

**“CORRELATION OF CLINICAL, ARTHROSCOPIC AND
RADIOLOGICAL FINDINGS OF MENISCAL AND ANTERIOR
CRUCIATE LIGAMENT INJURIES OF KNEE”**



**By
Dr. SHIVAPRASANNA G. VASTRAD**

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Dr. SANTOSH JEEVANAVAR

**DEPARTMENT OF ORTHOPAEDICS
SDM COLLEGE OF MEDICAL SCIENCES AND HOSPITAL,
DHARWAD -580 009**

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ABSTRACT

Background: Soft tissue injuries of the knee including meniscal and ligament injuries are commonly seen by orthopaedic surgeons. In the past diagnosis of these injuries was based on accurate clinical examination alone as plain radiographs were unable to detect these soft tissue injuries. Clinical examination alone produced false diagnosis rates between 40-85%.

Aim: Correlation of clinical, arthroscopic and radiological findings of meniscal and anterior cruciate ligament injuries of knee.

Methods: After obtaining clearance from the Institutional Ethics Committee, a Prospective study was conducted for a period of one year and all patients admitted to SDM hospital that are scheduled to undergo arthroscopic surgery of the knee for either meniscal or ACL injury based on clinical and Magnetic Resonance Imaging (MRI) findings were included in the study.

Results: 56 patients were studied comparing clinical examination, MRI with arthroscopy and were analyzed. Clinical examination showed sensitivity, specificity, Positive Predictive value (PPV), Negative Predictive value (NPV), accuracy of 72%, 42%, 50%,

65%, 55% respectively for medial meniscus tear, 80%, 100%, 100%, 95.83%, 95% respectively for lateral meniscus tear and 73.3%, 90.2%, 73.3%, 90.2%, 86% respectively for Anterior Cruciate Ligament (ACL) tear. MRI findings showed sensitivity, specificity PPV, NPV, accuracy of 92%, 77.1%, 76.7%, 92.3%, 83% respectively for medial meniscus, 90%, 100%,

100%, 97.9%, 98% respectively for lateral meniscus tear, 80%, 92.7%, 80%, 92.68%, and 89% respectively for ACL tear.

Interpretation and Conclusion: Clinical tests to detect ACL and lateral meniscus injuries have a high degree of correlation when compared to arthroscopy and MRI. Clinical tests to detect medial meniscus injuries have a lower degree of correlation compared to MRI and arthroscopy.

Key words: Knee, Correlation, Clinical, Radiological, Arthroscopy.