

# European Respiratory Society Annual Congress 2012

**Abstract Number:** 7088

**Publication Number:** P2732

**Abstract Group:** 4.2. Sleep and Control of Breathing

**Keyword 1:** Sleep disorders **Keyword 2:** Pulmonary hypertension **Keyword 3:** Chronic disease

**Title:** Sleep-related breathing disorders in patients with schistosomal cor-pulmonale

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**Body:** Schistosomiasis has long been an endemic disease in Egypt and an important cause of pulmonary hypertension. Objectives: We aimed to investigate the clinical and polysomnographic features of sleep-related breathing disorders (SRBD) in patients with schistosomal cor pulmonal and to evaluate their effects on pulmonary hemodynamics. Patients and methods: We studied 10 stable patients with schistosomal pulmonary hypertension (mean age was 43.7) and 10 healthy volunteers matched. All underwent overnight polysomnography. Results: The mean AHI in patients group was 20/h while in the control group it was 2.3/h. 80 % of the patients were found to have an AHI >10/h and 60% had moderate to severe sleep apnea (AHI  $\geq$  15/h). In addition, the majority of the patients (80%) spent > 30% of the night with an arterial oxygen saturation < 90%. SRBD were not correlated with anthropometric measures, spirometry nor with the typical symptoms of SA such as excessive sleepiness as assessed by ESS. More importantly, SRBD were significantly associated with measures of pulmonary hypertension severity, and patients with moderate to severe SA had more impaired cardiovascular function as indicated by more severe right ventricular dilatation ( $p=0.036$ ) than patients with mild sleep apnea. Conclusion: SRBD are highly prevalent in patients with schistosomal pulmonary hypertension (PH). Also, the SA severity was correlated with more advanced PH and more severe cardiovascular impairment. Therefore in the evaluation of patients with schistosomal PH, polysomnography or an ambulatory cardiorespiratory sleep study seems justified to identify potentially treatable SRBD that may challenge the already compromised cardiovascular system.