

# NMES QUICK TIPS

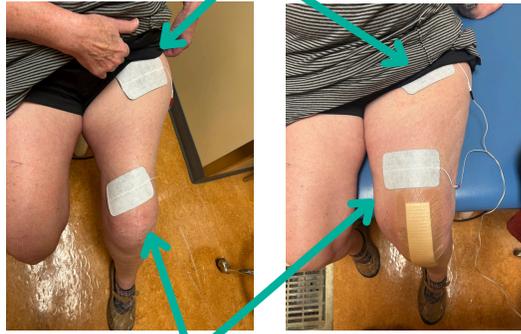
## GENERAL REMINDERS

### TKA PROGRAM PARAMETERS

Time	15 minutes
Rate	50 Hz
Width	400 $\mu$ s
Waveform	Symmetrical
Off Time	10 seconds
Cycling	1 channel
Ramp + (CH1 & CH2)	2 seconds
On Time (CH1 & CH2)	10 seconds
Ramp - (CH1 & CH2)	0 seconds
Lag (CH1 & CH2)	0 seconds

### PAD PLACEMENT

Proximal pad as high as possible and slightly lateral



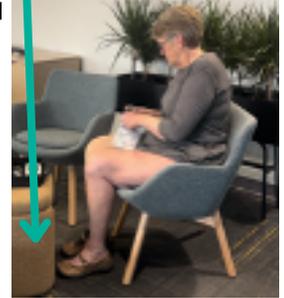
Distal pad as low as possible, as close to the incision as possible and slightly medial

*Goal: Cover as much of the quad as possible*

### HOME USE SCHEDULE

15 minutes, 2x per day, for 6 weeks

- Start the day after surgery
- Patient seated with sturdy object blocking leg from kicking
- Adjust chair height based on knee ROM



## VIEW USAGE DATA

**REMINDER: Don't CLEAR the data when you view it!** The data will only be cleared by the site champion after they document the final usage data in REDCap, after a patient is done using NMES (6 weeks of usage).



1. Press **HOME** button

2. Select **CONFIG**

3. Select **DATA**

4. **Scroll** using arrow buttons on the left. **Document all fields: SESSIONS, TOTAL HOURS, AVERAGE TIME, CH1 INTENSITY, CH2 INTENSITY**

## CHANGE PARAMETERS

1. Unlock the settings for NMES Large Muscle Group



1. Press **HOME** button

2. Select **CONFIG**

3. Select **LOCKS**

3. **Scroll** using arrow buttons on the left until screen displays **NMES L. MUSCLES**

4. **Scroll** using arrow buttons on the right until an **OPEN** lock appears (meaning unlocked)

2. Change the parameters



1. Press **HOME** button

2. Select **NMES L**

3. Select **CUSTOM**

4. **Scroll** using arrow buttons on the right to view each parameter. **Scroll** using arrow buttons on the left until desired setting is displayed

3. Lock the settings for NMES Large Muscle Group: Follow the unlock instructions and change to a **CLOSED** lock

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## TROUBLESHOOTING

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### DOUBLE CHECK SET UP

- Check that leads are connected securely to the device and to the pads
- Check that electrodes are making good contact with skin and are moist. Replace if they are too worn
- Check that battery power is adequate. Replace batteries if low and/or suspected lower power output (e.g., low contraction response with high intensities)

### PSYCHOLOGICAL STRATEGIES TO IMPROVE PATIENT COMFORT

- Relaxation techniques (e.g., Lamaze breathing, talk through the 10 seconds with small tasks)
- Light active kick with stimulation
- Clasp fingers and pull apart
- Give the patient control; let them adjust intensity

### CHANGE PARAMETERS (*LAST RESORT*)

If above strategies do not improve patient tolerance, try changing the parameters on the device. Instructions to change parameters are on the back of this sheet.

- **Contraction is too strong** → Change pulse width to 300  $\mu s$
- **Contraction comes on too strong** → Increase ramp up (+) time to 3 seconds
- **Excessive muscle soreness or fatigue** → Increase off time (time between contractions) to 20 seconds