

**Contraindications**

- ◆ Do not work deeply during a tension headache. Avoid vigorous techniques or deep pressure when treating hyperirritable trigger points, since “kick-back” pain may result. Kick-back pain is a recurrence of the client’s symptoms hours or days after treatment. This is especially true if ischemic compressions are applied too quickly and deeply, released too quickly and not followed by either a passive stretch and heat or slow, full active free range of motion and heat.

- ◆ There may be associated postural dysfunctions. Temporomandibular joint dysfunction may be present.

**Differentiating Other Headaches**

- ◆ With new headaches that begin later in adult life, especially after age 50, the client should be referred to a physician. New primary headache is rare in the elderly; the headache may be secondary to an underlying pathology (*Davidoff, 1995*).
- ◆ See the migraine chapter for differentiating other types of headaches.

**Treatment Considerations**

**HEALTH HISTORY QUESTIONS**

- ◆ Does the client have a history of headaches?
- ◆ When was the onset of the headaches and how often do they begin? Many patients have a history of tension headaches.
- ◆ Was there a trauma associated with the onset of the headache?
- ◆ Does the client have any other medical conditions?
- ◆ Does the client experience any other symptoms?
- ◆ What is the location of the pain?
- ◆ What are other symptoms?
- ◆ What is the duration of the headache?
- ◆ What was the time of day when the headache occurred?
- ◆ What relieves the headache?
- ◆ What aggravates the headache?

**SPASM**

**Contraindications**

- ◆ **Do not** attempt to completely eliminate reflex muscle guarding that is splinting an acute injury.
- ◆ **Avoid passively stretching an acutely spasmodic muscle** because this may tear fibres of the muscle and further injure the client. This is especially true when inflammation is present, as stretching will increase the pain and muscle guarding, resulting in greater tissue damage (*Kisner, Colby, 1990*).
- ◆ Hot hydrotherapy applications are contraindicated with a muscle spasm resulting from an acute injury.
- ◆ Massage is locally contraindicated with deep vein thrombosis or thrombophlebitis of the calf. A medical referral is indicated. With venous thrombosis, the client may complain of calf cramping or tightness, exhibit local tenderness, heat, pallor, swelling and have a diminished or absent dorsalis pedis pulse (*Alexander, 1992*). This is an important consideration for clients who have had a recent fracture or surgery, for clients who are pregnant or for clients over 50 years of age.

**Testing**

- ☞ The **AF ROM** of the joint crossed by the affected muscle is reduced. There is pain on active movement, especially at the end ranges when the affected muscle is being stretched or shortened.
- ☞ **PR ROM** that lengthens the affected muscle reveals a muscle spasm end feel with pain and decreased range.
- ☞ **AR submaximal isometric testing** reveals decreased strength with pain on contraction with an intrinsic muscle spasm. Strength testing of an acutely spasmodic muscle is contraindicated.

**Special Tests**

- ☞ **Ramirez’s test** is positive with deep vein thrombosis. **Homan’s sign** is also positive, but may not always detect DVT. Either positive test contraindicates local massage.

**Treatment Goals Treatment Plan**

**Break the pain-spasm cycle and decrease the spasm.**

- ☞ **Positioning** of the client depends on the location of the affected muscle and the client’s comfort.
- ☞ The therapist can intervene in the pain-spasm cycle in several ways. The task is to choose the appropriate modality or combination of modalities to break this cycle and decrease the spasm. Encouraging **diaphragmatic breathing** and relaxation decreases the sympathetic nervous system firing. **Hydrotherapy** applications depend on the type of spasm that is present. With reflex muscle guarding in response to acute injury, local **cold** applications, such as an ice pack or ice massage, are used for an analgesic effect to break the cycle (*Kraus, 1988*). With an intrinsic muscle spasm that is occurring in chronically