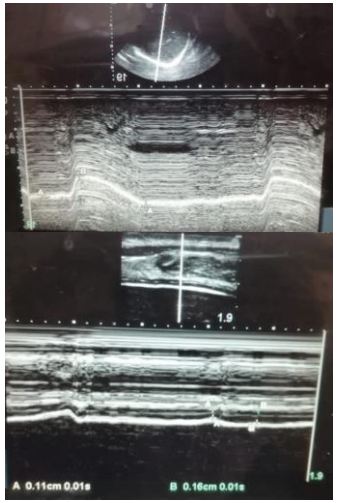
Ultrasonographic assessment of diaphragm function to predict need for assisted ventilation and liberation from mechanical ventilation in patients with neuromuscular disorders: an observational, cohort, pilot study.

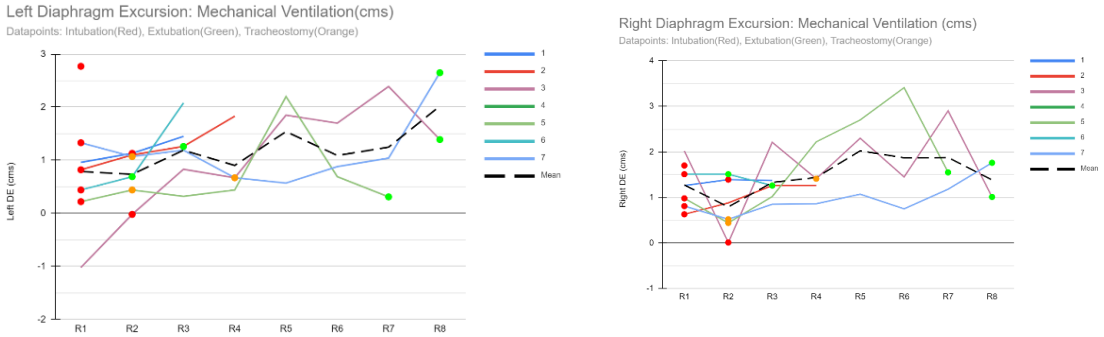
Nair S, More A, et al.



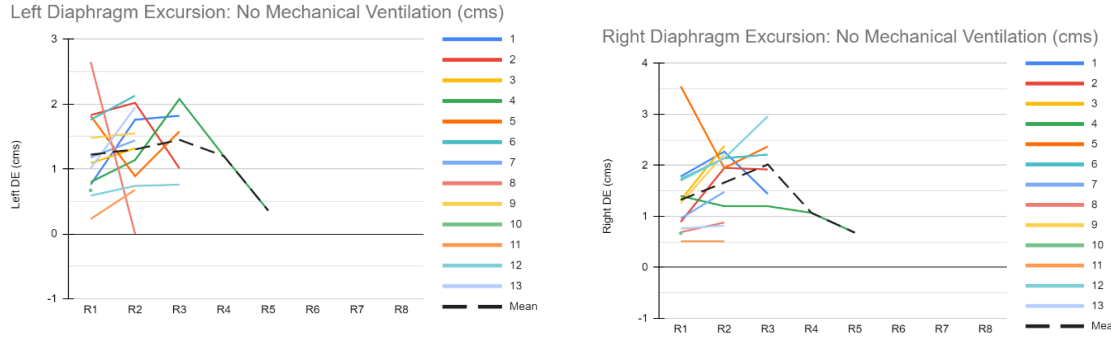
No. of patients- n= 20
Myasthenia Gravis-9,
Guillian Barre Syndrome-11
Vent- 7, non-vent-13

Results:

- Both sided diaphragm excursions (DE) in second reading and right sided DE in the third reading (within 48-72 hours of admission) were significantly lower in ventilated than non-ventilated patients.
- Baseline left DE < 1 cm and decrease in right DE > 50%, predicted significant increased risk of need for ventilation.
- Among the ventilated patients, those with an increase in DE on either side had higher ventilator free days.



DE readings for ventilated NMS patients
Each dot represents one patient.



DE readings for non-ventilated NMS patients
Each dot represents one patient.

Conclusion: Serial DE measurements help predict need for assisted ventilation and appropriate time for weaning in NMS patients. Larger trials are needed to formulate a guideline.