

1 2  **Chapter 6**

## Manual Therapies

3  **Overview**

- A number of manual therapies have evolved over the years
- By their nature, many of these techniques are not founded on the same scientific rigor as anatomy and physiology, and much of their use is based on clinical outcomes, rather than evidence-based proof

4  **Manual Therapy**

- The decision on which manual technique to use is based on the clinician's belief, their level of expertise, and their decision-making processes

5  **Application**

- There is general agreement on those criteria that are important for the correct application of a manual technique. These include:
  - Specificity
  - Direction and amount of force
  - The duration, type, and irritability of symptoms
  - Patient and clinician position
  -

6  **Indications for Manual Therapy**

- Manual therapy is indicated when there is:
  - Mild pain
  - A non-irritable condition
  - Intermittent musculoskeletal pain
  - Pain that is relieved by rest, or by particular motions or positions

7  **Contraindications to Manual Therapy**

- Absolute
  - · Bacterial infection
  - · Malignancy
  - · Systemic localized infection
  - · Sutures over the area
  - · Recent fracture
  - · Cellulitis
  - · Febrile state
  - · Hematoma
  - · Acute circulatory condition
  - · An open wound at the treatment site

8  **Contraindications to Manual Therapy**

- Absolute
  - · Osteomyelitis
  - · Advanced diabetes
  - · Hypersensitivity of the skin
  - · Inappropriate end feel (spasm, empty, bony)
  - · Constant, severe pain, including pain which disturbs sleep, indicating that the condition

- is likely to be in the acute stage of healing
- · Extensive radiation of pain
- · Pain unrelieved by rest
- 

9  **Contraindications to Manual Therapy**

- Relative
  - · Joint effusion or inflammation
  - · Rheumatoid arthritis
  - · Presence of neurological signs
  - · Osteoporosis
  - · Hypermobility
  - · Pregnancy
  - · Dizziness

10  **Soft Tissue Techniques**

- Transverse Friction Massage
  - A technique devised by Cyriax whereby repeated cross-grain massage is applied to muscle, tendons, tendon sheaths, and ligaments
  - Contraindicated for acute inflammation, hematomas, debilitated or open skin, peripheral nerves, and with patients who have diminished sensation in the area

11  **Soft Tissue Techniques**

12  **Soft Tissue Techniques**

- Augmented soft tissue mobilization (ASTM)
  - A process that uses specially designed hand-held devices to assist the clinician in the mobilization of poorly organized scar tissue in and around muscles, tendons and myofascial planes

13  **Soft Tissue Techniques**

- Myofascial Release
  - A series of techniques designed to release restrictions in the myofascial tissue that are used for the treatment of soft tissue dysfunction that has not responded to other interventions.

14  **Soft Tissue Techniques**

- Massage
  - The systematic, therapeutic, and functional stroking and kneading of the body

15  **Soft Tissue Techniques**

- Acupressure
  - Involves the application of manual pressure over the body's acupuncture points to improve the flow of the body's Energy, known as 'Qi'.

16  **Soft Tissue Techniques**

- Muscle Energy
  - Can be used to mobilize joints, strengthen weakened muscles, and to stretch adaptively shortened muscles and fascia

17  **Soft Tissue Techniques**

- Strain-Counterstrain (Positional Release)
  - Involve a gentle, and simple indirect manipulative approach for the treatment of somatic

dysfunction, using the passive positioning of the body in a position of ease (rather than into the motion restriction) to evoke a therapeutic effect

18  **Soft Tissue Techniques**

19  **Joint Mobilizations**

20  **Joint Mobilizations**

- Kaltenborn Techniques
  - According to Kaltenborn, all joint mobilizations, when performed correctly should be made parallel, or at right angles to this plane of motion
  - Kaltenborn's techniques use a combination of traction and mobilization to reduce pain and mobilize hypomobile joints

21  **Joint Mobilizations**

- Australian Techniques
  - Under this system, the range of motion is defined as the available range, not the full range, and is usually in one direction only
  - Each joint has an anatomical limit (AL) which is determined by the configuration of the joint surfaces and the surrounding soft tissues
  - The point of limitation (PL) is that point in the range which is short of the anatomical limit and which is reduced by either pain or tissue resistance

22  **Joint Mobilizations**

- Mobilisations with Movements
  - Mulligan's mobilization techniques are applied parallel to the plane of motion, and are sustained throughout the movement until the joint returns to its starting position, with the intention of producing no pain when applied

23  **Joint Manipulations**

- Unlike mobilizations, which are applied singularly or repetitively within, or at the physiological range of joint motion, joint manipulations involve a thrust to a joint so that the joint is briefly forced beyond the restricted range of motion

24  **Neurophysiological Techniques**

- Proprioceptive Neuromuscular Facilitation
  - Techniques use active muscular relaxation techniques that utilize muscle facilitation and inhibition to hasten the response of the neurophysiological mechanisms involved in the stretch reflex

25  **Neurophysiological Techniques**

- Myofascial Trigger Point (MTrP) Therapy
  - The major goal of MTrP therapy is to relieve pain and tightness of the involved muscles, improve joint motion, improve circulation, and eliminate perpetuating factors
  - When treating a patient for a specific muscle syndrome, it is important to explain the function of the involved muscle and to describe or demonstrate a few of the activities or postures that might over stress it, so that the patient can avoid such activities or postures