



Editorial on Postoperative Spinal Implant Infection (PSII)

Over the past several decades, the total number of spinal fusion procedures has continuously risen worldwide. With a reported incidence of 0.7–20%, postoperative spinal implant infections (PSIIs) are one of the most common and devastating complications in spine surgery, causing increased patient mortality and morbidity, poor long-term outcomes and high health-care costs. While in arthroplasty, clear definitions, diagnostic guidelines, and therapeutic algorithms have been established for periprosthetic joint infections (PJIs), literature on PSII remains limited. Due to similarities in pathogenesis, symptoms, diagnosis, and treatment, recommendations for PSII can be derived from existing literature on PJI. In most cases of PSII, surgical revision is indicated, which, however, always needs to be accompanied by an adequate long term antibiotic treatment to achieve efficient pathogen eradication and clinical results. Still, a standardized algorithm-based treatment system is lacking but necessary to ensure optimal treatment of PSII.

The purpose of this series is to provide an overview of evidence-based strategies for the diagnosis and treatment of PSIIs covering their epidemiology, diagnosis of acute and delayed infections, implications from existing literature on PJIs, surgical strategies, antibiotic treatment, and patient-reported outcomes. To ensure a comprehensive and interdisciplinary perspective we have invited spine experts from neurosurgery and orthopedic surgery backgrounds as well as infectiology experts. We are very excited to share this series and hope you find it informative and valuable in the care of your patients.

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