

# NEOSTIGMINE ADMINISTRATION TO IMPROVE SUGAMMADEX-MEDIATED NEUROMUSCULAR BLOCKADE REVERSAL IN MYASTHENIA GRAVIS

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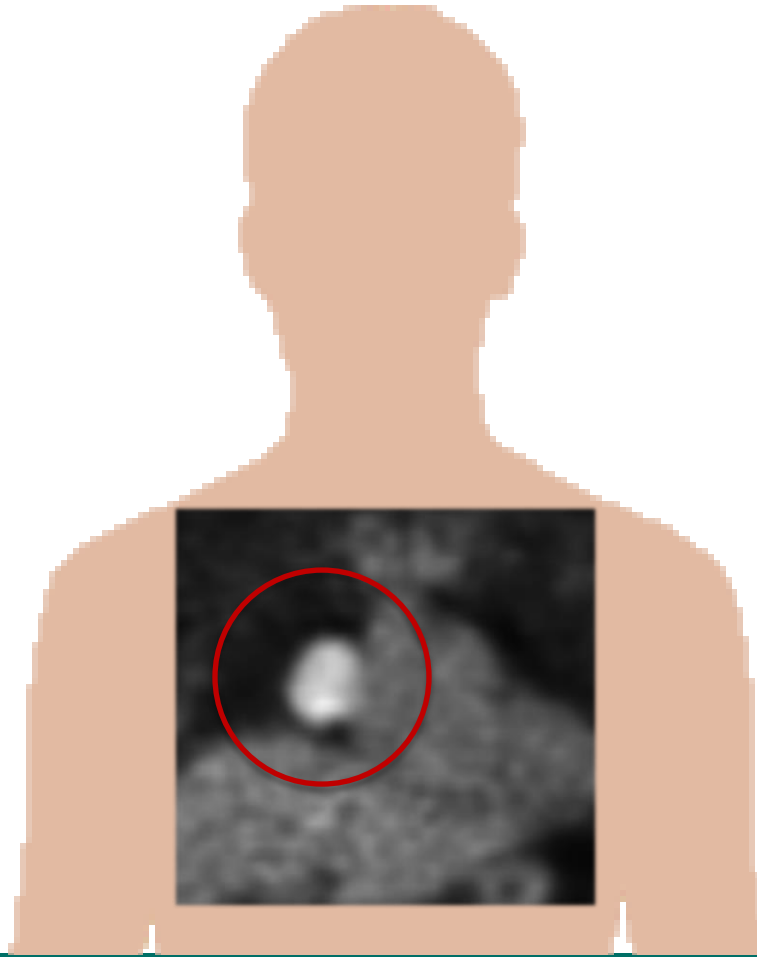


