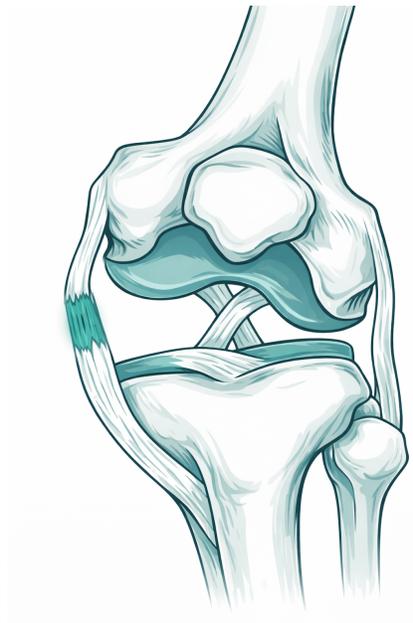




# MCL Rehabilitation Guide

Sports-focused, criteria-based pathways (Grade 1–3)



## Important

- This guide is designed for isolated MCL sprains.
- If there is locking/catching, major swelling, or instability (giving way), consider medical review and MRI.
- Progress is criteria-based: pain, swelling response, and movement quality drive the timeline.



## Medial Collateral Ligament (MCL)

The MCL is the primary restraint to valgus stress (knee collapsing inward) and contributes to rotational stability. Injuries often occur with contact to the outside of the knee, awkward landings, cutting, or twisting.



### Weightbearing

Weightbearing is usually encouraged as tolerated for isolated MCL sprains, guided by pain, swelling response, and quality of gait (limp = too much).



### Green / Yellow / Red rules

#### Green (OK to progress)

- Pain during rehab  $\leq 3/10$  and settles within 24 hours
- No increase in swelling the next day
- Walking is normal (no limp)

#### Yellow (hold/reduce)

- Pain 4–5/10 or lingering tenderness
- Mild swelling increase the next day
- Stiffness that takes >24 hours to settle

#### Red (stop & reassess)

- Locking/catching, instability (giving way)
- Significant swelling increase
- Pain > 6/10 or worsening day-to-day



# Grade 1 MCL Sprain (Mild)

Typical return-to-sport window: 1–3 weeks (sport dependent)

### Notes

- Avoid early cutting/pivoting and deep valgus positions.
- Progress based on symptoms and movement quality.

Phase	Goals	Key Exercises	Progress when
<b>Phase 1</b> Days 0–7	<ul style="list-style-type: none"> <li>• Settle medial knee pain</li> <li>• Restore extension + flexion</li> <li>• Normal walking (no limp)</li> <li>• Early quad + hip activation</li> </ul>	<ul style="list-style-type: none"> <li>• Heel slides / bike</li> <li>• Quad sets + SLR</li> <li>• Mini squat (0–45°)</li> <li>• Single-leg balance (supported → unsupported)</li> </ul>	<ul style="list-style-type: none"> <li>• Walking normal</li> <li>• ROM near full (esp. extension)</li> <li>• No swelling increase after exercise</li> </ul>
<b>Phase 2</b> Days 7–14	<ul style="list-style-type: none"> <li>• Build strength capacity</li> <li>• Reintroduce impact</li> <li>• Return-to-run entry</li> </ul>	<ul style="list-style-type: none"> <li>• Split squat</li> <li>• Step-ups/downs</li> <li>• Leg press</li> <li>• RDL + hip thrust</li> <li>• Hamstring sliders/curls</li> </ul>	<ul style="list-style-type: none"> <li>• No limp/swelling</li> <li>• Step-down control</li> <li>• Pogo hops in place pain-free</li> </ul>
<b>Phase 3</b> Weeks 2–4	<ul style="list-style-type: none"> <li>• Deceleration + COD</li> <li>• Planned → reactive drills</li> <li>• Sport integration</li> </ul>	<ul style="list-style-type: none"> <li>• Rounded → sharper cuts</li> <li>• Reactive cues late-stage</li> <li>• Build sprint to full speed</li> </ul>	<ul style="list-style-type: none"> <li>• No pain/swelling with increases</li> <li>• Strength + function &gt;90%</li> <li>• Full-speed run + COD tolerated</li> </ul>



## Grade 2 MCL Sprain (Moderate / Partial Tear)

Typical return-to-sport window: 3–8 weeks (sport dependent)

### Notes

- Hinged bracing may be useful early for some athletes. [See bracing protocol below]
- Return-to-run and Change of direction (COD) must be criteria-based (not just time-based).

