Continuous Passive Motion Devices

CPM

What is a CPM?

- Passive motion delivered via a motorized device that moves a joint slowly and continuously through a controlled range of motion
- CPMs exist for nearly every joint in the body

Parameters of Application

- “No definitive delineation has been established” for a set protocol of CPM usage
- Variables that can be set by the clinician:
  - Speed
  - ROM
  - Hold Times

Kisner, p69-69
Benefits of CPM

- Prevents development of adhesions and contractures and therefore joint stiffness
- Provides a stimulating effect on the healing of tendons and ligaments
- Enhances healing of incisions over the moving joint

Kisner, p69-69

Benefits of CPM continued

- Increases synovial fluid lubrication of the joint and so it increases the rate of intra-articular cartilage healing and regeneration
- Prevents the effects of immobilization
- Provides a quicker return of ROM
- Decreases postoperative pain

Kisner, p69-69

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

What does the Research say?

- People who use CPM post TKR vs those who don’t:
  - Short term
  - Long-term

Let’s Take a Look

- [http://www.youtube.com/watch?v=9MvdPlk9tw](http://www.youtube.com/watch?v=9MvdPlk9tw)
- [http://www.youtube.com/watch?v=mXAHU4YH_o&feature=related](http://www.youtube.com/watch?v=mXAHU4YH_o&feature=related)
Reference