

Bibliografia articoli

Procedure endoscopiche apparato muscolo-scheletrico

Infection after arthroscopic treatment of symptomatic total knee arthroplasty

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Arthroscopy for failed total knee arthroplasty (TKA) is a well-documented and accepted procedure for diagnosis of component and soft tissue problems. Fortunately, infection is a rare complication of arthroscopy. To our knowledge, we present the second report of acutely infected TKA after arthroscopy. Two days after arthroscopic treatment because of painful TKA, a 72-year-old woman developed an acutely infected TKA. The patient underwent immediate arthroscopic irrigation and debridement, and treatment with intravenous antibiotics. The cultures from knee joint aspirates were positive for infection with the organism *Staphylococcus aureus*. Three days later, repeat open debridement with exchange of the tibial polyethylene insert was performed because of persistent fever and fluctuation. The patient was treated with antibiotics for 6 weeks postoperatively. At the latest follow-up evaluation, 26 months after revision, the patient was pain free, had full activities of daily living, and had no clinical or radiographic signs of infection. However, despite the success of arthroscopy in treating and evaluating painful TKA, this potential complication should be considered when performing arthroscopy of symptomatic TKA.

Surgical site infections after arthroscopy: Outbreak investigation and case control study

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PURPOSE: The goal of this study was to determine the causes of increased post-arthroscopy surgical site infections (SSIs) and to define risk factors for infection. **Type of Study:** Outbreak investigation and case control study at a university-affiliated community hospital from 1994 to 1996, with surveillance through 1999. **METHODS:** Demographic, clinical, and microbiological data were collected on 27 post-arthroscopy SSIs from 1994 through 1999. Risk factors for SSI were identified by case-control analysis and presented as odds ratios (OR) and 95% confidence intervals (CI). **RESULTS:** Initial investigation revealed an increased annual rate of post-arthroscopy SSIs in 1995 (1.3%). Infection control deficiencies were identified, and feedback was provided to surgeons and staff. Instrument sterilization was standardized, flash sterilization prohibited, and preoperative shaving discouraged. Case-control analysis of 10 cases (from 1994 to 1996) found a statistically

significant increase in risk of SSI with intra-articular corticosteroid joint injection (OR, 9.33; 95% CI, 1.6 to 64.9); other risk factors did not reach statistical significance. SSI rates dropped after feedback and education (0.34% in 1996). Continued surveillance revealed 2 smaller outbreaks, in December 1997 (1997 rate, 1.13%) and September 1998 (1998 rate, 1.09%). Case-control analysis of the 17 cases occurring in 1997 through 1999 was also performed. The 1997 outbreak appeared to be related to preoperative razor shaving ($P = .003$), which was then prohibited by hospital policy. One scrub nurse was also associated with 75% of these cases, which were culture-positive for coagulase-negative Staphylococcus. The cases in the 1998 outbreak shared prolonged procedure duration and conversion to arthrotomy. Of 27 cases, 24 required repeat hospitalization and repeat surgery, at an average excess cost of \$9,154.84 per case. All received prolonged courses of intravenous or oral antibiotics. CONCLUSIONS: Post-arthroscopy SSIs are associated with significant morbidity and cost. Although small numbers make finding statistical significance difficult in case-control studies, infection control and CDC-recommended interventions can lower SSI rates. Careful definitions, ongoing surveillance, and long-term follow-up are helpful in reporting results of infection control interventions.

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Careful definitions, ongoing surveillance, and long-term follow-up are helpful in reporting results of infection control interventions.

Postarthroscopy surgical site infections: review of the literature

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The use of arthroscopy for both diagnosis and operative intervention has been increasing steadily since its introduction in the 1970s. It is generally associated with fewer complications and shorter times to mobilization than are open procedures. Overall reported rates of complications are low (0.1%-0.6% of procedures). This review focuses on infectious complications of arthroscopy, which are rare (0.01%-0.48% of procedures) but result in significant morbidity for the patient when they occur. The most commonly reported causative organisms are staphylococci. Several outbreaks have been reported related to breaks in infection control or to contaminated instruments. Suggested risk factors include use of intra-articular corticosteroids, prolonged tourniquet time, patient's age > 50 years, failure to prepare the surgical site again before conversion to arthrotomy, procedure complexity, and a history of previous procedures. However, most reports use variable and unclear definitions of infection, which makes it difficult to draw firm conclusions.