The role of ultrasound elastography at differential diagnosis of enlarged cervical lymph nodes

Essay

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دور قياس درجة المرونة بواسطة الموجات فوق الصوتية في التفرقة بين الأسباب المختلفة لتضخم الغدد الليمفاوية في الرقبة

رسالة

توطئة للحصول على درجة الماجستير

في الأشعة التشخيصية

مقدمة من

الطبيبة/ مروة محمد زكي إبراهيم

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Summary and Conclusion

There are many lymph nodes located at the neck which could classified at anatomical basics or more recently at level system .

Lymphadenopathy, which is defined as an abnormality in the size or character of lymph nodes,. is a common finding in the primary care outpatient sitting**,** and the pathologies affect lymph nodes could classified into benign and malignant causes . And most important and annoying for both the patient and the doctor detecting either those enlarge lymph nodes are benign or malignant .

Elasticity (hardness) is a mechanical tissue characteristic that prevents tissue displacement under pressure. It varies in different types of tissue and in the same tissue in different pathologic states (inflammatory, malignant). And its determination will adds at differentiation between benign and malignant lesions .

During the past few years, sonographic elastography and some other techniques have performed digital measurements of tissue hardness.

In sonographic elastography, image representation of tissue hardness can be obtained using a conventional sonography machine with special software and a conventional ultrasound probe.

Two types of elastography are present ,static and dynamic . Static elastography is the one used to examine cervical lymph nodes .

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Abbreviations

AJCC…… American Joint committee on cancer
ATM…… Atypical mycobaterial tuberclosis
CT……. Computerized tomography
FNA……...Fine needle aspiration
LN……..Lymph node
MRI……. … Magnetic Resonance Imaging
NTM…… Non tuberculous Mycobacterium
NCI……... National cancer institute
PDS …….. Power Doppler sonography
PET……... Positron emission tomography
PI…….. Pulsatility index
RI…….. Resistive index
ROI……... Region of interest
SCC…….. Sequamous cell carcinoma
TAF…….. Tumor angiogenetic factor
UE……. Ultrasound elastography
US……..Ultrasonography

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Introduction & Aim of the Work

Anatomy of cervical Lymph nodes

Pathology of Cervical lymph nodes

Technique of sonoelastography