**The Knee**:

|  |  |
| --- | --- |
| Flexion |  |
| Extension |  |
| Open Pack |  |
| Closed Pack |  |

Relevant Research:

Mobilization with Movement at the Knee Joint

* (Alkhawajah, 2019) RTC of 40 adults with knee OA
	+ MWM benefits over sham for local and widespread pain, function, knee flexor and extensor strength, and knee flexion ROM in the short term

Knee Manual + PT

* (Argut, 2021) RTC of 42 patients scheduled for unilateral TKA for severe OA
	+ The combination of exercise and manual therapy provides more benefit for pain, function, and patient satisfaction than an exercise program alone

Techniques:

1. Knee Flexion Mobilization

|  |  |
| --- | --- |
| Indication |  |
| Patient Position |  |
| Neutral vs IR vs ER positioning |  |
| Hand Placement |  |
| Neutral Technique |  |
| IR Technique |  |
| ER Technique |  |
| How to Increase Force of Mob |  |

1. Knee Extension Mobilization

|  |  |
| --- | --- |
| Indication |  |
| Patient Position |  |
| Hand Placement |  |
| Anterior-Posterior Technique |  |
| Medial-Lateral (Varus) Technique |  |
| Lateral-Medial (Valgus) Technique |  |

**The Hip:**

|  |  |
| --- | --- |
| Flexion |  |
| Extension |  |
| Abduction |  |
| Adduction |  |
| IR |  |
| ER |  |
| Open Pack |  |
| Closed Pack |  |

Relevant Research:

Mobilizations post-THA

* (Matheis, 2018) RTC of 39 patients post-THA
	+ Targeted mobilization and strength training in full weight-bearing 3 days post-op was tolerated well and improved hip ROM and gait compared to exercise alone

Mobilizations and OA

* (Pawlowska, 2020) RTC of 57 adult females with hip OA
	+ Hip mobilization increased ROM, decreased pain, and improved hip function more than non-weight bearing exercises
1. Long Axis Hip Distraction Mobilization and Manipulation

|  |  |
| --- | --- |
| Indication |  |
| Patient Position |  |
| Hand Position |  |
| Technique |  |

1. Hip Distraction Mobilization and Manipulation for SIG/Innominate Upslip

|  |  |
| --- | --- |
| Indication |  |
| Patient Position |  |
| Hand Position |  |
| Technique |  |

1. Lateral Hip Distraction

|  |  |
| --- | --- |
| Indication |  |
| Patient Position |  |
| Hand and Belt Position |  |
| Technique |  |

1. Prone Figure Four Non-Thrust Mobilization

|  |  |
| --- | --- |
| Indication |  |
| Patient Position |  |
| Hand Position |  |
| Technique |  |

1. Hip Caudal Glides

|  |  |
| --- | --- |
| Indication |  |
| Patient Position |  |
| Hand Position |  |
| Technique |  |