

Limitations of elastography based prostate biopsy

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Although many authors mentioned there is not a clear data about comparing elastography in larger vs smaller prostates, the literature is certain that, in the detection of especially anterior tumors MRI and perineal biopsy are superior to standart transrectal guided biopsies as these techniques provide better spectacle of this part of the prostate [1,2]. In our opinion enlarged prostate glands had an effect on the final results (probably decreased the low recorded sensitivity) because of the worse spectacle but no data was given about the prostate volumes in their study. On the other hand, pathologic confirmation was based on biopsy specimens. Emphasising radical prostatectomy specimen (at least for the patients who undergone to surgery after diagnosis) will be more appropriate for the correlation of imaging and pathology. The studies which represents single population from a single center might be a limitation. Lastly, viscosity of organs such as breast, thyroid, prostate etc. has to be clearly measured in order to avoid biases of stiffness as previously demonstrated [3].

In the last few years, research on elasticity imaging has gained importace because the viscoelastic properties of different tissues provided clinically useful information [4]. Beside prostate cancer, it is

widely used in the diagnosis of many different diseases like cancers of breast, liver and thyroid, cirrhosis, venous thrombosis arterial stiffness and plaques etc. in different clinics. Multicenter controlled trials are needed before falling elastography based biopsies into disfavour of prostate cancer detection since positive predictive values of PSA and DRE remains low and innovations like serum PCA3 or MRI targeted biopsies are expensive and time consuming protocols yet.

References

1. Hoeks CM, Hambrock T, Yakar D, Hulsbergen-van de Kaa CA, Feuth T, et al. (2013) Transition zone prostate cancer: detection and localization with 3-T multiparametricMR imaging. *Radiology* 266: 207-217.
2. Pepe P, Dibenedetto G, Pennisi M, Fraggetta F, Colecchia M, et al. (2014) Detection rate of anterior prostate cancer in 226 patients submitted to initial and repeat transperineal biopsy. *Urol Int* 93: 189-192.
3. Amador C, Urban MW, Chen S, Greenleaf JF (2011) Shearwave dispersion ultrasound vibrometry (SDUV) on swine kidney. *IEEE Trans Ultrason Ferroelectr Freq Control* 58: 2608-2619.
4. Castaneda B, Ormachea J, Rodríguez P, Parker KJ (2013) Application of numerical methods to elasticity imaging. *Molecular & Cellular Biomechanics: MCB* 10: 43-65.

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