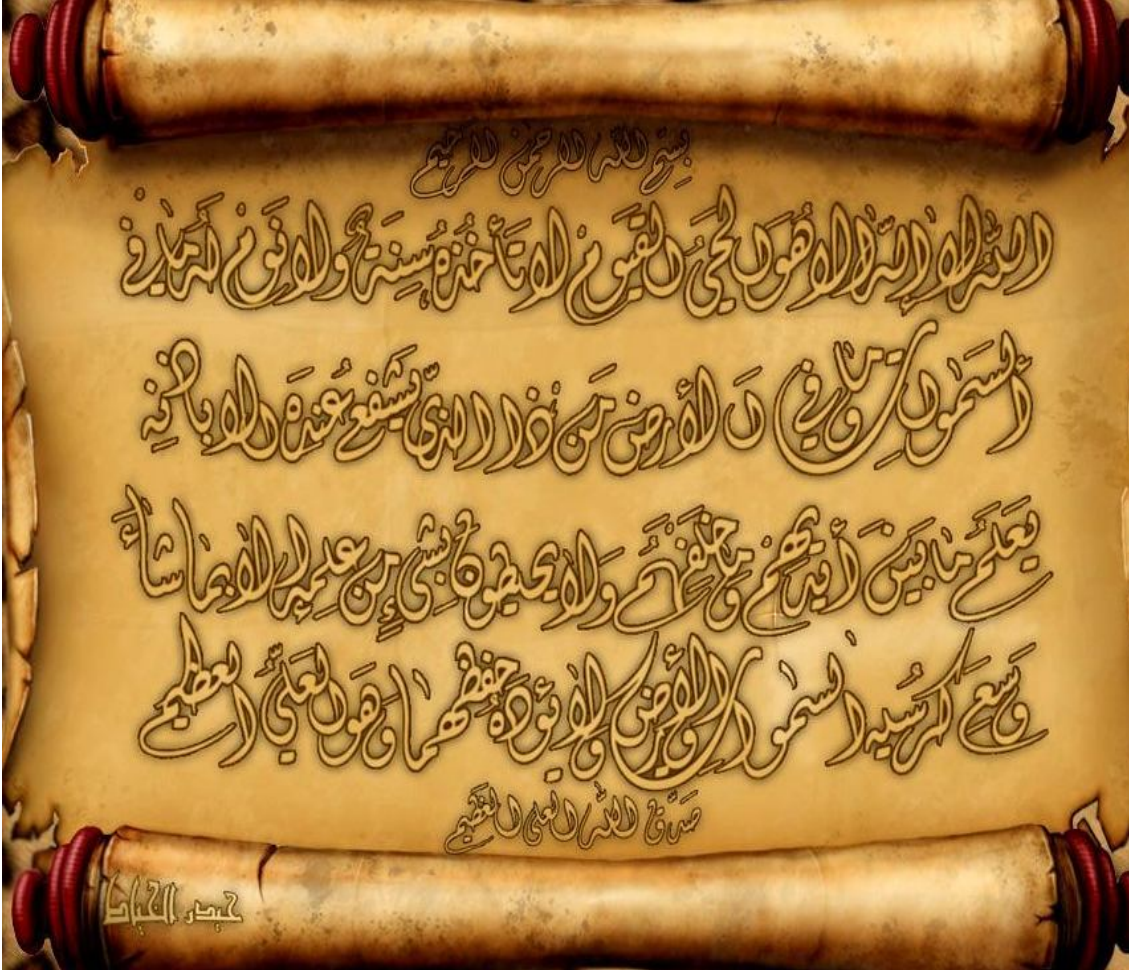


الآية



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List of abbreviation

ADC.....	Apparent diffusion coefficient
CT.....	computed tomography
DHEA.....	dehydroepiandrosterone
ED.....	emergency department
GE.....	general electric
HCG	human chorionic gonadotropine
HSG.....	histro salpingiogram
IR.....	Interventional radiology
LH.....	luteinize hormone
MRI.....	Magnetic resonance imaging
PET.....	positron emission tomography
PVA.....	Poly vinyl alcohol
RCFA.....	right common femoral artery
SPECT.....	single photon emission computed tomography
TSH.....	Thyroid stimulating hormone
UAE.....	United Arab Emirates/uterine artery embolization
UFE.....	uterine fibroid embolization

Dedication

First and foremost I dedicate this work to my parents, brothers and sisters for their endless love, support and encouragement throughout my live. Thanks all for giving the strength to reach for the star and chase the dream.

