A Pain Management Algorithm

Residual Limb Pain Algorithm (continued)

Are there skin abrasions present?

- Yes → Dermatologic Treatments
  - Pain Unresolved → Pain Resolved
  - Pain Unresolved → Pain Resolved

- No → With palpation, is there any tenderness

  - Yes → Etiology
  - No → Etiology

Are there signs of autonomic dysfunction?

- No → Other potential pain generators:
  - Radiculopathy, Vascular Claudication, Cardiac, Brachial Plexus Injury, Thoracic Outlet Syndrome

- Yes → Complex Regional Pain Syndrome/RSD
  - Pain Unresolved → Treatment
  - Pain Resolved → Treatment

Etiology

- Bursa, Ligament, Tendon
  - Tx: NSAID, PT, Injections

- Muscle (Trigger points)
  - Tx: Physical Therapy, Injections

- Nerve (Neuroma, Nerve Entrapment)
  - TX: Padding, Medications, Injections, Surgery

- Bone (Bone spur, Heterotopic ossification, Bone cyst)
  - Tx: Padding, Surgery, Radiotherapy
Are there psychological factors? (Depression, anxiety, anger)

Are there sleep disturbances?

Rule out all etiologies of residual limb pain that may contribute to phantom pain (See Chart 1)
Phantom Limb Pain Algorithm (continued)

Level 1 Management

- Physical Therapies:
  - Desensitization
  - Massage
  - Vibration Therapy
  - Percussion Therapy
  - Ultrasound
  - TENS Therapy
  - Heat/Cold Therapy

Level 2 Management

- Electroconvulsive Therapy

Pain Unresolved

Medications:
- Tricyclic Antidepressants
- SSRI’s
- Antiarrhythmics
- Anticonvulsants
- Antihypertensives
- Calcitonin
- Opioids
- NSAID’s
- Antispastics
- Dronabinol

See Table 2

Neuromodulation:
- Peripheral Nerve Stimulation
- Spinal Cord Stimulation
- Thalamic Stimulation
- Deep Brain Simulation

Neurodestructive Procedures:
- Neuroma Excision
- Rhizotomy
- Dorsal Root Entry Zone (DREZ) Ablation
- Cordotomy
- Thalamic Ablation