# WORK RELATED KNEE INJURIES IN THE MONTANA WORKERS COMPENSATION SYSTEM

Albert D. Olszewski MD

Treasure State Occupational health

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# DISCLAIMER

- Independent Physician Contractor with Treasure State Occupational Health
- Independent Orthopedic Surgeon in Northwest Montana 26 years
- Military Orthopedic Surgeon and Flight Surgeon in the U.S. Air Force

# OBJECTIVES

- Know the most common knee injuries claimed in the Montana Workers Compensation System.
- Know the natural history of the three most common knee injuries claimed.
- Learn strategies to expedite resolution when the natural history of healing is exceeded.

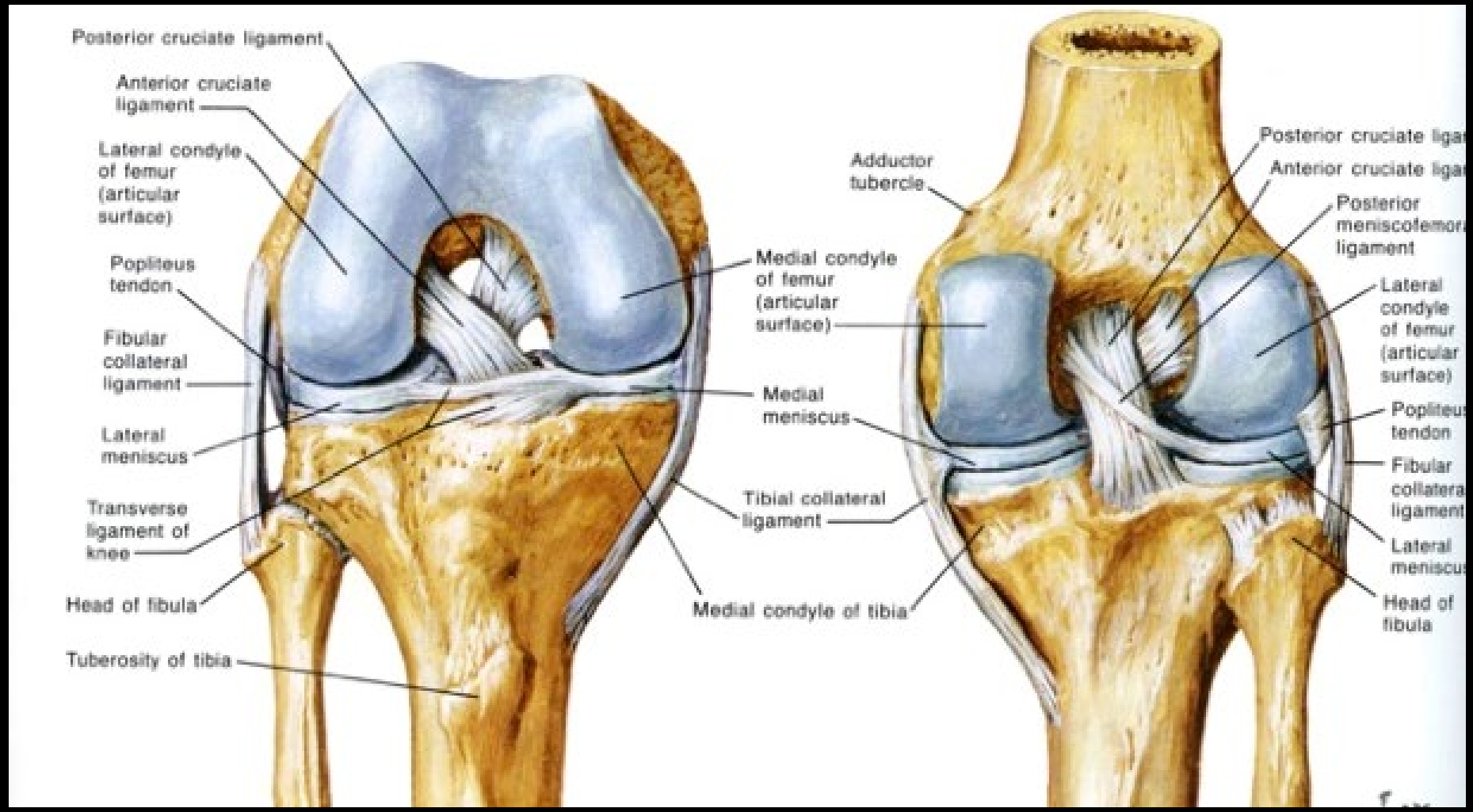
# MY GOAL

- Empower you with knowledge.
- A reasonable expectation when most common knee injuries should resolve.
- You can advocate for:
    1. Better medical and return-to-work outcomes.
    2. Better overall injured worker experience.

# DEFINITION OF A KNEE

- The joint between the thigh and the lower leg.
- Consists of the distal femur, Proximal Tibia and anteriorly by the Patella.
- Synovial joint.
- Articular Cartilage/ Menisci.
- Complex Ligamentous Support.

# ANATOMY OF THE KNEE



# THE PURPOSE OF THE KNEE

- Greatly improves locomotion (Ambulation).
- Greatly improves transitioning in space (standing, kneeling, squatting)
- Critical for upright stability at rest and with motion.
- Provides protection in the nerves and blood vessels behind.

