## Hand Placement:

1. Place stimulating electrodes directly over ulnar groove just proximal to wrist crease.
2. Wrap J-shaped cutout connecting $1 \& 2$ around inside of thumb and affix $G$ to index finger.

Note: Numbers reverse on left hand.

## Foot Placement:

1. Place stimulating electrodes on posterior tibial nerve behind medial malleolus.
2. Wrap1 \& 2 around flexor hallucis brevis and affix $G$ distally.

Note: G may only extend to ball offoot.

3. Connect electrode to cable and tape cable to patient.


## Tips:

- Expect faster muscle recovery of the face and diaphragm.
- Patient can take spontaneous breaths while in PTC.
- TOFC $=4$ on the face can equate to $\mathrm{TOFC}=1$ or PTC at the hand.
- If EMG amplitude is low or decreases after repositioning, increase stimulation currentMenu $\rightarrow$ Stimulation Parameters
- Extubate after TOF ratio of $\geq 90 \%$.
- Reset monitor after every case.

Menu $\rightarrow$ New Session $\rightarrow$ OK

TRAIN OF FOUR MONITOR

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## EMORY <br> HEALTHCARE

## EHC Guidelines for Reversal of Neuromuscular Blocking Agent

These guidelines do not substitute for clinical judgment. There are clinical situations that these guidelines do not apply. For safe practice, patients should only be extubated if the TOF is $\mathbf{\geq 9 0 \%}$.

Reversal of Rocuronium or Vecuronium

| TRAIN-OF-FOUR <br> ASSESSMENT AT ULNAR | REVERSAL AGENT | NOTE |
| :--- | :--- | :--- |
| Train of four ratio $\geq 90 \%^{*}$ | None needed | Requires quantitative <br> twitch monitor* |
| TOF count $=4$ | Neostigmine 70 <br> $\mathrm{mcg} / \mathrm{kg}+\mathrm{glycol} .15$ <br> $\mathrm{mcg} / \mathrm{kg}$ | IBW |
| TOF ratio $\leq 50 \%^{*}$ or <br> TOF count $=23^{*}$ | Sugammadex $2 \mathrm{mg} / \mathrm{kg}$ | ABW |
| TOF count $=1^{*}$ or <br> TOF count $=0$ and PTC $\geq 1$ | Sugammadex 4mg/kg | ABW |

## Recommendations:

1. Patients who receive nondepolarizing neuromuscular blockade and will be extubated in the operating room should have the neuromuscular blockade monitored at adductor pollicis with a quantitative twitch monitor when available and with qualitative monitoring when not
2. If only qualitative TOF is used, neostigmine may be used if $4 / 4$ twitches are elicited. If there are fewer than $4 / 4$ twitches, sugammadex may be appropriate.
3. If quantitative train of four is used and:
a) TOF is $\geq 90 \%$, no neuromuscular reversal is necessary
b) TOF count is 4 , reversal with $70 \mathrm{mcg} / \mathrm{kg}$ neostigmine $+15 \mathrm{mcg} / \mathrm{kg}$ glycopyrrolate is recommended
c) TOF Count is $\geq 1$, Sugammadex $2 \mathrm{mg} / \mathrm{kg}$ ABW
d) PTC $\geq 1$ - TOF count $<1$, Sugammadex $4 \mathrm{mg} / \mathrm{kg}$ ABW
4. If a patient has no PTC, consider:
a) Waiting to reverse until PTC $\geq 1$ (preferred) or
b) Administer $4 \mathrm{mg} / \mathrm{kg}$ Sugammadex, wait 10 minutes, and then assess PTC. Follow PTC rescue algorithm (Table 2).
5. For emergency uses, sugammadex $16 \mathrm{mg} / \mathrm{kg}$ ABW may be administered for rapid reversal of rocuronium or vecuronium
6. If the calculated dose of sugammadex is $<300 \mathrm{mg}$, consider administering 200 mg and reassess the TOF after 5 minutes to see if additional sugammadex is required.
7. If the calculated dose of sugammadex is $>300 \mathrm{mg}$, utilize a 500 mg vial for your dose

## EMORY

HEALTHCARE

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