

# [Patient case study of knee injury](https://assignbuster.com/patient-case-study-of-knee-injury/)

Short case description: 25 years old, female injured her right knee during basketball game. She left playing, required little assistance to get her car. PCP evaluated her, gave her non-steroidal anti-inflammatory with P. T referral.

Brief summary of patient history: injury occurred when she planted her right leg and rotated to the right to evade a defender. She denied hearing a pop, she reported immediate pain was 8 out of 10 on a visual analog scale. Her current pain level is 5 out of 10. Patient came 2 days after injury, with knee swelling and locking. . Patient pain and mechanism of injury are consistent with a meniscus injury.

Examination:

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| Key Examination elements | ICF category assessing | Finding |
| Pain | Body structure function | 5/10 with non-steroidal medication |
| Effusion | Body structure function | Present (first grade) |
| Active knee flexion | Body structure function | 10-110 |
| Active knee extension | Body structure function | 0-10 |
| Passive knee flexion | Body structure function | 10-120 |
| Passive knee extension | Body structure function | 0-5 |
| Manual Muscle test for knee flexion | Body structure function | 4/5 |
| Manual Muscle test for knee extension | Body structure function | 3+/5 |
| McMurray’s test | Health condition | Positive with palpable click |
| Joint line tenderness test | Body structure function | Positive with reproduction of pain on medial tibiofemoral joint |
| Apley’s compression test | Health condition | Positive with reproduction of pain consistent with medial meniscal injury |
| Ambulation | Activity limitation | Assistive tool (single cane)  Limping, antalgic gait |
| squatting | Activity limitation | Quite a bit difficult |
| Walking a mile | Activity limitation | Extreme difficulty |
| Going up or down  10 stairs | Activity limitation | Quite a bit difficulty |
| Standing one hour | Activity limitation | Extreme difficulty |
| Running over even ground | Activity limitation | Extreme difficulty |
| Ability to kook at home kitchen | participation-involvement | Quite a bit difficulty |
| Ability to attend social meetings | participation-involvement | Quite a bit difficulty |
| Usual sports activity | participation-involvement | Extreme difficulty |

Assessment/evaluation: 25 Y/O female had right medial meniscus sprain with positive special Tests, pain, effusion, weakness, limited knee range of movement of flexion and extension and limited activities of daily living with inability to participate in usual sports activities.

Interventions: physical therapy treatment include:

1. Modalities to reduce pain (whirlpool, electric stimulation, and cryotherapy).
2. Modalities to reduce knee effusion (whirlpool, taping, pulsed ultra sound, and static quadriceps drill exercise).
3. Intervention to restore range of motion deficits: therapeutic exercise progression, joint mobilization/ manual therapy.
4. Therapeutic exercise to restore muscular strength and aerobic fitness.
5. Functional strengthening exercise to return to previous level of function and participate in usual sports routine.
6. Outcomes: After 7 weeks of rehabilitation patient get improved with following outcomes:

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| Outcome | ICF category | Changes at D/C |
| Pain | Body structure function | 2/10 with strenuous activity |
| Effusion | Body structure function | Absent |
| Active knee flexion | Body structure function | 0-140 |
| Active knee extension | Body structure function | 0 |
| Passive knee flexion | Body structure function | 0-140 |
| Passive knee extension | Body structure function | 0 |
| Manual Muscle test for knee extension/ flexion | Body structure function | 5/5 |
| McMurray’s test | Health condition , disease, injury | negative |
| Joint line tenderness test | Body structure function | negative |
| Apley’s compression test | Health condition , disease, injury | negative |
| Ambulation | Activity limitation | Normal gait without cane |
| squatting | Activity limitation | No difficulty |
| Walking a mile | Activity limitation | No difficulty |
| Going up or down  10 stairs | Activity limitation | No difficulty |
| Standing one hour | Activity limitation | No difficulty |
| Running over even ground | Activity limitation | No difficulty |
| Usual sports activity | participation-involvement | No difficulty |
| Ability to attend social meetings | participation-involvement | Participating with no difficulty |
| Ability to kook at home kitchen | participation-involvement | Participating with no difficulty |
| LEFS SCALE | activity | Changes at D/C 20 points improvement to be 76/80 |

After 7 weeks of successful rehabilitation, patient was able to participate in routine sports activities and her daily living with no need to more medical or physical therapy assistance.