

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

(إِنَّمَا يَخْشَى اللَّهَ مِنْ عِبَادِهِ
الْعُلَمَاءُ إِنَّ اللَّهَ
عَزِيزٌ غَفُورٌ)

صدق الله العظيم،،،

فاطر ٢٨

Dedication

This work is dedicated to my mother, who has been my constant source of inspiration and she passed on me a love of reading and respect for education. and to my father, who given me the drive and discipline to take any task with enthusiasm and determination.

To my sisters and brothers for their love and support

To My friends, whom Without their support and encouraging this project would not have been made possible

To everyone whom

Gave me a bit of

Wise advice

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Abbreviations:

ACL Anterior crucaite ligament

PCL posterior crucaite ligament

LCL Lateral collateral ligament

MCL Medial collateral ligament

SST Supra-spinatius Tendon

AGL Anterior Glenoid labrum

PGL posterior Glenoid labrum

Abstract

This study assessed the role of magnetic resonance imaging in evaluation of ligament injuries of shoulders and knees , with apply of best protocol and technique used to assess ligament injuries and to classify the most common ligament injuries .

It was conducted at radiology department in MRI unit of Modern Medical Center_ Khartoum. In the period from October 2011 up to January 2012.

It included Random samples of 50 patients, which divided in two groups group one consist 30 patients referred for shoulder MRI their age ranged from 16-74 years And group two consist 20 patients referred for knee MRI their age ranged from 6-77 years with injuries in ligaments .

The most affected age group in group one ranged from 21-40 years old represent 46.6%, With high percentage in male than female(53.3%/ 46.7%) respectively .

The most affected site supraspinatus tendon represented 63.6%.

The most affected age group two ranged from 46-65 years old represent 35 % With high percentage in male than female(60%/e 40%) respectively.and most affected site Medial meniscus cartilage represented 54.5%.

These result was established by account the number of MRI apperance and findings.

It can be said that the magnetic resonance imaging is the best modalitiy choice

In diagnosis of ligaments injuries for it is high ability in detect the change in signal intensity.

ملخص البحث

فى هذه الدراسة تم تقويم اصابات اربطة حزام الكتف ومفصل الركبة بواسطة الرنين المغنطيسي واستخدام البرتوكول والطريقة المناسبة لهم مع تصنيف اكثر انواع الاصابات حدوثا.

أجريت هذه الدراسة بقسم الأشعة وحدة الرنين المغنطيسي بالمركز الطبي الحديث_ الخرطوم فى الفتره من اكتوبر ٢٠١١ الى يناير ٢٠١٢.

أخذت عينه عشوائيه تتكون من ٥٠ مريض قسمت الى مجموعتين الاولى تتكون من المرضى الذين اجرؤا تصوير للمفصل الكتف وهم ٣٠ مريض تتراوح اعمارهم بين ١٦ الى ٧٤ سنه حيث اوضحت الدراسة ان اكثر الاعمار عرضة للمرض بين ٢١ الى ٤٠ سنة وان الرجال اكثر عرضة من النساء بنسبة مئوية (٣,٥٣%-٦,٤٦%) بالتتالي كذلك ابانت ان اكثر الاربطة اصابة في حزام الكتف هو الوتر للعضلة الفوق شوكية بنسبة قدرها ٦٣,٦%.

أما المجموعة الثانية تتكون من عشرين مريض تتراوح اعمارهم من ٦ الى ٧٧ سنة حيث اوضحت الدراسة ايضا ان اكثر الاعمار اصابة بين ٤٦ الى ٦٥ سنة وان الرجال هم اكثر اصابة من النساء بنسبة متتالية (٦٠%-٤٠%) وان اكثر الاصابات حدوثا في منطقة غضروفة الركبة القطنية.

وتم الحصول على هذه النتائج من خلال حساب عدد الظواهر التى قامت وحدة الرنين المغنطيسي بايضاحها واعداد تقارير طبية لها.

ومن هنا يمكن القول ان الرنين المغنطيسي يعتبر افضل تقنية تصوير للأربطة لقدرته العالية فى اكتشاف التغيرات فى شدة الاشارة المغنطيسية .

