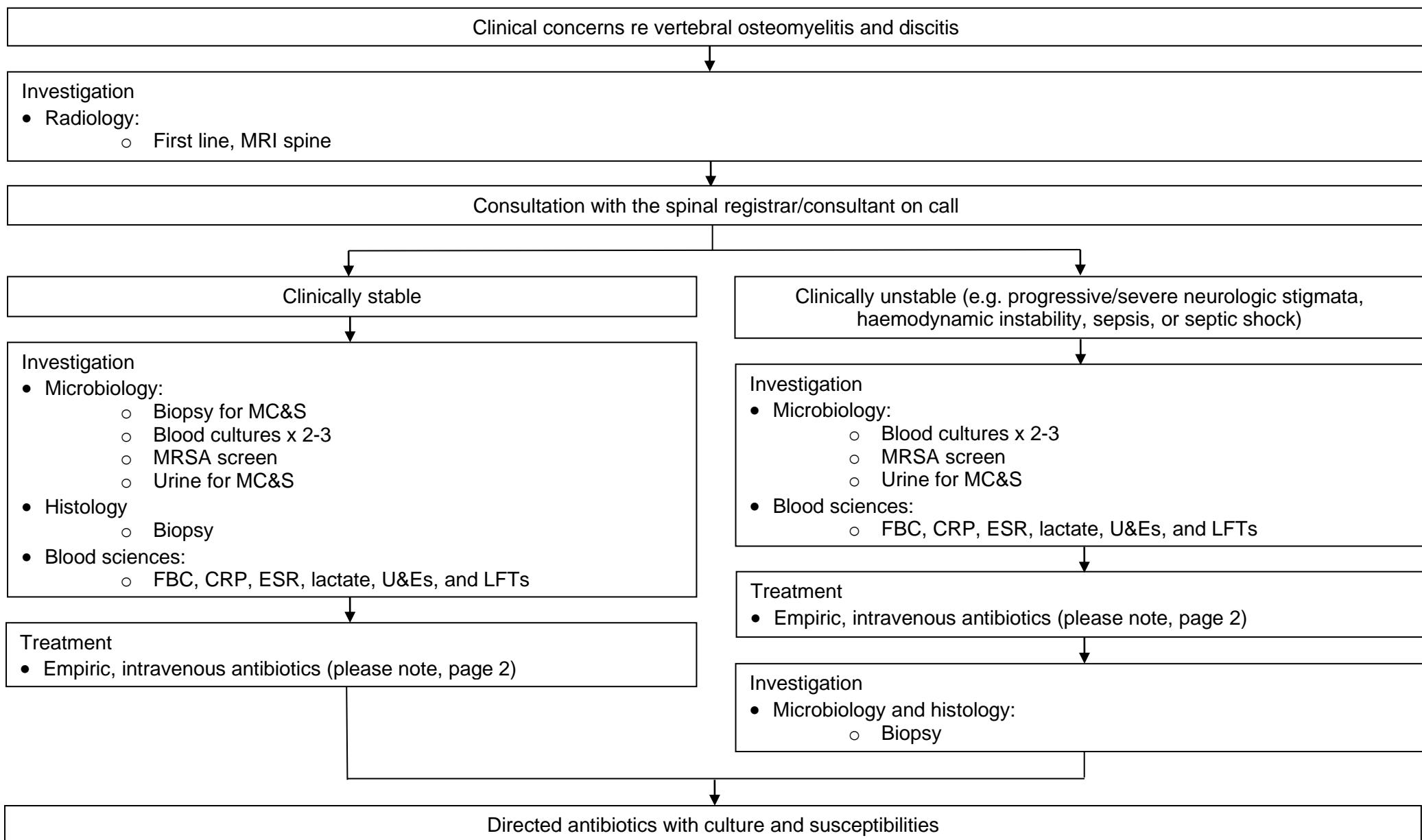


## Native Vertebral Osteomyelitis and Discitis in Adults - Microbiology Summary Clinical Guideline

Reference number: CG-ANTI/2022/015



### Empiric, intravenous antibiotics: clinically stable

First line	Co-amoxiclav 1.2 g 8 hourly ± If there are clinical concerns regarding the risk of MRSA, glycopeptide (vancomycin or teicoplanin), <a href="#">dose as per hospital guidelines</a> , vancomycin target pre dose level 15-20 mg/l, teicoplanin target pre dose level 20-40 mg/l
Second line, <a href="#">if non-immediate without systemic involvement penicillin allergy</a>	Glycopeptide (vancomycin or teicoplanin), <a href="#">dose as per hospital guidelines</a> , vancomycin target pre dose level 15-20 mg/l, teicoplanin target pre dose level 20-40 mg/l <b>and</b> Ceftriaxone 2 g 24 hourly
Third line, <a href="#">if immediate rapidly evolving or non-immediate with systemic involvement penicillin allergy</a>	Ciprofloxacin 400 mg 12 hourly <b>and</b> Glycopeptide (vancomycin or teicoplanin), <a href="#">dose as per hospital guidelines</a> , vancomycin target pre dose level 15-20 mg/l, teicoplanin target pre dose level 20-40 mg/l

### Empiric, intravenous antibiotics: clinically unstable

First line	Piperacillin tazobactam 4.5 g 8 hourly ± If there are clinical concerns regarding the risk of MRSA, glycopeptide (vancomycin or teicoplanin), <a href="#">dose as per hospital guidelines</a> , vancomycin target pre dose level 15-20 mg/l, teicoplanin target pre dose level 20-40 mg/l
Second line, <a href="#">if non-immediate without systemic involvement penicillin allergy</a>	Metronidazole 500 mg 8 hourly; <b>and</b> Glycopeptide (vancomycin or teicoplanin), <a href="#">dose as per hospital guidelines</a> , vancomycin target pre dose level 15-20 mg/l, teicoplanin target pre dose level 20-40 mg/l <b>and</b> Ceftazidime 1 g 8 hourly
