

Concordance of renal stone culture: PMUC, RPUC, RSC and post-PCNL sepsis? a non-randomized prospective observation cohort study

Walton-Diaz, Annerleim

Vinay, José Ignacio

Barahona, Jaime

Daels, Pieter

González, Mariano

Hidalgo, Juan Pablo

Palma, Cristian

Díaz, Pablo

Domenech, Alfredo

Valenzuela, Rodrigo

Marchant, Fernando

© 2016, Springer Science+Business Media Dordrecht. Introduction: Between 5 and 10% of patients undergoing percutaneous nephrolithotomy (PCNL) develop postoperative sepsis 1, 2. Strategies to prevent infectious complications are based on information provided by preoperative midstream urine cultures (PMUC). The aim of this study is to evaluate the concordance of the microbiologic findings of PMUC, cultures of the renal stone (RSC) and urine obtained directly from the renal pelvis (RPUC) in patients undergoing PCNL. Materials and methods: This is a multicenter prospective study. The study included all patients who underwent PCNL from May 2013 to July 2015 in three academic hospitals. All patients underwent a PMUC. Samples for RPUC were obtained by renal puncture for PCNL. Stone fragments extracted during the procedure were sent for culture (RSC). Clinical variables, stone configuration, burden and microbiology reports of cultures were recorded. We analyzed concordance between cultures and