A 28-year-old African American woman presented to the R Adams Cowley Shock Trauma Center in Baltimore, Maryland, for evaluation of right-sided paralysis and left-sided paresthesias after being found down in her home between her nightstand and her bed.
The symptoms began after eating at a local restaurant chain, consuming alcohol, and smoking one cigarette dipped in liquid phencyclidine (PCP).
She was asymptomatic that night and went to bed without complications.
She was found down next to the bed the following morning unable to move.
The patient denied any physical trauma other than falling from the bed.
She had no history of seizures, sickle cell anemia, fever, urinary or bowel incontinence, or pain.
The patient had a history of viral meningitis without residual deficits eight years prior, gastric bypass surgery, and cholecystectomy, and she was treated for a presumed urinary tract infection five days prior to admission at an outside institution.
Her triage vital signs were as follows: temperature 36.8°C, blood pressure 155/100 mm Hg, heart rate 90 beats per minute, respiratory rate 16 breaths per minute, and an oxygen saturation of 95% on room air.
On physical exam, the patient was alert and oriented to person, place, and time.
Her cranial nerves II–XII were grossly intact.
She had 2/5 strength in her right lower extremity, 3/5 in her left lower extremity, and 4/5 bilaterally in her upper extremities.
Her sensation was intact.
She opened her eyes spontaneously, her verbal response was oriented and appropriate, and she obeyed commands, resulting in a Glasgow Coma Scale score of 15.
Pupils were equal, round, and reactive to light.
She had tenderness to palpation over the cervical, thoracic, and lumbar spine without obvious external signs of trauma.
Her anal sphincter tone was intact.
Multiple laboratory abnormalities were noted on admission, including hyperlactemia, elevated liver function tests, and electrolyte derangements.
Her complete blood count and remainder of her complete metabolic panel were within normal limits.
These values are summarized along with reference ranges in Table 1.
Her toxicology screen was positive for PCP.
Blood cultures drawn on admission grew the aerobic bacteria Salmonella enterica serotype 4,12: i, and then repeat cultures drawn two days later grew group B streptococcus (aerobic and non-aerobic).
Subsequent blood cultures were negative, as were stool cultures.
Metronidazole and vancomycin therapy was initiated empirically, with transition to ceftriaxone upon learning of the culture results.
In addition, she had a detailed autoimmunity workup including anti-nuclear antibody (ANA) and HLA-B27, all of which returned within normal limits.
Admission computerized tomography scan of her cervical, thoracic, and lumbar spine revealed no spinal fractures.
Magnetic resonance imaging (MRI) revealed no acute intracranial abnormalities, but enhancement within the central aspect of C3–T2 suggested spinal cord edema, disc protrusions at C3–4, C4–5, and C5–6, and bilateral posterior neck muscle edema.
A lumbar puncture was not initially performed upon patient admission due to concerns about raised intracranial pressure from suspected trauma.
Four hours after presentation, her strength had progressively deteriorated to 1/5 in all extremities.
She lost proprioception in her toes bilaterally and developed absent anal sphincter tone.
The patient was admitted to the neurotrauma intensive care unit with further deterioration ultimately requiring endotracheal intubation due to respiratory failure.
Upon her positive blood culture results, lumbar puncture was performed, which demonstrated a pattern consistent with ATM, the results of which are summarized in Table 2.
An extensive workup for infectious etiologies was also completed, with the results summarized in Table 3.
Plasma exchange therapy was initiated with a suspected diagnosis of ATM.
Despite maximal medical therapy, the patient remains quadriplegic, is experiencing neurologic pain, received a tracheostomy due to prolonged respiratory failure, and required a feeding jejunostomy tube placement at the time of this report.