Acute leukoencephalopathy in the setting of drug abuse

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A 25 year-old male with no past medical history presented after being found unresponsive in bed with a bottle of Xanax. He had been heard on the phone the evening prior without clear abnormalities. He was initially tachypneic and hypoxic to 83% with agonal breathing and tachycardic to the 120s with blood pressure of 108/71 and required intubation due to lack of airway protection. He was catheterized due to two liters of urinary retention. Initial exam by neurology five days after admission was notable for spontaneous eye opening, inability to follow commands, roving horizontal eye movements, mildly spastic arms, and localization to painful stimuli with all extremities. Initial labwork notable for CK of 4000, AST/ALT in the 400s, and acute kidney injury with a creatinine of 3. Urine toxicology was positive for benzodiazepines, opiates, and THC. MRI revealed confluent diffusion restriction throughout the cerebral white matter. Lumbar puncture was unremarkable, and EEG was suggestive of moderate encephalopathy. Course was complicated by severe autonomic lability concerning for opiate withdrawal or sympathetic storming. Presentation was felt to be secondary to toxic/opiate-induced or delayed post-hypoxic leukoencephalopathy.