

Bucket Handle Tear of Lateral Meniscus on MRI - A Case Report

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ABSTRACT

Bucket handle tear commonly involved the medial meniscus but lateral meniscus are also involved though less commonly. The characteristic imaging appearance on MRI are important to diagnose the condition.

KEYWORDS

Meniscus; Bucket handle tear

1. INTRODUCTION

Bucket handle tear which can be longitudinal, oblique or vertical tear in attached fragment which is displaced from its place. It is important to diagnose the condition and provide important information to the therapeutics by arthroscopic repair if required. MRI plays important role in the diagnoses of the condition with characteristic appearance leading to the diagnosis.

2. CASE REPORT

We present a case of a 22-year-old male presented with injury to right knee in a road traffic accident MRI images shows double posterior horn of lateral meniscus and absent anterior horn in showing bulky posterior horn of lateral meniscus and double ACL sign. Diagnosis is Bucket handle tear of lateral meniscus (Figure 1 - Figure 6).

3. DISCUSSION

Bucket handle tear is a longitudinal, oblique or vertical tear in attached fragment which is displaced. Patient usually present with history of trauma sustained while playing or road traffic accident [1]. There is painful swelling in the knee and locking sensation. Bucket handle tears are the vertically displaced longitudinal tears and the displaced inner fragment resembles the handle of a bucket leading to its name the bucket handle tear as the larger peripheral portion of the meniscus resembles a bucket [2].

Key imaging diagnostic clues:

- 1) Double ACL sign.
- 2) Absent Bow-tie sign.
- 3) Double anterior or posterior horn.

It is rare to find bucket handle tear lateral menisci injury as it is more common in its medial counterpart thus this case holds importance.

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Figure 1: A 22-years old male presented with injury to right knee in a road traffic accident MRI images shows double posterior horn of lateral meniscus and absent anterior horn in coronal (A: PD; B: STIR; C: PD FATSAT; D: STIR) sagittal images (E: PD; F: T2W) shows bulky posterior horn of lateral meniscus and double ACL sign. Diagnosis is Bucket handle tear of lateral meniscus.

4. CONCLUSION

Bucket handle tear are displaced longitudinal tear affecting commonly the medial meniscus but to lesser

extent lateral meniscus may be involved. This condition is diagnosed by MRI which is sensitive, non-invasive technique for diagnosis and plays important role in patient management.

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