جامعة حلب
كلية الطب
قسم الأشعة

# دراسة آفات الركبة الرضية بالرنين المغناطيسي

رسالة قدمت لنيل شهادة الدراسات العليا في الأشعة

**إعداد**

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# *Summary*

- The meniscus Tears are a common Lesions in the Knee. Which prevent the Person to does his Jobs.
- The Magnetic Resonance Imaging is a favorable Tool in Diagnosing of Meniscus and Ligaments Tears after Trauma on the Knee. And it is choice and Specific Method for Diagnosis.
- The study includes (٩٤) Patients, who referred to the Magnetic Resonance Unite in Radiology Department of Aleppo University and Alkindy Hospital After Trauma on the Knee And especially they have a suspected Meniscus and Ligaments Tears. and they underwent MRI., (٨٤) them had Injury and they underwent arthroscopy or surgical treatment for (٤٠) formed the group of study .
-  The Peak incidence was in (٢٠ -٣٠) age group and little than in (٣٠-٤٠) age group, and the average incidence in this two group was about (٦١،٩٪), which, referred to Occupational and Traumatic Factor in Young group of Society.
- Meniscus tear happened in the Male (٦٣،١٪) more than the Female (٣٦،٩٪). which, was clearly variation.
- The Medial Meniscus Tear happened alone (٦٩،١٪) more than The Lateral Meniscus Tear alone  (١٣،١٪), and Both Meniscus Tears together was (١٧،٨٪) , so the The Medial Meniscus Tear happened (٨٦،٩٪)  .
- The Injury of Posterior horn of Medial Meniscus was (٩١،٩٪) more than its Anterior Horn always with Injury of Posterior horn (٨،١٪), And also in Lateral Meniscus.
- The Injury of major ligaments, especially. A.C.L. was (٩٢٪). and The Injury of P.C.L. was (٤٪). and The Injury of two Ligaments (ACL&PCL) was (٤٪), and we did not record any Injury of M.C.L & L.C.L our study alone it happened two injury of M.C.L with injury of A.C.L and Medial Meniscus and one injury of L.C.L with injury of A.C.L.

- The Meniscus Tears, especially, Medial Meniscus Tear commonly happened With ligaments Tears. especially. A.C.L. was (٨٧،٥%) .And P.C.L tears Was (٤٪)
- Plain X-Ray did not diagnose the Meniscus Tears, but it discovered the bony injuries.
- Accuracy of M.R.l in diagnosis of Medial Meniscus Tear was (٩٠٪), and Sensitivity was (٩٤٪), and Specificity was (٦٦،٧٪), and P.P.V. was (٩٤،١٪), and N.P.V. was (٦٦،٧٪).
- Accuracy of M.R.I in diagnosis of Lateral Meniscus Tear was (٩٠٪). and Sensitivity was (٧٥٪), and Specificity was (٩٣،٨٪), and P.P.V. was (٧٥٪), and N.P.V. was (٩٣،٨٪).
- Accuracy of M.R.I in diagnosis of Anterior Cruciate Ligament Tear was (٨٥٪), and Sensitivity was (٧٥٪), and Specificity was (٨٧،٥٪), and P.P.V. was (٦٠٪), and N.P.V. was (٩٣،٣٪).
- Accuracy, Sensitivity, Specificity, P.P.V and N.P.V. of M.R.I in diagnosis of Posterior Cruciate Ligament Tear were (١٠٠٪) because recorded one case in our study, because it needs to great force to injury.