

| Type of soft tissue injury                | Positive findings  |
|---|--|
| <b>Muscle contusion</b>                   | <ul style="list-style-type: none"> <li>● Pain with active and passive motion +/- swelling.</li> <li>● Decreased range of motion of joints spanned by the injured muscles.</li> <li>● Occasionally a permanent palpable mass</li> </ul>   |
| <b>Patellar/Quadriceps tendon rupture</b> | <ul style="list-style-type: none"> <li>● Tenderness at the site of the injury</li> <li>● Unable to extend the knee against resistance</li> <li>● Gap on palpation: above or below patella depending on the affected tendon</li> <li>● <b>X ray:</b> Patella-alta: Patellar tendon rupture\ Patella-infera(baja): Quadriceps rupture</li> </ul>   |
| <b>Achilles tendon rupture</b>            | <ul style="list-style-type: none"> <li>● Increased resting dorsiflexion with the knees flexed,</li> <li>● a palpable gap من يدك تمشين لما فوق وتطلع الكالكينس</li> <li>● weak plantar flexion, and an <b>abnormal Thompson test</b> (lack of plantar flexion when squeezing the calf).</li> </ul>  |
| <b>ACL injury</b>                         | <ul style="list-style-type: none"> <li>● <b>Hx:</b> noncontact injury(Cutting or Pivoting sport)</li> <li>● <b>ROM:</b> in acute injury the range of motion may limited</li> <li>● <b>Special tests:</b> Lachman's test(+),Anterior Drawer test(+), <b>Pivot shift test(+)</b> is pathognomonic for ACL injury (best in the chronic setting).</li> </ul>   |
| <b>PCL injury</b>                         | <ul style="list-style-type: none"> <li>● <b>Hx:</b>A direct blow to the proximal aspect of the tibia,e.g:Dashboard injury,or a fall onto the flexed knee with the foot in plantar flexion.</li> <li>● <b>Special tests:</b>Posterior Drawer test(+)</li> </ul>   |
| <b>MCL injury</b>                         | <ul style="list-style-type: none"> <li>● <b>Hx:</b>Usually result from contact injury like a direct blow to the lateral aspect of the knee</li> <li>● <b>Special tes,Valgus stress test:</b> <ul style="list-style-type: none"> <li>○ if only(+)at 30° of knee flexion: indicates isolated MCL injury</li> <li>○ If (+)at both 0° (knee extension) and 30° of knee flexion: indicate concurrent injury to the posteromedial capsule and/or cruciate ligaments</li> </ul> </li> <li>● <b>Radiological findings:</b> <ul style="list-style-type: none"> <li>○ <b>MRI:</b> Confirm the diagnosis</li> <li>○ <b>Xray:</b> Second fracture or Tibial spine avulsion may seen</li> </ul> </li> </ul> |
| <b>LCL injury</b>                         | <ul style="list-style-type: none"> <li>● <b>Special tes,Varus stress test:</b> <ul style="list-style-type: none"> <li>○ if only (+)at 25° knee flexion: indicates <u>isolated</u> LCL injury</li> <li>○ If(+)at both when the knee extended and 25° knee flexion: indicative of a severe combined posterolateral corner and cruciate ligament injury</li> </ul> </li> </ul>  |
| <b>Meniscal injuries</b>                  | <ul style="list-style-type: none"> <li>● Slow developed swelling,localized pain at the joint line,<b>LOCKING</b></li> <li>● <b>Range of motion:</b> is typically normal, but longitudinal bucket-handle tears may block full extension of the knee joint.</li> <li>● <b>Special tests:(+) McMurray and Apley tests</b>, may produce a palpable or audible <b>click</b></li> </ul>  |
| <b>Lateral Ankle sprain</b>               | <ul style="list-style-type: none"> <li>● <b>Hx:</b>inversion injury</li> <li>● Localized tenderness, swelling, and ecchymosis over the <b>lateral ankle</b></li> <li>● <b>Special tests:</b> <ul style="list-style-type: none"> <li>○ <b>Anterior drawer test (+):</b>antero talofibular ligament injury</li> <li>○ <b>Talar tilt(+):</b>calcaneofibular ligament injury</li> </ul> </li> </ul>  |

| Type of soft tissue injury                | Treatment  |
|---|--|
| <b>Muscle injury</b>                      | <ul style="list-style-type: none"> <li>• Conservative:RICE,NSIAD,physiotherapy</li> <li>• BUT severe muscle laceration may need I&amp;D,and saturation</li> </ul>  |
| <b>Patellar/Quadriceps tendon rupture</b> | <ul style="list-style-type: none"> <li>• Surgical</li> </ul>   |
| <b>Achilles tendon rupture</b>            | <ul style="list-style-type: none"> <li>• Surgical</li> </ul>   |
| <b>ACL injury</b>                         | <ul style="list-style-type: none"> <li>• The ideal treatment is SURGERY</li> </ul>   |
| <b>PCL injury</b>                         | <ul style="list-style-type: none"> <li>• Non operative, surgical if combined ligament injury</li> </ul>  |
| <b>MCL injury</b>                         | <ul style="list-style-type: none"> <li>• <b>Conservative</b> Rx: Is the <b>mainstay</b> of treatment for the isolated MCL injuries<br/>→ <b><u>Nonsurgical management include:</u></b>Crutches, RICE, and anti-inflammatory/pain medication,No brace is usually required for partial tear, A knee brace is recommended for complete tear.</li> <li>• Surgical Rx:if failed conservative Rx + complete tear + associated with other ligaments injury</li> </ul> |
| <b>LCL injury</b>                         | <ul style="list-style-type: none"> <li>• Isolated injury: non operative لكن احتماليه التدخل الجراحي كبيرة</li> <li>• Combined injury: surgical</li> </ul>  |
| <b>Meniscal injuries</b>                  | <ul style="list-style-type: none"> <li>• Not all meniscus tears cause symptoms, and many symptomatic tears become asymptomatic.<br/>→ <b><u>Nonsurgical management include:</u></b>ice, NSAIDs, or physical therapy for range of motion and general strengthening of the lower extremities. they respond well</li> <li>• Surgical indications:Failure of conservative treatment - Locked knee - Concomitant ACL surgery</li> </ul>                             |
| <b>Knee dislocation</b>                   | <ul style="list-style-type: none"> <li>• emergent closed reduction and splinting or bracing should be performed immediately. Post reduction radiographs should be taken to confirm knee reduction.</li> </ul>  |
| <b>Lateral Ankle sprain</b>               | <ul style="list-style-type: none"> <li>• Conservative to all!!</li> <li>• <b>RARELY need surgery!</b>Surgery is a reasonable option when an adequate trial of nonsurgical treatment fails to control symptoms of grade 3</li> </ul>  |

The End ^^

Done by: Rawan Aldhuwayhi