## SYMPTOMS:

- Extremity weakness
- Fatigue
- Blurred vision

## PYRIDOSTIGMINE THERAPY:

- 150mg PO QID
- 180mg PO nightly



## ANTERIOR MEDIASTINAL MASS:

- Likely thymoma

## TRANSTERNAL THYMECTOMY

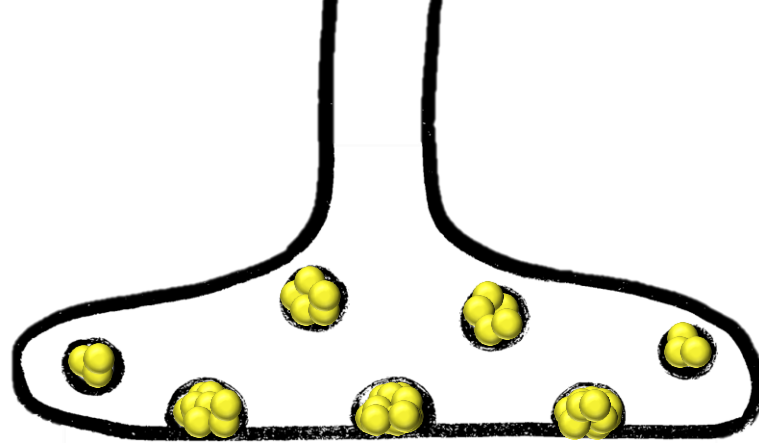
## PLASMAPHERESIS

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● Ach

● Ach receptor

Y autoantibody against Ach receptor

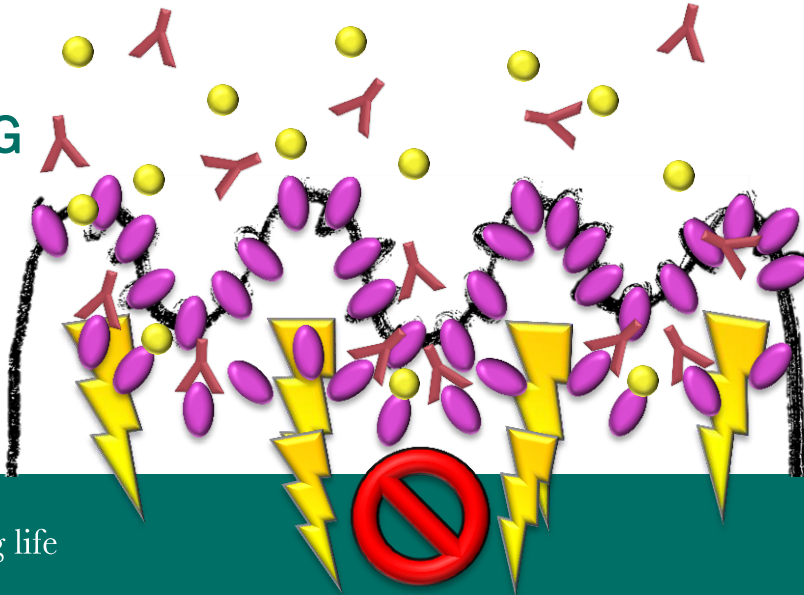


## SUCCINYLCHOLINE:

- Ineffective

## NON-DEPOLARIZING NMB AGENTS:

- Enhanced efficacy



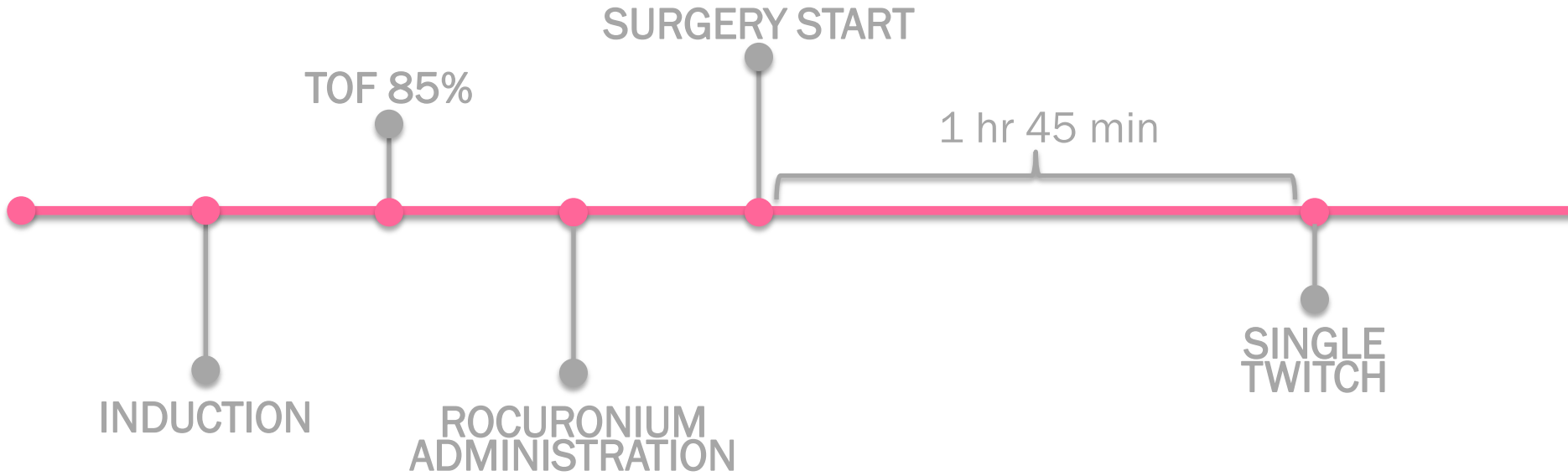
## TRADITIONAL REVERSAL:

