

CMV PRP should be considered in patients with advanced immunosuppression presenting with ascending paraplegia, areflexia, and urinary retention with typical CSF abnormalities (polymorphonuclear pleocytosis, elevated protein concentration, and hypoglycorrhachia).

Table 1. Summary of Presenting Signs and Symptoms of the Two Cases in Comparison to the 103 Patients with CMV PRP in Anders and Goebel's Review

Sign or Symptom	Anders and Goebel [2]	Case 1	Case 2
Lower limb weakness	100%	Present	Present
Lower limb areflexia	100%	Present	Present
Urinary retention	94%	Present	Present
Paresthesia	79%	Present	Present
Sensory loss (legs)	72%	Present	Present
Fecal incontinence	67%	Absent	Absent
Lumbar pain	36%	Absent	Absent
Babinski sign	16%	Absent	Absent

Disclosures. All authors: No reported disclosures.

352. Towards Earlier Diagnosis of Transmissible Spongiform Encephalopathies (TSEs): A Case Series, Including One Associated With Squirrel Brain Consumption

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Session: 55. CNS Infections

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Background. TSEs present diagnostic and infection control (IC) challenges. Creutzfeldt-Jakob Disease (CJD) is the most common human TSE, occurring in 1–2/million/year in the United States, but other zoonotic factors or transmissions remain incompletely understood. Prompted by the occurrence of four suspected cases from November 2017 to April 2018, we present a case series of suspected CJD to illustrate its variable presentation and the need for more rapid identification for implementation of disease-specific disinfection, sterilization, and quarantine measures.

Methods. We defined a case as any patient with a rapidly progressive dementing or neurologic illness and laboratory tests for CJD, IC and laboratory databases, and electronic medical records were reviewed to identify possible cases from 2013 to 2018.

Results. Five patients met case definition. The average time to suspecting and confirming a diagnosis was 5.2 and 14.2 days, respectively.

Case	1	2	3	4	5
Age/sex	61 M	65 F	51 F	61 F	80 M
Cognitive symptoms	Psychosis, schizophrenia, cognitive decline	Dysphasia, depression, psychosis	Vertigo, progressive encephalopathy	Memory loss, aphasia	Aphasia, dysarthria, dysphagia
Motor symptoms	Impaired gait	Impaired gait	Bilateral ataxia	Impaired gait incontinence, abnormal muscle tone with paratonia	Unilateral weakness, jerking movements
EEG	Triphasic pattern	Abundant generalized discharges	Occasional bi-frontal sharp wave discharges	Generalized encephalopathy	NSC
MRI	Increased T2 signal in the pulvinar of the thalamus and cortex (especially frontal lobes)	NSC	NSC	NSC/small vessel infarcts	NSC/small vessel infarcts
RT-QuIC 14-3-3	+	+	+	-	P
T-tau	8,750	>4,000	>4,000	390	P
Epidemiology	Intake of squirrel brains	Concurrent apheresis and GYN surgery	Hotel Housekeeping	Industrial Chemist	Janitor
CJD	V	S	S	No	P
Days to suspecting diagnosis	1	13	2	4	6
Days to confirmation	16	12	18	12	>11
Months of illness	5	3	>2	P	P
Outcome	Dead	Dead	Alive	Alive	Alive

NSC, nonspecific changes; P, pending; S, sporadic; V, variant; RT-QuIC, Realtime Quaking Induced Conversion.

Conclusion. Protean in presentation, the diagnosis of CJD can be delayed. Variant CJD and emerging zoonotic TSEs should be considered in differential diagnoses and IC measures. Improved empiric classification algorithms and tests with faster turnaround times are needed.

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353. HSV-Induced Anti-NMDAR Encephalitis

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Background. N-Methyl-D-aspartate receptor (NMDAR) is a glutamate receptor on nerve cells that controls synaptic plasticity and memory function. Anti-NMDAR encephalitis is a rare autoimmune disease caused by antibodies (Ab) against GluN1 subunit of the NMDAR. Preceding Herpes simplex virus-1 encephalitis (HSVE) is a well-recognized infectious trigger. First reported in female patients with ovarian teratoma, and more recently with germ cell tumors in males.

Methods. A 61-year-old male presented with agitation, behavioral changes, and confusion. Eight months prior, he was diagnosed with HSVE and treated with 21 days of intravenous acyclovir. Following therapy, he suffered from residual cognitive and personality changes with slow recovery until 3 months prior to admission encephalopathy again worsened. An extensive investigation was unrevealing except for a CSF lymphocytic pleocytosis, positive anti-NMDAR Ab titer 1:64 and imaging changes consistent with post-viral encephalitis. At that point, HSV-induced anti-NMDAR encephalitis was diagnosed. A PET scan did not show any occult malignancies. Two cycles of plasmapheresis were attempted over 4 months period with limited success in improving his worsening neurologic deficits.

Results. HSVE induced autoimmune encephalitis is a rare complication, primarily affecting children and young adults. Auto Ab develop 1–4 weeks after HSVE, manifesting as choreoathetosis and/or orofacial dyskinesia in children and psychiatric symptoms in young adults. CSF Ab titer is highly sensitive and specific. Proposed mechanisms include either viral reactivation or a post-infectious autoimmune process. Immunotherapy with tumor resection (if present) has been promising with less frequent need for second-line therapy in primary condition, compare with HSVE-induced condition where tumors have not been reported and resistance to first-line therapy has been observed. Progressive decline in neurologic function post HSVE prompted an evaluation for paraneoplastic conditions in our patient that ultimately revealed the diagnosis. The unique feature of this case is the age of the patient and preceding HSVE which triggered this autoimmune process.

Conclusion. Physicians should consider anti-NMDAR encephalitis in the differentials for relapsing patients post HSVE.

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354. Evidence of Aspergillosis Among Patients With Influenza-Associated Hospitalizations—United States, 2005–2017

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Session: 56. Fungal Disease: Management and Outcomes

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Background. Invasive aspergillosis primarily affects immunosuppressed persons, but it has also been observed in immunocompetent patients with severe influenza. Several case series suggest that severe influenza infection might be an under-recognized risk factor for aspergillosis. We examined the frequency of aspergillosis-related hospital discharge codes in a national surveillance database of influenza hospitalizations.

Methods. We analyzed laboratory-confirmed influenza-associated hospitalizations reported during 2005–2017 to Centers for Disease Control and Prevention (CDC)'s Influenza Hospitalization Surveillance Network (FluSurv-NET), which includes children and adults in 13 states. We obtained data on underlying conditions and clinical course through medical chart abstraction. We defined invasive aspergillosis cases as influenza hospitalizations with ≥1 of the following the International Classification of Diseases (ICD) 9th or 10th Clinical Modification discharge diagnosis codes: 117.3 (aspergillosis), 484.6 (pneumonia in aspergillosis), B44.0 (invasive pulmonary aspergillosis), B44.2 (tonsillar aspergillosis), and B44.7 (disseminated aspergillosis).

Results. Among 92,671 influenza hospitalizations, we identified 94 cases (0.1%) that had invasive aspergillosis codes. Characteristics of patients were: 60% male (56/94), 72% white race (60/83), and median age 58 years [interquartile range (IQR) 41–67].