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Abstract

Difficulty in differentiate a malignant from benign tumor based on tumor stiffness or elasticity drives the founding of more advanced imaging modality. Elastography is a non-invasive method in which stiffness or strain images of soft tissue are used to detect or classify tumors. Elastography relies on imaging the strains induced in the tissue as a result of a small external mechanical compression. An important field that has emerged as complementary to ultrasonic imaging is that of ultrasound elastography. Ultrasound elastography is very helpful to differentiate cancers from benign lesions in breast, prostate, thyroid, pancreas and lymph nodes, to evaluate local strain of the arterial wall and plaques, and to measure the stiffness of the liver in vivo. It also shows good sensitivity, specificity and accuracy for evaluate malignant tumor for breast, thyroid, pancreas, lymph node and prostate.

Keyword : ultrasound, elastography, tumor, elasticity, ,

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