

# EFFICACY OF THE INTEGRATION OF THE KINESIOTAPING METHOD IN THE TREATMENT PROTOCOL FOR PATIENT WITH COPD

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## Aim of the study

The aim of the study is to verify if the diaphragm posterior application and the functional application of the back extensors could improve the usual rehabilitation protocol based on specific exercises in patients affected by COPD.

## Material and method

At the patient's hospital admission the physiotherapist evaluated the clinical condition with standardized tests identifying the basic condition (T0). The 19 patients included in the study were those classified as grade 3-4. They were randomly divided in 2 groups. 10 patients in Group A followed the normal rehabilitation protocol based on exercises and respiratory rehabilitation for 10 sessions, 9 patients in the group B followed the same protocol plus the Kinesio tape application for 1 month. Both groups were reevaluated at the end of the treatment (T1).

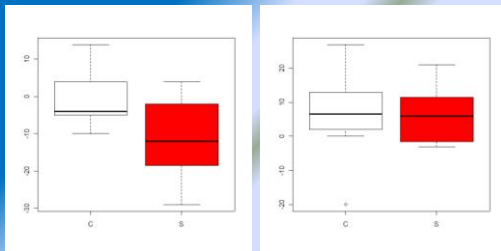
The outcome measures were: Dyspnea evaluation (BDI-TDI); Physical performance: WT6'; Strength of the respiratory muscles (MIP and MEP); Arm capacity (arm Test); Dyspnea evaluation after physical effort (modified BORG scale). The data results were compared using statistical analysis: T Student test to verify the homogeneity of the groups and Test U of Wilcoxon-Mann-Whitney bilatero for every outcome with level of significance  $p < 0.1$ .

## Results

The MIP value has a significant statistical difference with  $p < 0.1$ . In almost all the outcome measures the statistical analysis shows a difference between the groups, even if it is not significant. It could be considered a pilot study for future clinical trial with more patients.



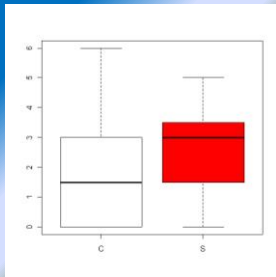
Strenght of the respiratory muscles:  
MIP and MEP



$p = 0,09004$   $p < 0,1$

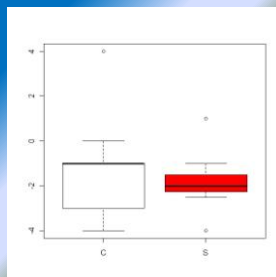
$p = 0,7893$

Dyspnea evaluation in the ADL:  
BDI-TDI index



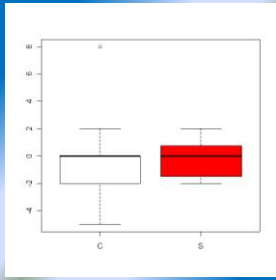
$p = 0,3156$

Dyspnea evaluation after physical  
effort: modified BORG scale after arms  
test



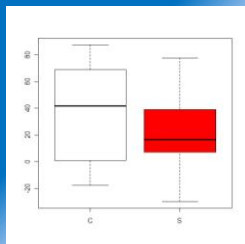
$p = 0,4118$

Dyspnea evaluation after physical effort: modified BORG scale after WT6

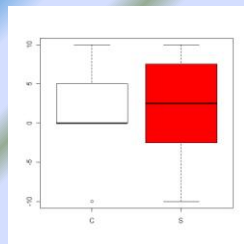


p= 0,89

Physical performance:  
WT6 (meter) – arms test (watt)



p= 0,5049



p= 0,7076