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Letter to the Editor

Strain elastography and lymph nodes

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I read with interest the currently published article written by Özel *et al.* [1] entitled “Evaluation of diagnostic value of conventional and color Doppler ultrasound with elastography strain ratios in differentiation between benign and malignant lymph nodes”. They found elastography strain (ESR) ratios to be higher in malignant lymph nodes (3.93, mean SD [3.71]) than benign lymph nodes (2.94, mean SD [3.61]). However, the difference was not statistically significant. Real-time elastography has shown potential diagnostic value in many diseases. However, elastography has not been used as a routine examination in the evaluation of lymph nodes. There were many studies about usage of elastography in lymph nodes [2-4]. In these studies, different elastographic methods such as strain elastography or shear wave elastography, as well as different elasticity assessments such as visual scoring or comparing strain ratio values with reference tissue, were used. In this study, Özel *et al.* [1] compared strain ratio values with reference tissue; in this method the strain in

the region of interest (ROI) can be compared to an ROI in the reference tissue that is experiencing similar stress, and this provides a semi-quantitative measurement of the relative rather than absolute tissue stiffness. In this study the distribution of lymph nodes regions were very heterogeneous, such as neck, axillary, and inguinal. As mentioned in the study, the strain ratio values were affected by the adjacent tissues and were highly user-dependent, which is a limitation of this method. In this study, as I understand it, muscles were used as the reference tissue, which may be usable in the neck region. But how we do use muscles as a reference tissue in the axillary region; maybe surrounding fat tissue is usable in the axillary region. However, I think that the regional comparison of lymph node strain ratio values may be better in such cases.

Conflict of interest

The author reports no conflict of interest.

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