

بسم الله الرحمن الرحيم





شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



جامعة عين شمس

التوثيق الإلكتروني والميكرو فيلم

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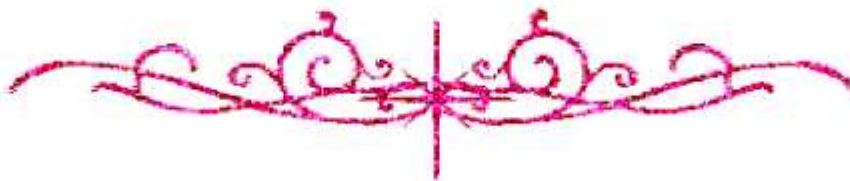


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The Accuracy of Ultrasound Shear Wave Elastography in the Diagnosis of Adenomyosis

Thesis

Submitted for the partial fulfillment of MD Degree
In *Obstetrics and Gynecology*

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2021

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

لسبحانك لا علم لنا
إلا ما علمتنا إنك أنت
العليم العظيم

صدق الله العظيم

سورة البقرة الآية: ٢٢

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Amr Mohamed Abdel Hady Sayed

ABSTRACT

The accuracy of Ultrasound shear wave elastography in the diagnosis of Adenomyosis

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Aim: this study aims to assess the accuracy of shear wave elastography in the diagnosis of uterine adenomyosis compared to that of MRI.

Methodology: 50 patients planned for hysterectomy due to some gynaecological indications completed this study. Preoperative diagnosis of uterine adenomyosis was done by TVS, SWE and MRI . The diagnostic accuracy of each of these methods was done versus histopathological examination as the gold standard test.

Results: twenty seven patients (54%) had histopathological diagnosis of uterine adenomyosis. The clinical manifestations that may be related to uterine adenomyosis were AUB (43%) and chronic pelvic pain (44%). The specificities of TVS, SWE and MRI are comparable, while, the sensitivity of TVS is non-significantly less than those of either SWE or MRI . The sensitivity of SWE and MRI were comparable.

Conclusion: Prevalence of adenomyosis in premenopausal patients who underwent hysterectomy is 54%. SWE and MRI have comparable specificities and sensitivities in the diagnosis of uterine adenomyosis. TVS has specificity in line with those of SWE or MRI , but with sensitivity non- significantly less than each of them.

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List of Abbreviations

Abb.	Full term
<i>AIs:</i>	<i>Aromatase inhibitors.</i>
<i>ARFI:</i>	<i>Acoustic radiation force imaging.</i>
<i>ART:</i>	<i>Assisted reproductive technique.</i>
<i>COCs:</i>	<i>Combined oral contraceptives.</i>
<i>COX-2:</i>	<i>Cyclooxygenase – 2.</i>
<i>CT:</i>	<i>Computerized tomography.</i>
<i>DIE:</i>	<i>Deep infiltrating endometriosis.</i>
<i>DNG:</i>	<i>Dienogest.</i>
<i>EMI:</i>	<i>Endometrial myometrial interface.</i>
<i>EMID:</i>	<i>Endometrial myometrial interface disruption.</i>
<i>EMT:</i>	<i>Epithelial – to – mesenchymal transition.</i>
<i>GnRHa:</i>	<i>Gonadotrophic releasing hormone agonist.</i>
<i>HDI:</i>	<i>Histone deacetylase inhibitor.</i>
<i>HRT:</i>	<i>Hormone replacement therapy.</i>
<i>ICSI:</i>	<i>Intracytoplasmic sperm injection.</i>
<i>IGF-2:</i>	<i>Insulin growth factor 2.</i>
<i>IGF-BP3:</i>	<i>Insulin growth factor binding protein 3.</i>
<i>IVF:</i>	<i>Invitro fertilization.</i>
<i>IVF-ET:</i>	<i>Invitro fertilization and embryo transfer.</i>
<i>LNG-IUD:</i>	<i>Levonorgestrel intrauterine device.</i>
<i>LNG-IUS:</i>	<i>Levonorgestrel intrauterine system.</i>
<i>LPF:</i>	<i>Low power field.</i>
<i>MMPs:</i>	<i>Matrix metaloproteinases.</i>
<i>MRgFUS:</i>	<i>Magnetic resonance guided focused ultrasound.</i>
<i>MRI:</i>	<i>Magnetic resonance imaging.</i>
<i>NETA:</i>	<i>Norethinodrone acetate.</i>
<i>NLR:</i>	<i>Negative likelihood ratio.</i>
<i>NPV:</i>	<i>Negative predictive value.</i>
<i>PLR:</i>	<i>Positive likelihood ratio.</i>

List of Abbreviations (Cont...)

Abb.	Full term
<i>PPV:</i>	<i>Positive predictive value.</i>
<i>PROM:</i>	<i>Premature rupture of membrane.</i>
<i>re TIAR:</i>	<i>Repeated tissue injury and repair.</i>
<i>SE:</i>	<i>Strain elastosonography.</i>
<i>SGA:</i>	<i>Small for gestational age.</i>
<i>SPRMs:</i>	<i>Selective progesterone receptors modulators.</i>
<i>SR:</i>	<i>Strain ratio.</i>
<i>SWE:</i>	<i>Shear wave elastography.</i>
<i>T1-WI:</i>	<i>T1 weighted imaging.</i>
<i>T2-WI:</i>	<i>T2 weighted imaging.</i>
<i>TAS:</i>	<i>Trans abdominal sonography.</i>
<i>TAUS:</i>	<i>Trans abdominal ultrasound.</i>
<i>TE:</i>	<i>Transmission electron.</i>
<i>TIAR:</i>	<i>Tissue injury and repair.</i>
<i>TXA2:</i>	<i>Thromboxane A2</i>
<i>UAE:</i>	<i>Uterine artery embolization.</i>
<i>VCI:</i>	<i>Volume contrast imaging.</i>
<i>VPA:</i>	<i>Valproic acid.</i>