatory therapies.

[Page e1822](#)

Clinical Reasoning: Progressive cognitive decline, cerebellar ataxia, recurrent myoclonus, and epilepsy

A 23-year-old woman presented with recurrent attacks of myoclonus and generalized tonic-clonic seizures, progressive cognitive decline, and walking instability.

[Page e1827](#)

Pearls & Oysters: Relapse of anti-NMDA receptor encephalitis after prior first- and second-line immunotherapy

A 33-year-old right-handed woman with history of anti-NMDA receptor (NMDAR) encephalitis presented with a 1-day history of vomiting and bizarre behavior in the context of recent cannabis and synthetic cannabinoid ingestion. She had been diagnosed 7 years previously with anti-NMDAR encephalitis complicated by refractory epilepsy.

[Page 936](#)

Teaching Video NeuroImages: Figure 8 head-shaking stereotypy in rhombencephalosynapsis

The authors present a video of a 4-year-old boy with rhombencephalosynapsis that shows the typical figure 8 and side-to-side head shaking. This distinctive stereotypy has been previously reported in the majority of individuals with rhombencephalosynapsis, highlighting it as an important diagnostic clue.

[Page e1832](#)

May 22, 2018, Issue

The lumbar puncture is a common procedure for a neurology specialist. The Opinion and Special Article in this issue explores the aspects of acquiring this skill during training. Neurology training includes extensive experience in medical and neurologic etiologies for rapid-onset cognitive change. The Pearls & Oysters article discusses inclusion of neuropsychiatric causes in the differential diagnosis. The 2 Teaching NeuroImages describe cases of transient global amnesia and arteriovenous malformation.

Opinion and Special Articles: Stress when performing the first lumbar puncture may compromise patient safety

In this cross-sectional multicenter study, we have identified how stress of the novice lumbar puncture operator warrants more attention, as it might explain an observed tendency for novices to shy away from the procedure. We have identified how stress of the procedure operator is an independent risk factor for patient safety, exemplified by the risk of postdural puncture headache and confidence in the procedure operator.

[Page 981](#)

Pearls & Oy-sters: An unusual neuropsychiatric manifestation of systemic lupus erythematosus

In our case, the diagnosis of catatonia was made and the patient responded well to first-line therapy with benzodiazepines. Had there been further delay in diagnosis, it would have led to further unnecessary tests, therapy, or complications.

[Page e1929](#)

Teaching NeuroImages: Convexal subarachnoid hemorrhage accompanied by transient global amnesia

A 55-year-old otherwise healthy woman presented with sudden onset anterograde amnesia, temporal disorientation, and repetitive questioning, which was associated with moderate intensity headache. Consistent with transient global amnesia, this clinical symptomatology lasted for 8 hours.

[Page e1933](#)

Teaching NeuroImages: Spontaneous regression of AVM feeding pedicle pseudoaneurysms

A 34-year-old woman had sudden left-sided weakness shortly after delivery. Head CT showed a small hemorrhage secondary to an arteriovenous malformation with 2 small pseudoaneurysms. Angiography 2 months later documented obliteration of 1 of the 2 pseudoaneurysms but growth of the other.

[Page e1935](#)

May 29, 2018, Issue

Congratulations to our readers who correctly solved the neuro-ophthalmology Mystery Case. The Clinical Reasoning case takes the reader through the steps in the evaluation of headache. The first Teaching NeuroImage describes a specific MRI pattern while the second illustrates an important clinical finding and confirmatory neuroimaging.

Mystery Case: Bilateral temporal crescent sparing after cardiac arrest

A 48-year-old man complained of tunnel vision after he experienced a cardiac arrest with out-of-hospital resuscitation. This particular visual field pattern with sparing of 2 visual field regions located on opposite anatomic poles in the visual cortex is rare.

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Clinical Reasoning: A 23-year-old woman with fever and vertical diplopia

A 23-year-old woman with a history of uncomplicated migraine headaches presented with 2 days of headache. Her typical migraines were preceded by visual aura and usually resolved after taking a triptan. This headache was different in that there was no preceding aura, it did not respond to Imitrex, and it was accompanied by nausea/vomiting, dizziness, subjective fevers, and binocular vertical diplopia.

[Page e2006](#)

Teaching NeuroImages: Distinct brain microhemorrhage pattern in critical illness associated with respiratory failure

A patient developed extensive microhemorrhages within the subcortical white matter, corpus callosum, and internal capsules in the setting of critical illness associated with severe respiratory failure and hypoxia. This specific pattern seen on susceptibility-weighted imaging MRI closely resembles the pattern of microhemorrhages recognized in patients with high altitude exposure, suggesting a common etiology.

[Page e2011](#)

Teaching NeuroImages: Prosopagnosia heralding anti-NMDA receptor encephalitis

A 23-year-old right-hand-dominant woman presented with 3 weeks of progressive difficulty recognizing faces, including her own, subsequently becoming psychotic. Noncontrast CT head and MRI brain with contrast revealed a nonenhancing lesion of the right posterior temporal lobe and fusiform gyrus, with corresponding hypermetabolism on FDG-PET/CT brain.

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Resident & Fellow Rounds

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