Author: Susana Núñez-Pereira

QUESTION 2: When should patients with suspected infections of the spine be referred to an infectious disease department?

RECOMMENDATION: There is no data on the timing or need for a referral to an infectious disease department. We support a multidisciplinary approach to managing clinical spine infections.

LEVEL OF EVIDENCE: Consensus

DELEGATE VOTE: Agree: 100%, Disagree: 0%, Abstain: 0% (Unanimous, Strongest Consensus)

RATIONALE

Only one paper has addressed the collaboration with an infectious disease-specialized team in order to improve outcomes for patients with spinal surgical site infections (SSIs). The paper is a retrospective study reporting on 40 patients, none of whom needed implant removal [1]. The paper didn't report on the exact timing when collaboration started, but reported three main advantages related with this collaboration:

1. Efficient detection of auxiliary bacteria (reached 88%)
2. Early treatment with antibiotics
3. Appropriate duration of administration of antibiotics

There were no other papers which discussed this issue, and all subsequent searches on related articles yielded no more information on the matter.

From a theoretical point of view, referral, or at least counselling by an infectious diseases specialist, might have some advantages. Antibiotic treatments are more complex today and only specialists are adequately up-to-date on the issue. The appropriate treatment choice might be difficult in patients with allergies, multi-resistant smears or simply a low tolerance for the medication. Adjusting the choice of antibiotic, taking into account side effects and tolerance, will very likely improve compliance, which is paramount in reaching a successful treatment outcome.

REFERENCES

[1] Kobayashi K, Imagama S, Kato D, Ando K, Hida T, Ito K, et al. Collaboration with an infection control team for patients with infection after spine surgery. Am J Infect Control. 2017;45:767–770. doi:10.1016/j.ajic.2017.01.013.

Authors: Dolors Rodriguez-Pardo, Gregory Schroeder

QUESTION 3: Which patients with vertebral osteomyelitis (VO) are suitable for outpatient management? Does any criteria exist to aid in this decision-making?

RECOMMENDATION: There are no studies aiming to identify which patients diagnosed with VO can be treated on an outpatient basis.

LEVEL OF EVIDENCE: Limited

DELEGATE VOTE: Agree: 93%, Disagree: 7%, Abstain: 0% (Super Majority, Strong Consensus)

RATIONALE

VO, also known as spondylodiscitis, describes an infection of the vertebrae and intervertebral disc. By comparison, discitis describes infection limited to the intervertebral disc, however there are many who consider discitis and VO to be different stages of the same disease process. VO can arise from hematogenous seeding, contiguous spread from infection in adjacent soft tissues or direct inoculation during spinal surgery or procedures (i.e., epidural). Management of native vertebral osteomyelitis (NVO) depends on the location of the infection, disease progression and the patient's general condition including age and comorbidities.

Conservative treatment is reasonable in the early stages with no or minor neurologic deficits or in the case of severe comorbidities. However, in cases of doubt, surgical treatment should be considered. Both options require a concomitant antimicrobial therapy, initially applied intravenously and administered orally thereafter [1]. To date, there is no consistent data from randomized controlled trials to guide the optimal duration and appropriate route of antibiotic therapy. Although the optimal duration of antibiotic therapy remains controversial, it should never undercut six weeks [2]. Recent Infectious Diseases Society of America (IDSA) guidelines for the diagnosis and treatment of NVO in adults include evidence and opinion-based recommendations for the management of patients with NVO treated with antimicrobial therapy, with or without surgical intervention, but do not address the issue of which patients affected by NVO can be treated on an outpatient basis [3,4]. The extent of pursuing spinal biopsies to determine etiology, antimicrobial therapy, response to treatment and preference for surgical techniques and timing all vary widely in clinical practice with heterogeneous studies limiting comparisons. Surgery, rather than conservative approaches, is being proposed as the default management choice because in carefully-selected patients it can offer faster reduction in pain scores and improved quality of life [5–9]. Due to a