

PP-053

Factors affecting fever and sepsis following percutaneous nephrolithotomy: The role of one week preoperative antibiotic course

A. Bourdoumis, M. Lardas, A. Papatsoris, A. Skolarikos

2nd Department of Urology, Sismanogleio Hospital, Athens, Greece

Introduction: Percutaneous nephrolithotomy (PCNL) is frequently associated with infectious complications.

Purpose: To evaluate patient-related, procedure-related and stone-related factors which predisposed to high-grade fever and systemic inflammatory response syndrome (SIRS) development in patients who undergo PCNL.

Material and Methods: We have analyzed data extracted from 112 PCNLs performed in our department.

Results: Mean stone burden was 33,9 mm. A stone-free rate of 58,4% was achieved. High-grade fever and SIRS were reported in 22 patients. Those patients who received antibiotic prophylaxis with induction to anesthesia, compared to one week prior to the procedure, bled intraoperatively, operated on for >60 minutes, received a haemostatic agent to seal the nephrostomy tract and had a Clavien complication graded as >2 developed fever/SIRS with a statistically higher incidence. Multivariate analysis depicted that only the antibiotic course and the operating time significantly affected the outcome. Those patients who received antibiotic coverage for one week prior to the operation and underwent a sort operation had a 90% and 78% lower incidence of fever/SIRS development, respectively.

Conclusion: The results of our study indicate a significant role of a prolonged period of preoperative antibiotics in reducing febrile episodes when large stones are treated.

As published in the *Supplement of AFJU, Volume 18 (2012), 1st ESD "Experts in Stone Disease" Conference* (pages 45-46)