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Purpose
To study the effect of Thixotropy conditioning and pneumatic machine exercise (Thixo-Ex) to the mobility of thorax, respiratory function, and exercise capacity of COPD patients.

Objects
Stable COPD patients: 12 patients (Male only, average age 74.2 ± 4.4, %FEV1.0 48.4 ± 11.9%)

Method
Perform the inspiratory muscle exercise using HUR (Thixo-Ex) and Threshold IMT. Before and after exercise, the following issues are evaluated and analyzed.
- Chest expansion
- Respiratory function
- Distance of 6 minutes walk
- Breathing difficulties while walking

For Thixo-Ex (HUR), the resistance was 10% of maximum muscle strength, 5 repetitions x 3 sets. The same resistance and repetitions were applied to IMT EX.

Result
For Thixo-Ex, the result of ensiform chest expansion variability (Before and after the exercise) and breathing difficulties while walking were positively correlated with %FRC. The effect of Thixo-Ex differed depending on the pulmonary hyperinflation.

Consideration
When we focus only on Thixo-Ex, the breathing difficulty while walking and %FRC have positive correlation according to the test result. Therefore for COPD patients with less pulmonary hyperinflation, breathing difficulties can possibly be reduced by doing Thixo-Ex.