Introduction:
Human African Trypanosomiasis (HAT) is rarely encountered by critical care clinicians, but is an important differential for fever in the returning tropical traveler. Late disease is characterized by seizures, fever and multi-organ failure. We present an anonymized case presenting from an endemic area in Zambia referred for tertiary critical care management. The patient was too obtunded to give informed consent and his relatives could not be contacted despite extensive efforts.

Methods:
A 47-year-old farmer with no past medical history from rural Zambia presented to a local clinical officer post with fever and arthralgia. He was treated twice with anti-malarial medication without resolution of symptoms. Two months later he was admitted febrile and obtunded to a local hospital with worsening confusion. He was transferred 8 hours by ambulance to our facility in Lusaka, which is the only public tertiary critical care unit in Zambia.

Results:
GCS on arrival was E3M4V2 without localizing neurology. Microbiology investigations were negative, including for toxoplasma, cryptococcus, HIV or malaria. The patient suffered a generalized seizure followed by a sustained GCS of 3 and was admitted to the ICU for invasive ventilation and seizure control. Peripheral blood smears demonstrated trypanosomes consistent with HAT secondary to Trypanosoma brucei rhodesiense. He was commenced on melarsoprol but rapidly deteriorated, with signs of melarsoprol-induced arsenic encephalopathy and subsequent tonsillar herniation. His death was confirmed by neurological criteria.

Conclusion:
ICU management of fulminant HAT involves supportive neurocritical care plus melarsoprol, a toxic arsenic compound with common side effects of hepatotoxicity and dysrhythmia. Arsenic encephalopathy occurs in 10% of late HAT, with a fatality rate of 70% [1]. Early diagnosis is associated with a 95% survival rate in developed world travelers repatriated from endemic areas [2].

References:
1. DOI 10.1016/j.trstmh.2006.12.001
2. DOI 10.1016/j.ijid.2018.08.012