

Pyogenic Spondylodiscitis in geriatric patients: What are the issues?

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INTRODUCTION:

With the growing population of multimorbid and immunocompromised patients in particular, pyogenic spondylodiscitis should be included in differential diagnostic considerations at an early stage, even in the presence of nonspecific symptoms. The overall mortality rate of pyogenic spondylodiscitis is up to 20%. With regard to all age groups pyogenic spondylodiscitis occurs most frequently in 70-79 years old people.

METHODS:

We performed a PRISMA-compliant systematic computerized literature search. For all included studies, we used the Oxford Centre for Evidence-Based Medicine (2011) guidelines for defining the level of evidence. The strength of recommendation was defined using the GRADE approach (Grading of Recommendations Assessment, Development and Evaluation). Regarding the risk of bias every included investigation was graded with respect to the Newcastle Ottawa scale. Moreover, we included key points on the diagnosis and treatment of pyogenic spondylodiscitis in this review as part of a comprehensive systematic review also considering the current guidelines of the Infectious Disease Society of America (IDSA) and the German guidelines.

RESULTS:

Pyogenic spondylodiscitis has an increasing incidence by age with a peak at 75 years or older. The 1-year mortality without an appropriate treatment is with 15 to 20% extremely high. Pathogen detection is the essential diagnostic step and the basis for a sufficient antibiotic treatment. Geriatric patients have initially less elevated inflammatory parameters compared to younger patients. They have a longer length of hospital stay and take longer for normalization of markers of systemic inflammation. We conducted a diagnostic pathway algorithm (Figure 1). Even the outcome between conservative and operative treatment is comparable after one year. Patients with spinal instability, immobilizing pain, epidural abscess, and newly emerged neurological deficits should be considered for operative treatment (Figure2).

DISCUSSION AND CONCLUSION:

The treatment of geriatric patients with pyogenic spondylodiscitis must take into account that these patients usually have multiple comorbidities. The main goals are resistance-based antibiotics and the shortest possible time of immobilization of the patient. By comparing the American and German guidelines, we found many points of agreement.

