Abstract

Objectives: Transrectal ultrasonography-guided prostate biopsy is still the main technique in prostate cancer diagnosis. In spite of being a relatively well-tolerated exploration, often results in an awkward and painful procedure, especially in those cases in which the number of samples increase. We designed a prospective randomized study that compares biopsies tolerance with the use of intravenous analgesia and intrarectal gel with or without intracapsular prostatic anesthesia. Methods: We have included an amount of 80 procedures between June 2006 and December 2007. Intravenous analgesia was given to all patients and 12.5 gr. of lidocaine gel (which contains 250 mg of lidocaine hydrochloride) was instilled into the rectal vault. All patients underwent methodically 10 cores biopsy after having an intracapsular injection of 8 ml. of 2% lidocaine in a randomized group. A questionnaire with three measurements of the visual analogue scale of pain was given immediately after the procedure and another one thirty minutes later, as well as a satisfaction survey. Results: The average age of patients in control group was 68 years (48-73 range) and 69 years (50-75 range) in treatment group. The average PSA was 7.1 ng/mL (4.8-9.8 range) in the first group and 7.3 ng/mL (4.5-9.7 range) in the second one. Average pain in the visual analogue scale in patients without intracapsular anesthesia was 8.3 (2 - 9) in the first questionnaire and 2 (0 - 4) in the second one, against 4 (0 - 8) and 1.33 (0 - 2) of the group who did receive anesthesia. If we compare both groups, we find statistically significant differences only in immediately measurements (p<0,01), not in the second questionnaire (p=0,2). We didn't find statistically significant differences as for urethral bleeding, rectorrhagia or infection between both groups. Conclusion: We consider the injection of intracapsular lidocaine a reproducible technique and effective for both improving tolerance and diminishing the pain related to transrectal ultrasound-guided prostate biopsy without increasing morbidity.

Keywords

Prostatic biopsy, Local anesthesia, Prostate cancer.