

Transrectal ultrasound guided prostate biopsy: are complications and morbidity underestimated?

Biópsia da próstata transretal guiada por ultrassonografia: suas complicações e morbidade são subestimadas?

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According to Instituto Nacional de Câncer, in 2010, Brazil had about 52,350 new cases of prostate cancer, confirming that prostate cancer is the most common neoplasm among men⁽¹⁾. Although the prostate cancer mortality rate is low, studies have demonstrated that effective screening programs, allowing early detection of the disease, are related to the successive decrease in such rate, while five-year survival rates reach 99%⁽²⁾. It is important to note that, despite the continuous progress of imaging methods, particularly magnetic resonance imaging, searching for a correct diagnosis of prostate cancer, transrectal ultrasound (US) guided biopsy still plays a fundamental role for histopathological confirmation. Although such procedure is considered secure and also well tolerated by most patients, studies demonstrating complications in up to 73% of patients cannot be ignored⁽³⁾, leading us to ask if complications related to the procedure become effectively known by those professionals who perform it.

About this question, an article published in the present issue of *Radiologia Brasileira* by researchers from Escola Paulista de Medicina – Universidade Federal de São Paulo tried to evaluate the morbidity of transrectal US guided prostate biopsy. Solha et al.⁽⁴⁾ have evaluated the incidence of post-procedure complications in 97 patients submitted to prostate biopsy, utilizing data collected by means of phone interviews, searching information about the onset of adverse effects, fever or hemorrhage up to 14 days after the procedure. After prophylactic antibiotic therapy with ciprofloxacin, all the patients were submitted to a same protocol of prostate biopsy including anesthesia by means of periprostatic neurovascular bundle block. The collection of 12 specimens from the whole prostate followed the standard procedure recommended by Brazilian College of Radiology and Imaging Diagnosis and by Brazilian Urology Society. Additional specimens were collected when there were focal lesions in the peripheral region or in the cases of saturation rebiopsy, when 18 specimens were collected.

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The complications were classified into minor (self-limited) and major (cases where the patient sought emergency medical assistance). The results have demonstrated that almost 40% of the patients did not present any adverse event after the procedure. A little more than 52% of the patients reported minor complications, macroscopic hematuria being the most prevalent one, followed by hematospermia and hematochezia. Among the approximately 8% of patients who required emergency medical evaluation (eight patients), seven did it because of urinary retention. Three patients (3.1%) reported fever, and two of them presented concomitant dysuria. Such results are comparable to other studies in the literature. The authors have concluded that the procedure of transrectal US guided prostate biopsy is safe, with a low incidence of late, major complications.

Despite the constant increase in the number of scientific studies approaching the utilization of magnetic resonance imaging as guidance in the collection of prostatic specimens^(5,6), demonstrating the effort to optimize apparatuses and methods, transrectal ultrasonography still remains as the method most frequently utilized for this purpose, with long-standing experience. Studies like this, developed by Solha et al., reinforce the utility and safety of the method, stimulating technical improvements, minimizing furtherly the low incidence of major complications.

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