# THE KNEE IS FREQUENTLY INJURED AT WORK AT 10%

10% prevalence

Tied with “Hand/finger”, ”back”, “Head”

Workers Compensation Annual Report 2024, Montana Department of Labor and industry

# SPRAINS, STRAINS, AND CONTUSIONS ARE 56% OF KNEE INJURIES

Sprains/strains - 36% prevalence

Blunt trauma resulting in bruising/swelling – 20% prevalence

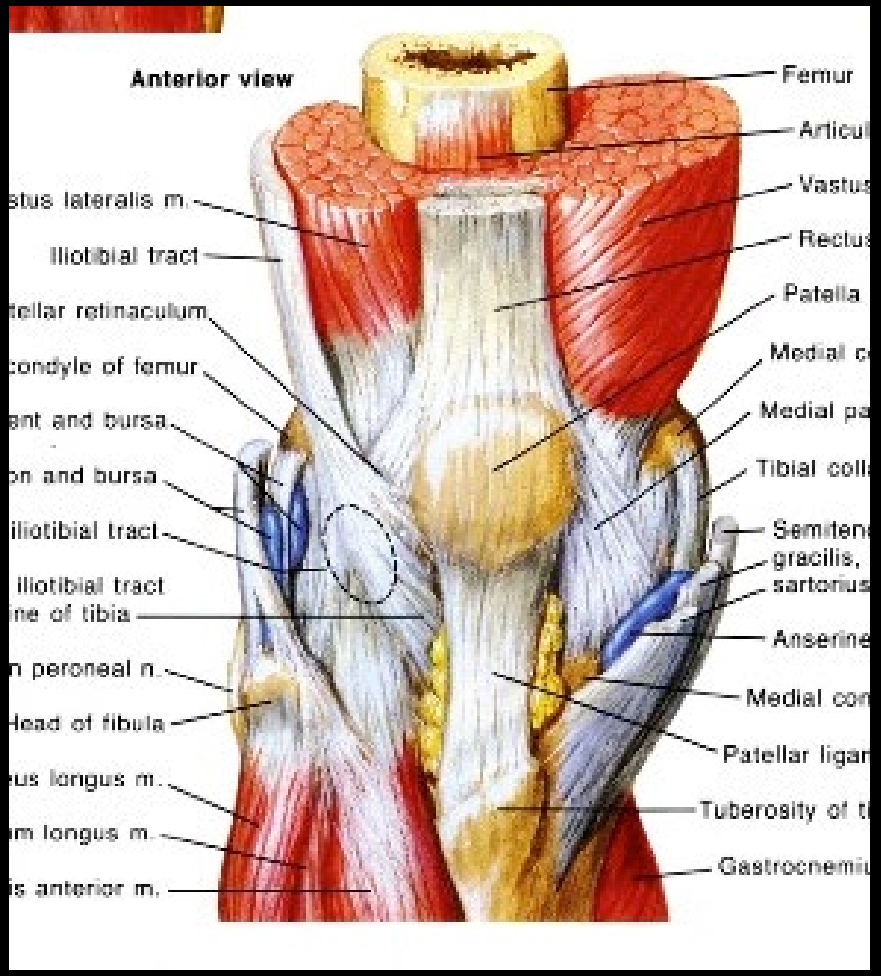
Workers Compensation Annual Report 2024, Montana Department of Labor and industry

# SPRAIN VS. STRAIN

SPRAIN - Stretch injury to ligaments and capsule

STRAIN – Stretch injury to muscles and tendons

Energy is indirectly applied



# SEVERITY OF SPRAIN AND STRAIN INJURIES

- Grade 1 – Injury with no structural loss
- Grade 2 – Injury results in a partial loss of structural integrity
- Grade 3 – Injury results in a complete loss of structural integrity

# CONTUSION

- Compression Injury to any tissue.
- Energy is directly applied.
- Severity is not placed on a Grading Scale.
- Reported injuries range from a "Bruise/Damage" to a "Crush/Death."

# NATURAL HISTORY OF SPRAINS, STRAINS, CONTUSIONS

Structural Intact

- Non-Operative/ Supportive
- 2 months to heal in the 20s
- 3 months to heal older than 30.

Structural failure

- Operative Treatment
- 6 months to heal in the 20s.
- 8 months to heal older than 30.

# WHY KNEE INJURY CLAIMS EXCEED NATURAL HISTORY TO HEALING

- Unknown additional injury/Wrong diagnosis.
- Exacerbation or aggravation of pre-existing injury/degenerative condition.
- Simultaneous natural progression of a pre-existing injury/degenerative condition.
- Medical Co-morbidities.

# STRATEGIES TO EXPEDITE INJURY RESOLUTION

- Recommend an Orthopedic surgical consultation.
- Request additional diagnostic testing. Knee MRI.
- Obtain an Independent Medical Examination.

# QUESTIONS AND INPUT

# SUMMARY

- 10% of workers compensation claims involve the knee.
- The three most common diagnoses are Sprains, Strains, and Contusions.
- Nonoperative injuries should resolve in three months.
- Operative injuries should resolve 6 to 8 months post surgery.
- Injuries that don't resolve in three months should be evaluated with an MRI and a consult by a orthopedic surgeon or consider an IME.