INTRODUCTION

Elastography is a new non invasive technique that provides images called elastogram of internal strain in soft tissues under a static compression, the strain is related to the stiffness of the tissues, which is in turn related to the pathological state of the tissues, for example, it has been known for long time that breast and prostate cancer are stiffer than normal tissues, and palpation is a standerd medical practice, elastography is able to provide new quantitative information about the stiffness of the tissues that would not be obtainable with existing imaging modalities . Although elastography is still only used in research today , It is expected that this imaging modality may become available for standard practice within a few years [(1)].

Ultrasonic imaging is the most common medical technique for producing elastograms .some research has been conducted using magnetic resonance elastography (MRE). However, using ultrasound has the advantages of being cheaper and faster than MRI techniques. Pre-cmpression images are correlated to post compression images resulting in regions of large and small change in position. This is called the shift diagram .the derivative of the shift will produce the strain diagram [(2)] .

Hardness is displayed in color tone,with increasing hardness presented in ascending order of red,yellow,green and blue . The hardness is scored on a scale of 1 to 5, the Tsukoba elasticity score. This scoring system distinguishes the following scores :

Table (1): Tsukuba Elasticity score

Score	Chriteria
Score 1	even strain for the entire lesion (i.e. the entire lesion was evenly shaded in green
Score 2	strain in most of the lesion with some area of no strain (I,e,the lesion had a mosaic pattern of green and blue) .
Score 3	strain at the periphery of the lesion ,with sparing of the centre of the lesion(i.e.the peripheral part of lesion were green ,and the central part was blue) .
Score 4	no strain in the entire lesion (i,e the entire lesion was blue ,not including its surrounding area) .
Score 5	no strain in the entire lesion or in the surrounding area (i.e. both the entire lesion and its surrounding area were blue).

Elasticity imaging is possible for nearly every tissue .Breast mass elastography has potential for enhancing the specificity of US and mammography for cancer detection .Lesions in the thyroid ,prostate gland,pancrease,and lymph nodes have been successfully imaged using elastography.Evaluation of diffuse disease including cirrhosis and transplant rejection is also possible,Vascular imaging including myocardium,blood vessel wall, plaques and venous thrombi has also shown great potential [(3)].

Elasticity imaging may also be important in assessing the progress of ablation therapy.Recent work in assessing porous material using elastography suggests that the technique may be useful in monitoring the severity of lymphedema [(4)].