

Oral Abstracts

Rapid Fire Papers 1

[O35] PROSPECTIVE, RANDOMIZED COMPARISON OF ONE- VERSUS TWO-STAGE BURSECTOMY FOR MODERATE TO SEVERE SEPTIC BURSTITIS

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Aim: The optimal surgical approach for patients hospitalized for moderate to severe septic bursitis is not known, and there have been no randomized trials of a one-stage compared with a two-stage (i.e., bursectomy, followed by closure in a second procedure) approach. Thus, we performed a prospective, non-blinded, randomized study of adult patients hospitalized for an open bursectomy.

Method: Patients were randomized 1:1 to a one-stage vs. a two-stage surgical approach. All patients received postsurgical oral antibiotic therapy for 7 days. These are the final results of the prospective study registered at ClinicalTrials (NCT01406652).

Results: Among 164 enrolled patients, 130 had bursitis of the elbow and 34 of the patella. The surgical approach used was one-stage in 79 and two-stage in 85. The two groups were balanced with regards to sex, age, causative pathogens, levels of serum inflammatory markers, co-morbidities, and cause of bursitis. Overall, there were 22 treatment failures: 8/79 (10%) in the one-stage arm and 14/85 (16%) in the two-stage arm (Pearson- χ^2 -test; $p=0.23$). Recurrent infection was caused by the same pathogen a total of 7 patients (4%), and by a different pathogen in 5 episodes (3%). The incidence of infection recurrence was not significantly different between those in the one- vs. two-stage arms (6/79 vs. 8/85; χ^2 -test: $p=0.68$). In contrast, outcomes were better in the one- vs. two-stage arm for wound dehiscence (2/79[3%] vs. 10/85[12%] ; $p=0.02$), median length of hospital stay (4.5 vs. 6 days), nurses' workload (605 vs. 1055 points) and total costs (6,881 vs. 11,178 Swiss francs) (all $p<0.01$).

Conclusions: For adult patients with moderate to severe septic bursitis requiring hospital admission, bursectomy with primary closure, together with 7 days of systemic antibiotic therapy, was safe, resource-saving and effective. Using a two-stage approach did not reduce the risk of infectious recurrence, and may be associated with a higher rate of wound dehiscence than the one-stage approach.