Knee injuries

Science, Anatomy

Knee Injuries The knee is a complex Joint which can flex and extend for movement and Is a weight bearing joint. The knee is part of a kinetic chain directly affected by motions and forces occurring and transmitted from the foot, ankle, and lower leg. The knee then transmits forces to the thigh, hip, pelvis, and spine. The knee Is has four major ligaments which controls stability. The medial collateral ligament (MAC)and lateral collateral ligament (LLC) are on the sides of the knee and prevent the Joint from sliding sideways.

The anterior excruciate ligament (CAL) and posterior excruciate ligament (PC) form an " X" on the inside of the knee and prevent the knee from sliding back and forth. These limitations on knee movement allow the knee to concentrate the forces of the muscles on flexing and extension. The knee also has two shock-absorbing pieces of cartilage called menisci that sit on the top surface of the tibia. The menials allow the femoral condole to move on the tibia surface without friction.

Range of Motion * Loss of motion is likely from: Effects of Injury * Trauma of Surgery Effects of Inflammation Ligaments do not heal completely for 18-24 months so waiting is not an option * Early range of motion can minimize harmful changes * Controlled movement should be initiated early and based on patient tolerance and healing constraints Exercises * Active assisted knee slides: use good leg supporting injured knee to regain flexing and extension * Wall slides to regain flexing and extension * Active assisted knee slides on wall * Knee extension with foot support (towel) regain extension (flex knee towards floor) * Knee extension in prone with ankle weight to regain extension (on stomach) * Groin stretches * Kneeling thrusts * Knee extensors

stretch * Side-lying knee extensor stretch with sports cord * Knee feeler stretch (on back) * Knee feeler stretch with sports cord (on back) * Knee feeler stretch on wall * Ankle pleasantness's stretch 1 OFF * Primary goal: Return of normal strength, endurance, and power to musculature surrounding the knee * Overload is necessary to strengthen but not over aggressively to cause further injury or repeat * Recovering knees need protection and strengthen programs made for ahealthknee can compromise the integrity of the injured knee. Strengthening contain.