Third line, <a href="#">if immediate rapidly evolving or non-immediate with systemic involvement penicillin allergy</a>	Metronidazole 500 mg 8 hourly; <b>and</b> Ciprofloxacin 400 mg 12 hourly <b>and</b> Glycopeptide (vancomycin or teicoplanin), <a href="#">dose as per hospital guidelines</a> , vancomycin target pre dose level 15-20 mg/l, teicoplanin target pre dose level 20-40 mg/l

## References

**Bennett, J. E., Dolin, R., and Blaser, M. J.** 2015. Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases, 8<sup>th</sup> Edition. Elsevier.

**Berbari, E. F., Kanj, S. S., Kowalski, T. J., Darouiche, R. O., Widmer, A. F., Schmitt, S. K., Hendershot, E. F., Holtom, P. D., Huddleston III, P. M., Petermann, G. W., and Osmon, D. R.** 2015. 2015 Infectious Diseases Society of America (IDSA) Clinical Practice Guidelines for the Diagnosis and Treatment of Native Vertebral Osteomyelitis in Adults. *Clinical Infectious Diseases*.

**Li, H., Rombach, I., Zambellas, R., Walker, A. S., McNally, M. A., Atkins, B. L., Lipsky, B. A., Hughes, H. C., Bose, D., Kumin, M., Scarborough, C., Matthews, P. C., Brent, A. J., Lomas, J., Gundle, R., Rogers, M., Taylor, A., Angus, B., Byren, I., Berendt, A. R., Warren, S., Fitzgerald, F. E., Mack, D. J. F., Hopkins, S., Folb, J., Reynolds, H. E., Moore, E., Marshall, J., Jenkins, N., Moran, C. E., Woodhouse, A. F., Stafford, S., Seaton, R. A., Vallance, C., Hemsley, C. J., Bisnauthsing, K., Sandoe, J. A. T., Aggarwal, I., Ellis, S. C., Bunn, D. J., Sutherland, R. K., Barlow, G., Cooper, C., Geue, C., McMeekin, N., Briggs, A. H., Sendi, P., Khatamzas, E., Wangrangsimakul, T., Wong, T. H. N., Barrett, L. K., Alvand, A., Old, C. F., Bostock, J., Paul, J., Cooke, G., Thwaites, G. E., Bejon, P., and Scarborough, M.** 2019. Oral versus Intravenous Antibiotics for Bone and Joint Infection. *The New England Journal of Medicine*.

**Peel, T.** 2021. Vertebral osteomyelitis and discitis in adults. UpToDate. Available at: [Vertebral osteomyelitis and discitis in adults - UpToDate](#) (accessed June 2022).

## Document control

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