PAIN MANAGEMENT
QUICK REFERENCE GUIDE

The following are general guidelines. Refer to the Pain Management Clinical Solution for details. Also, respect the modality contraindications, warnings, precautions and infection control guidelines.

INCIDENCE
- The prevalence of pain in nursing home residents is 45 – 80%
- 25 to 50% of community dwelling elders have pain
- An American Geriatric Society panel concluded that pain in long-term care is under-recognized and under-treated

TRAINING
- Involve the Administrator and Director of Nursing in the training and program planning
- The information is very relevant to both OT and PT disciplines
- Emphasize the great benefits of non-pharmacological pain treatment approaches (elimination of negative side effects such as disorientation, dizziness, dehydration, etc.)

PROBLEM OVERVIEW
- Common diagnoses cause pain; arthritis, cancer, neuropathy, etc.
- Pain contributes to problems such as falls, impaired cognition, depression, weight loss, etc.
- Pain is not a normal part of aging

PATIENT IDENTIFICATION
- Consult with nursing to identify those in need. Look at MDS, sections J1, J4, J5, & J8.
- Review pain medications including frequency of use and dosages

ASSESSMENT
- Determine the underlying causes of pain and develop a plan of care to address those causes (e.g. edema, joint contractures, immobility, etc.)
- Use objective pain measures: Visual Analogue Scale, Face Scale, Numerical Rating Scale, etc.

TREATMENT
- All modalities can be used to treat pain. Be sure to also incorporate therapy interventions that address the cause of the pain.
- A modality may need to be applied 3 or 4 times before it begins to reduce pain or causative factors. Patients with similar clinical conditions can respond differently to the same modality. If a modality or a particular setting is not reducing pain after multiple treatments, try something different.
  - For general, diffuse pain -
    - Use a body diagram to help focus treatment. Generally, patients will place their first mark over the area where they hurt the most
    - E-stim TENS → Apply motor level LVPC or IFC at the most painful area. Start with sensory if motor is initially too uncomfortable.
    - E-stim TENS → Apply motor-sensory IFC to a dermatomal level or acu-points
    - E-stim TENS → LVPC motor at acu-points
    - Ultrasound → One minute per point for acupuncture and trigger points
  - For acute and subacute pain (generally up to 2 weeks) -
    - Within 48 to 72 hours post tissue trauma → use e-stim TENS HVPC sensory or IR with e-stim
    - For superficial pain → apply sensory e-stim TENS LVPC to involved area or at segmental level
    - For deep pain → use e-stim TENS sensory IFC to involved area or at segmental level (examples – fractures, joint trauma, low back)
    - Ultrasound → subthermal using 20% duty factor at 0.5 w/cm² to involved area for 5 min, 2x the size of the transducer
    - Ultrasound → Subthermal one minute per point for acupuncture and trigger points
    - SWD → subthermal over involved area for 30 min (VAR setting)
For mid to late subacute pain and inflammation (generally 2 to 6 weeks) -

- E-stim TENS → IFC sensory-motor or motor-sensory to involved area or at segmental level. Also consider Infrared combined with e-stim.
- Ultrasound → Mild thermal to involved area (1ΔT) or acupuncture/trigger points
- SWD → Mild thermal x 20min (1ΔT setting)

For chronic pain and inflammation (generally 6 weeks and on) -

- E-Stim NMES → PENS can reduce pain by increasing circulation and improving neuromuscular performance. Increased circulation brings O2 and nutrients and removes waste products. Enhanced muscle performance can provide greater joint support and improve movement patterns.
- E-Stim TENS → IFC motor-sensory 30 min to involved area or at segmental level
- E-Stim TENS → IFC or LVPC motor over corresponding acupuncture points for longer lasting pain relief
- Ultrasound → moderate to vigorous thermal to involved area (2ΔT) or acupuncture/trigger points, 1 min/point
- SWD → moderate to vigorous thermal to involved area (2 to 4ΔT) x 20min

For post surgical pain –

- For patients who are hypersensitive and avoid movement and activity
- E-Stim TENS → Sensory IFC to the involved area, Nerve Block
- SWD → Subthermal to involved area (VAR setting) – Warning if metal in tx area (staples, implants, etc.)
- IR combined with e-stim

For OA Pain -

- E-Stim NMES → Priority: PENS to increase local circulation and for neuromuscular re-education
- E-Stim TENS → IFC motor sensory x 30 minutes
- Ultrasound → Subthermal US to local area (5 min 2x ERA) and over acupuncture/trigger points
- SWD → Subthermal x 30 minutes (VAR setting)
- IR combined with e-stim

For RA pain -

- E-Stim NMES → Priority: PENS to increase local circulation and for neuromuscular re-education
- Ultrasound → Subthermal US to local area (5 min 2x ERA) and over acupuncture/trigger points
- For hand RA: Underwater with US at continuous and 0.5 w/cm, 5 min palmar and 5 min dorsal
- IR combined with e-stim

For Neuropathic Pain (CRPS/RSD, Herpes Zoster and Phantom Limb Pain) -

- Initially → E-stim TENS Sensory LVPC or Sensory IFC. Also use subthermal ultrasound to corresponding acupuncture points, even if away from site (can include points on contralateral limb).
- E-stim NMES → PENS Triphasic for neuromuscular re-ed, to decrease muscle guarding and reciprocal inhibition from pain
- As condition improves, can switch to Motor LVPC or Motor IFC

General modality overview -

- Ultrasound works well for localized pain and trigger/acupuncture points. Start with the most conservative option (subthermal or 1ΔT) and increase intensity as needed. Remember to treat 2x the size of the sound head per application. For larger areas, do two (or more treatments) or use SWD.
- SWD works well for general joint pain, pain with edema, and hematomas
- Estim activates the endorphin system. If patient is taking narcotic agonist type pain meds, motor level stimulation may not work as well. Instead, use Sensory, Sensory-Motor, or Motor-Sensory protocols.
- Infrared has an advantage in treating muscle and joint pain because there are few contraindications. Also it generates somewhat unique physiologic effects such as breaking down prostaglandins to reduce inflammation and pain, and stimulates nitrous oxide synthesis that increases blood flow.

DOCUMENTATION

- Use objective measures repeatedly during patient courses of therapy; at baseline and to document therapy progress. Also document medication usage patterns; specific drugs, frequency of use, doses.
- Key items to report – Treatment impact on functional performance (e.g. ADL’s, gait) and underlying factors (ROM, strength, etc), as well as patient demeanor and participation in therapy and facility activities