

3.2. TREATMENT: MULTIDISCIPLINARY ISSUES

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QUESTION 1: Should periprosthetic joint infection (PJI) cases be referred to a regional center to improve the outcome of treatment and decrease cost?

RECOMMENDATION: Yes, for probable better outcome and greater efficiency.

LEVEL OF EVIDENCE: Consensus

DELEGATE VOTE: Agree: 92%, Disagree: 6%, Abstain: 2% (Super Majority, Strong Consensus)

RATIONALE

PJI significantly increases the utilization of hospital and physician resources compared to primary cases or aseptic revisions [1]. There is evidence to support that primary total joint replacements performed in a specialized center may have lower complications and lower reoperations than those performed in non-specialized centers [2]. This experience should be extrapolated for the treatment of PJIs. It is reasonable to assume that treatment of patients with PJI in tertiary centers provides access to a multidisciplinary group of healthcare providers [3]. This is important, as management of patients with PJI usually requires interaction with a large group of healthcare providers such as infectious disease specialists, pharmacists, plastic surgeons, rehabilitation experts and so on. It has been demonstrated that the work of a multidisciplinary team using well-established protocols may achieve excellent results in management of a complex group of patients including those with PJI [4]. Moreover, an infected total knee arthroplasty (TKA) performed primarily at an arthroplasty center may have better clinical outcome after PJI treatment compared to those cases performed primarily in another type of hospital [5].

When treating a previously-failed PJI case, the place where the subsequent treatment is taken over may be even more important. A recent study evaluated the frequency, associated factors and mortality of amputation and arthrodesis after a failed treatment for infected TKA [6]. The results of this study suggest that recommending centers with a high volume of joint arthroplasties may be a way to reduce the risk of salvage procedures.

In agreement with our recommendations, it has been observed that referrals to tertiary centers to treat PJI have increased [7]. These cases may also generate a financial incentive for the accepting institution [7].

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