Continuous Passive Motion Devices

CPM
CPMs in Physical Therapy

- Passive motion delivered via a motorized device
- Reduces the formation of adhesions
CPMs in Physical Therapy

- Applied following:
  - Orthopedic surgery
CPMs in Physical Therapy

- Variables that can be set by the clinician:
  - Speed
  - ROM
  - Hold Times
CPMs in Physical Therapy

• Provides a means for stimulating
  – Healing
  – Sensory fibers
CPMs in Physical Therapy

- Biomechanical results of stress deprivation on connective tissue matrix
  - Decreased water content
  - Decreased collagen synthesis
CPMs in Physical Therapy

• Biomechanical results of stress deprivation on connective tissue matrix
  – Increased collagen mass
CPMs in Physical Therapy

- Potential Indications
  - Prevent adhesions
  - Maintain joint ROM
CPMs in Physical Therapy

- Periarticular Tissue
  - Post manipulation of the shoulder
  - Following Total Knee Replacement
  - To Maintain the collagen matrix organization and normalize collagen concentration while maintaining tissue strength
Precautions for CPM use

- Significant bleeding or edema
- Mechanical injury
- Skin irritation
- Ensure proper
  - patient positioning
  - Patient monitoring
- Sensory impairments
Contraindications to CPM

- Unstable fracture
- Active infection
• http://www.youtube.com/watch?v=9MvdPk9tZ-w&feature=related
• http://www.youtube.com/watch?v=mXAHUj4YH_o&feature=related