Nervous – Tone Management
SECTION: 7.12
PURPOSE:
To normalize tone, maintain soft tissue length, re-educate movement of muscles and increase patient safety.

CONSIDERATIONS:
1. Patients may experience a change in muscle tone following neurological infarct. Correct management of abnormal tone is imperative for recovery of normal movement.
2. Lack of tone management leads to contracture, poor body alignment, abnormal motor movements and pain.
3. There are many techniques used by therapists to manage tone. This procedure is focused on the measures that can be utilized by the nurse or aide.
4. Problems with tone can occur at any time, interfering with safety during activities, such as transfers, monitoring vital signs or turning a patient. Knowing how to manage tone during such situations will increase safety and patient confidence.
5. Any intervention to address tone should be performed in a slow, steady manner to prevent further excitation of tone.
6. Clonus is a spasmodic muscle contraction/relaxation that causes an extremity to rapidly shake.

EQUIPMENT:
Hot pack/cold pack
Splint

PROCEDURE:
1. In the event of flaccidity, the clinician should ensure safety of the effected limb when moving or positioning the patient.
2. In the event of spasm or clonus, reassure the patient that change in tone is often seen in those who have had a neurological infarct.
3. Encourage relaxation to help decrease any increase in tone.

Weight-Bearing:
1. Weight-bearing on a limb with increased tone is an excellent way to help extend the muscle tissue and decrease tone.
2. This can be performed on the upper extremity as well as the lower extremity.
3. Slowly straighten the affected muscle to obtain full extension of the joint.
4. Place the foot or hand, palm down, on a flat surface.
5. Slowly shift the patient’s weight to the effected area.
6. Hold this position until reduction of tone is noted.
7. Be sure to maintain the patient’s body alignment while they are weight-bearing on the limb.
8. Daily weight-bearing can manage and reduce tone.

Splinting:
1. Splinting is effective for both decreased tone and increased tone.
2. Splints lengthen muscle tissues and prevent contractures in the event of increased tone.
3. Splints position and guard limbs in the event of decreased tone.
4. Follow the instructions set up by the physician or therapist for the wearing schedule.
5. Observe the patient’s skin for signs of skin breakdown.

Positioning:
1. Positioning is imperative for both flaccid and spastic changes in tone.
2. See Positioning for Prevention of Contractures, for the complete procedure.

Cold Packs:
1. Cold packs can be beneficial in reducing tone and the pain associated with increased tone.
2. Towel-wrapped cold packs should be applied for 5 to 10 minutes to the painful area.
3. Check the skin after 2 to 3 minutes to ensure good tolerance to the treatment.
4. In the event of poor tolerance, the cold pack should be withdrawn.

Hot Packs:
1. Hot packs can help relax the muscle fibers prior to other interventions.
2. Heat should be applied for no longer than 20 minutes.
3. Check the skin after 2 to 3 minutes to ensure good tolerance to the treatment.
4. In the event of poor tolerance, the hot pack should be withdrawn.

Passive Range of Motion:
1. Passive range of motion lengthens muscle tissue and is essential in preventing contractures for both flaccid and spastic changes in tone.
2. See Passive Range of Motion, for the complete procedure.

Patient/Caregiver Education:
1. Due to the chronic nature of abnormal tone, patient and caregiver education is imperative in order to continuously manage tone when clinicians are not present.
2. Instruct patients to be aware of what stimulates and relieves spasms.
3. Teach relaxation techniques to relieve spasms.
4. To maintain muscle length, teach gentle passive range of motion.

AFTER CARE:
1. Inform the nurse or therapist of any adverse reactions, changes in tone or unusual pain.
2. Monitor the vital signs and report any adverse findings.
3. Document in the patient’s chart the tolerance to the session.

REFERENCES: