

TRUS Prostatic Biopsy:

The role of the Urologist step by step

José Pedro Cadilhe, Veiga da Silva

Hospital Distrital de Chaves / Gineco – Porto / Urocad – Póvoa de Varzim, Portugal

Correspondência: José Pedro Cadilhe – E-mail: urocad@sapo.pt

Introduction: taking prostate biopsies has become a well known and well-tolerated urological technique. The use of anaesthesia (periprostatic local injection of lidocaine) effectively reduces patients discomfort. It is obvious that the amount of information expected by the urologist from the pathologist requires proper handling, adequate processing, followed by an accurate evaluation of prostate biopsies. It has also been repeatedly shown that at least 10 to 12 biopsies, predominantly on the lateral aspect of the prostate, are now the state of the art in order to detect a maximum of cancers, and perform additional biopsies of hypo-echogenic suspicious areas or palpable lesions could improve the biopsies.

Methods: we will describe and illustrate step by step how we perform a biopsy concerning the comfort of the patient and providing the pathologist with adequate tissue samples and handle the biopsies in a way that will help him to identify and map cancer in prostate. We performed 491 biopsies using local anaesthesia with periprostatic nerve block injecting 3cc of lidocaine 1% on each side and 1cc at the apex of the prostate. We take 10 to 12 biopsies predominantly on lateral aspect of the

prostate according to Ravery et al and the biopsies are delivered and embedded after flattening the cores between nylon sponges in a cassette. We also provide adequate clinical information to the pathologist, i.e. patient identification, PSA level / reason for biopsy and results of previous biopsies.

Results: almost all patients tolerate biopsy and the anaesthesia allow us to take more cores than the 12 when ever we need without any complaints. The average length of prostatic needle biopsies measured on glass slide > 10mm. We have 4,9% of lesions suspect of malignancy and we have 80% of corresponding histologies between biopsies and radical prostatectomies.

Conclusion: the role of the urologist is to provide adequate clinical information to the pathologist, with adequate tissue samples and handle the biopsies in a way that will help him to identify and map cancer in prostate. Undoubtedly, the primary responsibility for the number of biopsies taken and the quality of the tissue sample rests with clinician and the higher is the number of biopsy cores, greater is the need of anaesthesia.