

Sinorhizobium meliloti

Sinorhizobium meliloti is a phytobacterium found in the root nodules of plants, where it is involved in fixing nitrogen for delivery to the roots in exchange for a photosynthate carbon source. There have been no reported cases of *Sinorhizobium meliloti* infection in humans.

Methods: Retrospective review of clinical records and diagnostic tests.

Results: This is a case of an 81-year-old woman who presented to the emergency department with a one-day history of progressive decline in her level of consciousness following a head injury and deep scalp laceration. Her medical history was significant for a ventriculoperitoneal shunt due to normal pressure hydrocephalus. Imaging studies revealed hydrocephalus and a tear in the shunt catheter. CSF analysis was not suggestive for meningitis. CSF culture revealed an unfamiliar organism, identified as *Sinorhizobium meliloti* following sequencing of its entire genome, which was considered a contaminant. The patient subsequently developed [peritonitis](#), and the same pathogen was detected in the peritoneal fluid, suggesting distal shunt infection. Symptoms resolved after shunt removal and antibiotic treatment. Thorough history taking revealed that the patient had fallen and struck her head against a flowerpot.

Conclusion: *Sinorhizobium meliloti* is a phytopathogen that should not be easily disregarded as a contaminant when isolated from human sterile fluids or tissues. Aggressive management including removal of infected hardware, if present, is required to ensure resolution of infection. It emphasizes the importance of thorough history taking. ¹⁾

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Ben-Chetrit E, Assous MV, Wiener-Well Y, et al. When a Root is the Cause of Infection [published online ahead of print, 2020 Sep 1]. *World Neurosurg.* 2020;S1878-8750(20)31943-4. doi:10.1016/j.wneu.2020.08.174

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