## **European Respiratory Society Annual Congress 2012**

**Abstract Number: 2809** 

**Publication Number:** P3527

Abstract Group: 1.2. Rehabilitation and Chronic Care

Keyword 1: Asthma - management Keyword 2: Physiotherapy care Keyword 3: Rehabilitation

**Title:** Buteyko technique (BT) as an adjunct in pulmonary rehabilitation (PR) in patients with asthma and dysfunctional breathing – First results of an ongoing prospective controlled study

Mr. Thomas 12461 Schmid DieSchmidls@gmx.de ¹, Mr. Alois 12462 Wastlhuber rosmarie.wastlhuber@web.de ¹, Dr. Oliver 12463 Göhl oliver.goehl@klinik-bad-reichenhall.de ¹, Dr. Dragan 12464 Stojanovic dragan.stojonaovic@klinik-bad-reichenhall.de MD ¹ and Dr. Konrad 12465 Schultz konrad.schultz@klinik-bad-reichenhall.de MD ¹. ¹ Fachbereich Pneumologie, Klinik Bad Reichenhall, Zentrum für Rehabilitation, Pneumologie und Orthopädie, Bad Reichenhall, Germany, 83435 .

**Body:** Background: BT is recommended as an additional therapeutic module in asthmatics. So far there is inconclusive evidence of the effectiveness of BT as part of standard PR. Method: From November 2011 until January 2012 in our clinic 258 asthmatics underwent a 3-week inpatient PR. Of these 36% were characterised by dysfunctional breathing (Nijmegen Questionnaire, NQ≥23). Of those, the control-group patients (CG; n=21) received standard PR consisting among others of physical training, patient education, breathing therapy and psychosocial support. The intervention group (IG, n=39) additionally underwent at least 6 Buteyko sessions. The indication for enrolling patients to the BT was decided upon by the responsible physician. Primary outcome was the total score of the asthma control test (ACT), secondary outcome was the NQ-score. Statistics are based on data that resulted in complete data pairs of ACT and NQ at baseline (t0) and end of PR (t1). Results (mean±SD):

	IG (PR+BT)			CG (Standard PR)			
	t0	t1	t0	t1			
ACT [5-25]	14.1±5.1	18.9±3.9; +4.8; p=0.0000	15.2±5.3	17.9±4.6; +2.7; p=0.0194			
NQ[0-64]	29.8±6.4	18.4±9.0; -11.4; p=0.0000	28.7±5.8	21.1±8.4; -7.6; p=0.0001			
	between groups: ACT p=0.4483; NQ p=0.0784						

Discussion: Considering all asthmatics with dysfunctional breathing, our PR program resulted in significant improvements in ACT (+4,4) and NQ (-8,8). The IG tended to reach greater improvements in ACT (especially in items 2, 3 and 4, i.e. shortness of breath, asthma symptoms at night, rescue inhaler) and NQ than the CG, but these trends weren't significant between groups. Conclusion: BT could be a promising adjunct to PR.