Clinical performance of transperineal template guided mapping biopsy for therapeutic decision making in low risk prostate cancer.


Abstract

OBJECTIVES: To evaluate the role of Transperineal Template guided Mapping Biopsy (TTMB) in determining the management strategy in patients with low risk prostate cancer (PCa).

METHODS: We retrospectively evaluated 169 patients who underwent TTMB at our institution from February 2008 to June 2011. Ninety eight of them harbored indolent PCa defined as: Prostate Specific Antigen<10ng/ml, Gleason score 6 or less, clinical stage T2a or less, unilateral disease and a maximum of one third positive cores at first biopsy and<50% of the core involved. TTMB results were analyzed for Gleason score upgrading and upstaging as compared to initial TransRectal UltraSound (TRUS) biopsies and its influence on the change in the treatment decisions.

RESULTS: TTMB detected cancer in 64 (65%) patients. The upgrade, upstage and both were noted in 33% (n=21), 12% (n=8) and 7% (n=5) respectively of the detected cancers. The disease characteristics was similar to initial TRUS in 30 (48%) patients and TTMB was negative in 34 (35%) patients. Prostate volume was significantly smaller in patients with upgrade and/or upstage noted at TTMB (45.4 vs 37.9; P=.03). TTMB results influenced 73.5% of upgraded and/or upstaged patients to receive radical treatment while 81% of the patients with unmodified stage and/or grade continued active surveillance or focal therapy.

CONCLUSIONS: In patients with low risk PCa diagnosed by TRUS, subsequent TTMB demonstrated cancer upgrade and/or upstage in about one-third of the patients and resulted in eventual change in treatment decision.

Copyright © 2016. Publicado por Elsevier España, S.L.U.

KEYWORDS: Active surveillance; Biopsia guiada por plantilla; Biopsia prostática; Biopsia transperineal; Cáncer de próstata; Prostate biopsy; Prostate cancer; Template guided biopsy; Transperineal biopsy; Vigilancia activa

PMID: 27527686 DOI: 10.1016/j.acuro.2016.05.002

[PubMed - as supplied by publisher]