Phase	Goals	Key Exercises	Progress when
<b>Phase 1</b>			
<b>Weeks 0–2</b>			
	<ul style="list-style-type: none"> <li>• Control pain/swelling</li> <li>• Restore ROM</li> <li>• Normalize gait</li> <li>• Rebuild quad control</li> </ul>	<ul style="list-style-type: none"> <li>• Bike rocking → easy spin</li> <li>• Quad sets / SLR / TKE</li> <li>• Bridges + side planks</li> <li>• Supported balance</li> </ul>	<ul style="list-style-type: none"> <li>• Swelling controlled</li> <li>• Walking improving</li> <li>• ROM improving steadily</li> </ul>
<b>Phase 2</b>			
<b>Weeks 2–6</b>			
	<ul style="list-style-type: none"> <li>• Strength through range</li> <li>• Frontal plane control</li> <li>• Introduce plyo + run</li> </ul>	<ul style="list-style-type: none"> <li>• Split squats</li> <li>• Step-ups/downs</li> <li>• Squat/leg press</li> <li>• RDL + hamstrings</li> <li>• Pogo → skip → jump &amp; stick</li> </ul>	<ul style="list-style-type: none"> <li>• No swelling response</li> <li>• Good SL squat/step-down</li> <li>• Pain-free low plyo</li> </ul>
<b>Phase 3</b>			
<b>Weeks 4–10</b>			
	<ul style="list-style-type: none"> <li>• Power + decel</li> <li>• COD planned → reactive</li> <li>• Sport conditioning</li> </ul>	<ul style="list-style-type: none"> <li>• Run → controlled stop</li> <li>• COD low speed → sharper</li> <li>• Reactive drills late-stage</li> <li>• Repeat sprint exposure</li> </ul>	<ul style="list-style-type: none"> <li>• No next-day reaction</li> <li>• Landing quality under fatigue</li> <li>• COD tolerated at training speed</li> </ul>



## MCL Rehabilitation Guide

### Phase 4

#### Weeks 6–12+

- Full training integration
- Confidence + robustness
- Return to match play
- Sport-specific drills
- Reactive COD
- Contact prep (if needed)
- No pain/swelling
- Function >90%
- Consider brace early return (contact sports)



## Grade 3 MCL Sprain (Complete Tear)

Typical return-to-sport window: 8–12+ weeks (sport dependent)

### Notes

- Often benefits from a longer build-up to Change or Direction (COD) and contact readiness.
- If combined injuries are suspected (ACL/PCL/meniscus), rehab approach changes.

Phase	Goals	Key Exercises	Progress when
<b>Phase 1</b> Weeks 0–2	<ul style="list-style-type: none"> <li>• Protect valgus/rotation stress</li> <li>• Control swelling</li> <li>• Restore extension</li> <li>• Early safe strength</li> </ul>	<ul style="list-style-type: none"> <li>• Extension focus ROM</li> <li>• Isometric quads + SLR</li> <li>• Hip/core strength</li> <li>• Supported balance (brace if needed)</li> </ul>	<ul style="list-style-type: none"> <li>• Swelling controlled</li> <li>• ROM improving</li> <li>• Walking improving</li> </ul>
<b>Phase 2</b> Weeks 2–6	<ul style="list-style-type: none"> <li>• Strength foundation</li> <li>• Single-leg control</li> <li>• Reduce brace reliance as able</li> </ul>	<ul style="list-style-type: none"> <li>• Leg press / squat pattern</li> <li>• Split squats</li> <li>• Step-ups/downs</li> <li>• RDL + hamstrings</li> <li>• Trunk + lateral hip endurance</li> </ul>	<ul style="list-style-type: none"> <li>• SL squat improving</li> <li>• No swelling response</li> </ul>
<b>Phase 3</b> Weeks 5–10	<ul style="list-style-type: none"> <li>• Return to running</li> <li>• Introduce ply progressively</li> <li>• Build volume tolerance</li> </ul>	<ul style="list-style-type: none"> <li>• Walk/jog → steady run</li> <li>• Jump &amp; stick → linear bounds</li> <li>• Lateral hops later-stage</li> </ul>	<ul style="list-style-type: none"> <li>• Normal gait</li> <li>• No swelling response</li> <li>• Good step-down control</li> <li>• Pain-free low plyo</li> </ul>



## MCL Rehabilitation Guide

### Phase 4

#### Weeks 8–14+

- COD + contact readiness
- Reactive sport demands
- Return to play criteria met
- Rounded → sharp COD
- Reactive cues
- Contested drills late-stage
- No pain/swelling with sport exposure
- Function >90%
- Consider brace early return



## Hinged Knee Bracing Protocol (MCL)

Bracing is used to reduce valgus stress, improve confidence, and support early return to normal walking and controlled loading. The exact duration and range settings should be individualised to symptoms, sport demands, and clinical assessment.



Grade	Suggested duration	Suggested ROM settings	Wear / discontinue when...
<b>Grade 1 (mild)</b>	Usually not required (If used: ~3–7 days, up to 2 weeks)	0–90° or unlocked as tolerated	Normal gait, stairs comfortable, no swelling response
<b>Grade 2 (partial tear)</b>	~2–4 weeks	Week 0–1: 0–60° (or 0–90°) Week 1–2: 0–90° Week 2–4: unlock to full ROM	No limp, no giving way, good step-down control, swelling stable
<b>Grade 3 (complete tear)</b>	~4–6+ weeks (sometimes up to 8 weeks in contact athletes)	Week 0–2: 0–30° or 0–60° Week 2–4: 0–90° Week 4–6+: unlock to full ROM	Stable walking without brace, no valgus wobble on SL tasks, confident jog progression

### Practical bracing notes (sport-focused)

- Wear the brace for walking outdoors, busy environments, and early training re-introduction.
- The brace can often be removed for controlled rehab exercises, bike, and gym work once symptoms settle.
- For Grade 2–3 injuries, some athletes benefit from wearing the brace for the first 1–3 weeks of return to training (especially contact/collision sports).
- If swelling increases or gait worsens, reduce load and reassess brace settings.



## References

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