- Unpredictable

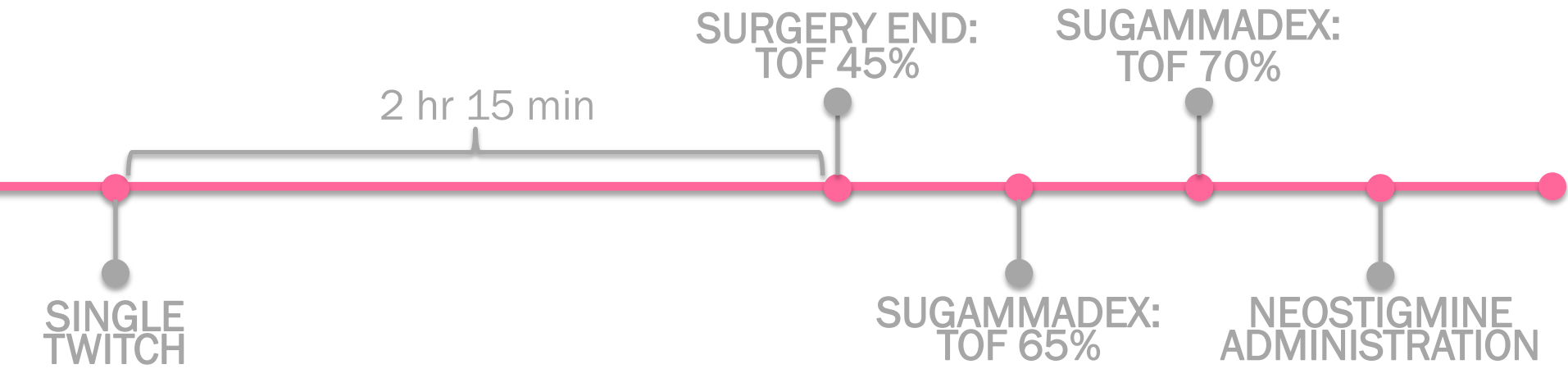
## SUGAMMADEX:

- Safe
- Effective
- More predictable

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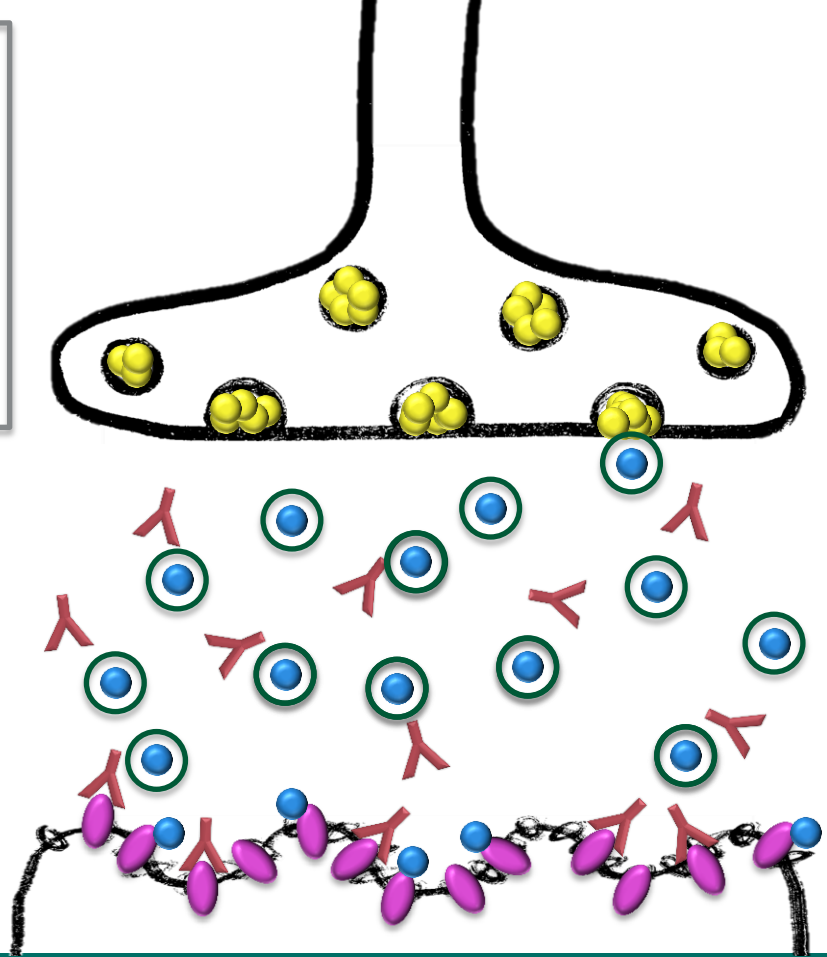


