Cephalosporins Periprostatic Injection in Prostate Biopsy

Introduction and Objective: To compare the antibiotic prophylaxis based on quinolone administered orally with a combination of cephalosporin administered periprostatically and a fluoroquinolone orally, in terms of post-prostate bioptic infectious complication rates in those men undergoing transrectal ultrasound-guided prostate biopsy (TRUS gpb).
Materials and Methods: In a prospective, randomized, double-blind study, 150 consecutive patients were randomized to receive 10 ml lidocaine 1 % in Group A and ceftriaxone 1 g diluted in a solution of 10 ml of lidocaine 1 % in Group B, before TRUS gpb. All signed the informed consent. The men were asked to grade the pain using a ten points visual analogue scale close after TRUS gpb. In a telephone interview at 3 and 6 days, they were asked about early and late complications, assessing rectal bleeding, urinary retection, fewer, haematuria, urethral bleeding and hematospermia.
Results: Of the 150 men enrolled, 135, 70 in Groups A and 65 in Group B, completed the study. Four men (5.7 %) in Group A developed sepsis after TRUS gpb requiring hospital admission and intravenous antibiotic treatment, while none in Group B. Escherichia coli was the only organism isolated. The mean pain score was 2.76 ± 1.69 and 1.73 ± 1.26 for Group A and B, respectively ($p = 0.08$). Complications, evaluated at 3 and 6 days after the procedure through a telephone interview, were similar in both Groups.
Conclusions: The antibiotic prophylaxis based on the combination of ceftriaxone administered periprostatically and ciprofloxacin orally is able to offer a best control on infections caused by fluoroquinolone-resistant E. coli.