

## Key Session 7

### [O81] THE ROLE OF THE ID PHYSICIAN IN TREATMENT OF PJI

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The treatment of periprosthetic joint infection (PJI) requires integrated and coordinated teamwork between orthopedic surgeons and infectious diseases (ID) specialists. Often other specialists such as plastic surgeons, pharmacologists, microbiologists, pathologists, and radiologists complete the team. The decision on the most appropriate treatment to achieve infection cure with preservation of joint function should be made interdisciplinary prior to the surgical intervention. Therefore, the extent and duration of infection and characteristics of involved microorganisms (e.g., virulence, resistance patterns, potential to adhere to foreign bodies) must be estimated. Recommendations for empirical treatment, both for routine cases as well as for complex cases vary between institutions. Therefore, intra-institutional surveillance and collaboration with infection control is required. Protocols on how and when biopsy samples should be obtained, transport modalities to microbiology and histopathology laboratories, and culturing process in defined media are pivotal steps in the diagnostic work-up. This underlines the importance of collaboration with the microbiology team. Also, histopathologists should use defined criteria for infection diagnosis. After isolation of causative pathogens, empiric antimicrobial treatment must be streamlined to targeted therapy. Dose adaptation to renal and liver function, therapeutic drug monitoring, interactions with other drugs and possible adverse effects need to be considered. The optimal time point for adding rifampin in case of rifampin-susceptible staphylococci and the switch from intravenous to oral formulation are further issues in the patient management. It includes also adherence to the antibiotic regime and attention to adverse effects that may occur at later time points of the treatment period. The optimal duration of antibiotic treatment is an inter-institutional matter of debate, though the majority of centers recommend between 6 weeks and 3 months. Cure of infection is commonly ascertained after a relapse-free interval of 2 years.