

High dose cefazolin for MSSA CNS infection

Cefazolin

vs

Nafcillin
/Oxacillin

Current Recommended
Treatment for **MSSA CNS**
infections:

- Anti-staphylococcal penicillins (ASP)
 - nafcillin
 - oxacillin



Is cefazolin gaining favor?

ASP Side Effects:¹

- Hypersensitivity reactions
- Interstitial Nephritis
- Hepatotoxicity
- Fluid Retention
- Bone marrow suppression
- Electrolyte abnormalities

Cefazolin = Better tolerability¹

Doses of Cefazolin included:^{1,2}

- 2 g IV Q6H OR 3 g IV Q8H
- Total daily dose: 8-12 g

Limited data suggests
**no significant
differences in:**²

- Hospital length of stay
- Treatment failure at 6 weeks and 12 weeks
- Mortality

Cefazolin CSF Concentration



Achieved 100% time > MIC¹

Evidence suggests cefazolin may be
a safe and effective alternative to antistaphylococcal
penicillins in the treatment of MSSA CNS infection.^{1,2}
Further research is required for validation.

References

1. Antosz, Kayla et al. "Cefazolin in the treatment of central nervous system infections: A narrative review and recommendation." *Pharmacotherapy* vol. 43,1 (2023): 85-95. Doi:10.1002/phar.2750
2. Corsini Campioli, Christina et al. "Antistaphylococcal Penicillin vs Cefazolin for the Treatment of Methicillin-Susceptible Staphylococcus aureus Spinal Epidural Abscesses." *Open forum infectious diseases* vol. 8,3 ofab071. 16 Feb. 2021, doi: 10.1093/ofid/ofab071