To my husband, thank you for understanding and encouragement in my many, many moments of crisis. The given friendship makes my life a wonderful experience.

This thesis is dedicated also to beautiful and precious children, Mohamed, Ludan and Khalid. Thanks for their love, support, patience, and numerous sacrifices throughout my academic career. This thesis and the pursuit of my goals would not have been possible without them.

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This thesis is only a beginning of my journey.

Abstract

Uterine fibroid embolization, a minimally invasive interventional radiology treatment for uterine fibroids, is a safe and effective option for women to consider. Interventional radiologists use MRIs to determine if fibroids can be embolized.

This research aimed to detect and evaluate the uterine fibroid size, location pre and post uterine artery embolization procedure using MRI (Magnetic resonance imaging) in addition to be modality of choice to follow up the patient on regular interval and evaluate the outcome of the interventional procedure of the fibroid.

This study performed in the clinical imaging institute of Al Ain hospital –UAE on a sample of (100 consecutive female patient with fibroid undergo the Uterine Artery Embolization) with different age groups between 30-60 years old ,the measurements of the fibroid pre and post embolization MRI scan is used. MRI (GE 1.5tesla Discovery S360) machine is used to scan the patients in this study and the Siemens Zee Artis C-arm machine was used for fluoroscopy during the embolization procedure.

The data of this study was collected from the radiology reports which documented by the radiologist in radiology information system. The study shows 67.35%(66patients)are totally resolved ,and significant improvement shows in 23.5%(23patients),some improvement in 5%(5patients)While 4%(4 patients)failed to show up in their clinic.

It was conclude that MRI is playing significant role for characterization uterine fibroids and identifying their exact anatomical location. MRI supporting the efficiency of uterine fibroid embolization process proven by this study when shows significant reduction of fibroids, MRI evaluate the response of fibroid to UFE with age correlation as the study shows that fibroid is obvious shrink with menopause.

الملخص

تعتبر قسطرة الاورام الليفية باستخدام الأشعة التداخلية قليلة الخطورة من الخيارات الآمنة والفعالة في علاج أورام الرحم الليفية.

يقوم إختصاصي الأشعة التداخلية باستخدام التصوير بالرنين المغناطيسي لتحديد إمكانية إنصمام الورم الليفي. هذا البحث يهدف لكشف وتقييم حجم الليف الرحمي وموقعه قبل وبعد عملية الإنصمام الليفي باستخدام التصوير بالرنين المغناطيسي بالإضافة إلى كونه الطريقة المفضلة لمتابعة المريضة على فترات دورية لتقييم نتائج العملية التداخلية للورم الليفي ومدى فعاليتها .

أجريت هذه الدراسة في معهد التصوير السريري بمستشفى العين في دولة الإمارات العربية المتحدة على مائة (100) عينة من النساء اللاتي سيخضعن لعملية قسطرة الشريان الرحمي مع وتراوح أعمارهن بين 30-60 سنة وتشمل الدراسة إجراء قياسات للورم الليفي قبل وبعد عملية القسطرة باستخدام التصوير بالرنين المغناطيسي.

(GE discovery s360 1.5tesla)

كان هو جهاز الرنين المغناطيسي الذي أستخدم لفحص المرضى موضع الدراسة وأستخدم جهاز سيمنز في التصوير الفلوري خلال عملية الإنصمام .

البيانات الخاصة بالعينات موضوع الدراسة تم جمعها من التقارير الإشعاعية والتي تم تسجيلها إلكترونياً من قبل إختصاصي الأشعة في نظام الأشعة المعلوماتية.

أظهرت الدراسة أن 67.3% (66مريضة) تم علاجهن بصورة كاملة و23.5% (23مريضة) عولجن بصورة ملاحظة و5% (5مريضات) تم علاجهن بصورة جزئية بينما 4% (4مريضات) لم يحضرن إلى عيادتهن.

وتخلص الدراسة إلى أن التصوير بالرنين المغناطيسي يلعب دوراً فعالاً في وصف أورام الرحم الليفية والتعرف على موقعها التشريحي بالتحديد. كما أنه يقيم إستجابة الليف الرحمي لعملية الإنصمام الليفي وعلاقته بعمر المريضة وهو ما أظهرته الدراسة من ضموه واضح في الليف الرحمي في سن اليأس.