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- Ach
- Ach receptor
- Y autoantibody against Ach receptor
- rocuronium
- sugammadex

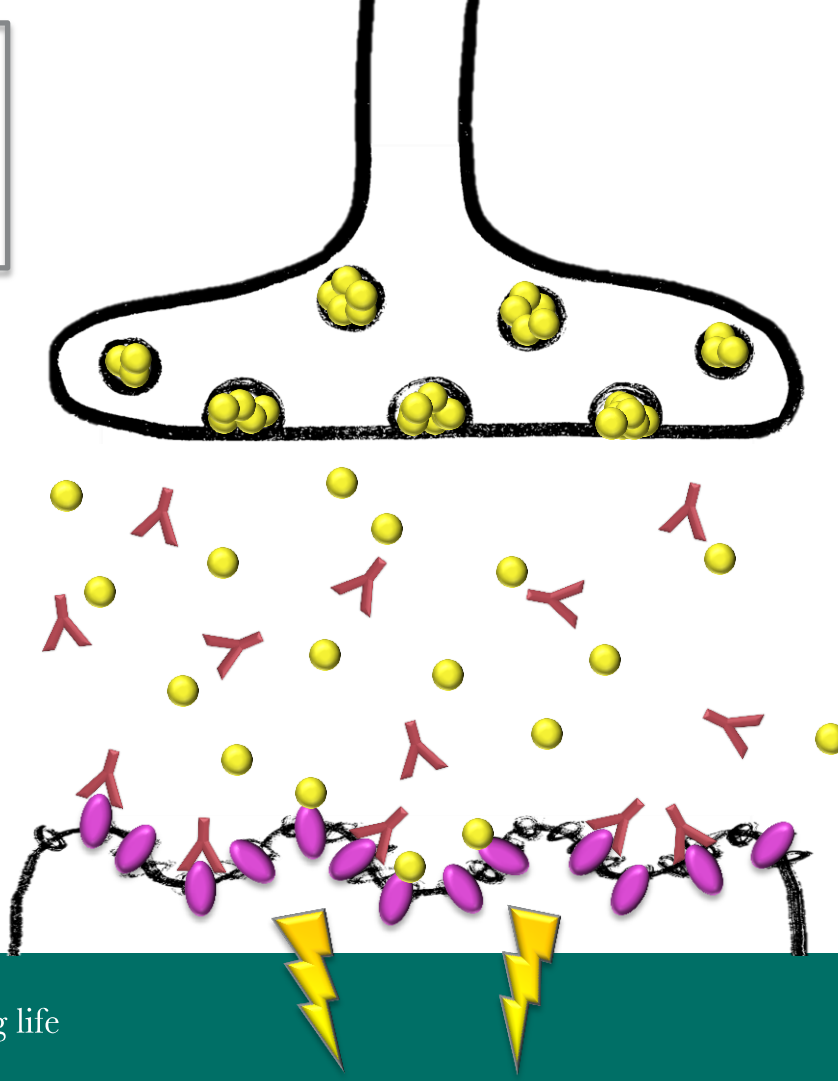


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## MYASTHENIC CRISIS:

acute deterioration  
necessitating intubation  
or  
delaying post-operative  
extubation

6% - 34% of patients  
undergoing transternal  
thymectomy

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SURGERY END:  
TOF 45%

SUGAMMADEX:  
TOF 70%

SUGAMMADEX:  
TOF 65%

NEOSTIGMINE  
ADMINISTRATION  
TOF 98%

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**Sugammadex is safe and effective in myasthenia gravis**

**Myasthenic crisis can cause prolonged weakness despite appropriate reversal with sugammadex**

**Neostigmine reduces weakness caused by myasthenic crisis**

*Bedlack, R. et al. (2002) J Clin Neuromusc Dis 4:40–42.*

*Sugi, Y. et al. (2013) A&A Case Reports 1: 43-45.*