

Successful treatment of methicillin-resistant Staphylococcus aureus meningitis using linezolid without removal of intrathecal infusion pump. Case report.

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Infection of an intrathecal pump system is a rare but serious complication and usually leads to the removal of the pump. The authors report the first case of methicillin-resistant Staphylococcus aureus (MRSA) meningitis in a patient with such a pump successfully treated with linezolid without the need for removal of the intrathecal pump. A 77-year-old woman with cervical myelopathy underwent implantation of an intrathecal pump system for baclofen administration. Two weeks after the procedure she developed meningitis caused by MRSA as isolated in cerebrospinal fluid (CSF) cultures, blood samples, and serum obtained from the pump pouch. Clinically she presented with meningism, somnolence, and signs of sepsis. When a combined intravenous antibiotic treatment regimen of vancomycin and rifampicin resulted in no clinical improvement, that regimen was discontinued and linezolid was administered intravenously as monotherapy. Within 3 days clinical and laboratory findings showed significant improvement. After 1 week of linezolid treatment, blood and CSF cultures were sterile. Intravenous treatment was administered for a total of 3 weeks, after which the patient was treated with oral linezolid for 3 months. During 18 months of follow-up, no new clinical or laboratory signs of infection were observed. These results confirm previous reports of the efficacy of linezolid for the treatment of severe infections of the central nervous system caused by multidrug-resistant Gram-positive bacteria, especially postneurosurgical infections.

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