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## الآية

**قال تعالى:**

{ لَا يُكَلِّفُ اللَّهُ نَفْسًا إِلَّا وُسْعَهَا لَهَا مَا كَسَبَتْ وَعَلَيْهَا مَا  
اَكْتَسَبَتْ رَبَّنَا لَا تُؤَاخِذْنَا إِنْ نَسِينَا أَوْ أَخْطَأْنَا رَبَّنَا وَلَا تَحْمِلْ عَلَيْنَا  
إِصْرًا كَمَا حَمَلْتَهُ عَلَى الَّذِينَ مِنْ قَبْلِنَا رَبَّنَا وَلَا تُحَمِّلْنَا مَا لَا طَاقَةَ  
لَنَا بِهِ وَاعْفُ عَنَّا وَاعْفِرْ لَنَا وَارْحَمْنَا أَنْتَ مَوْلَانَا فَانصُرْنَا عَلَى  
الْقَوْمِ الْكَافِرِينَ }

**صدق الله العظيم**

**سورة البقرة، الآية ( 258-286 )**

To anyone who has helped me in completing research  
modest to my mother God rest her soul rest in peace and  
.insert dear ,to my father , may God prolong his age  
Dear aunt Lila to any of the following serious Alnziro and  
his family to my brother & sisters Marwa and Ofra her  
family God Adamkm health and wellness accept me  
.dedicative

Firstly ,thank god , for help me to continue and providing  
. me insight to complete it my reaches

Secondly gratefully to all these supervisor assistant  
professor CAROLINEDOWERD and family &college, who  
continue to encourage me and support me , all these  
. would never have been possible without hem

Finally I could not even think of completing anything ,  
without the full support of the supervisor and college in  
military hospital and modern medical center &royal care  
. international

## **Abbreviations**

.MRI: magnetic resonance imaging

X-Ray: x-radiation is form of electromagnetic radiation ,  
this production and uses of the radiation in medical  
.imaging

T1 weighted image: image that demonstrates the deferens  
.in t1 time of the tissue

T2 weighted image : image that demonstrate the deferens  
.in the t2 time of tissue

.PCL: posterior cruciate ligament

.ACL: anterior cruciate ligament

Lat: (lateral) structure that lies farther away from the  
.median plane

Med: (median) structure situated near to the median  
.plane of the body

.ICL: lateral collateral ligament of knee joint

.MCL: medial collateral ligament of knee joint

.TI: patellar length ration

.PI: patellar tendon length

.BMI: body mass index

GRE: gradient echo, echo produce as a result of gradient  
.to re generate

.T2\*: dephasing due to magnetic field inhomogeneities

.FSE: fast Spin echo

.SE: Spin echo

Sat: time between each pre - saturation pulse

.Ap: anterior posterior

.KV: kilo voltage

.MA: milli ampere

.3D :three dimensional of reconstructed image

MPR: multi planer reformation image

FOV: field of view

## **Abstract English**

This study provides the characterized of patellae ligament and measured on sagital magnetic rezones image of 57 patentions , 45 males , 15 females whose mean age was 37.89, the gender difference and the relationshie with . anthropometry were also given

As for the mean of normal patella ligament longitudinal length 52.03mm,and the upper patellar thicknes is 3.25mm, middle patellar thicknes is 3.67mm, and mean of lower patellar thicknes is 4.78mm, compare with mean of abnormal patellar ligament measurement , mean of patellar length is 46.58mm,and mean of uppear patellar thickenes is 2,87mm, middle patellar thicknes 3.35mm ,and mean of lower patellar thicknes is 4.87mm,theare are not significant different p-vaule at patellar thicknes , expeact on patellar length theare are significant different .at p-vaule 0.00

The chartrized of normal patellar ligament length was larger than on abnormal patellar ligament length.anthropometry includeing weigth,height ,body mass index corssponds well with the thicknes of patellar and

poorly the length of patellar , thes data can provide  
.useful oinformaiton in the diagnosis tear if well happened

#### ملخص البحث

ملخص لهذا البحث , تمت هذه الدراسة لمعرفة خصائص رباط الركبة الطبيعي , واستخدام هذه المعلومة يحسن من تشخيص تمزقات الأربطة , هذه الدراسة تمت في المركز الطبي الحديث و مستشفى وريال كير , في الفترة من (2014-2015) تتضمن 57 مريض تم عمل فحص رنين مغناطيسي لهم , الأجهزة التي تم استخدامها (GE (general electrical قوته 1.3 تسلا وتوشيبا قوته 1.3 تسلا , ومن خلال المعلومات التي تم جمعها تم قياس طول رباط الركبة والعرض في ثلاث مستويات ( العلوي -السفلي -الأوسط) , تم اتخاذها نسبة لأهمية كل من المتغيرات وبالرجوع إلي التركيب التشريحي الطولي لرباط الركبة وتوصيله مع العظام , لذلك تم قياس عرضه. الطريقة التي تم استخدامها للقياس إلا وهي من أسفل الرضفة (knee cap)

إلي التعجر الظنبوي (|tibia tuberaisty) , بالاتفاق مع D. jae hyoo الذي كتب عن التشكيل الهندسي للركبة , خلاصة لهذا الدراسة لا يوجد فرق لمعرفة طول رباط الركبة لاستخدامه في تشخيص تمزقات الأربطة ما عدا العرض (العلوي والسفلي) و طول المريض , واستخدام هذه المعلومة للتشخيص في حالة تمزق لرباط الركبة.

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