

**SUITABILITY OF NEW METHODS FOR PULSEOXIMETRIC DATA ANALYSIS
IN SCREENING DIAGNOSTICS OF RESPIRATORY DISORDERS DURING SLEEP
(RDDS)**

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Abstract:

Pulseoximetry is the simplest and the most reliable screening test for diagnosing of Respiratory Disorders During Sleep. Assessment of blood saturation with oxygen is a basic parameter to determine the degree of SAS (Sleep Apnea Syndrome) progression. The authors describe the conventional, but also their own newly developed methods for pulseoximetric data analysis, tested for over 4500 patients. The purpose of these new methods is to give physicians easier and more simple means for evaluating patients after all-night blood oxygen saturation monitoring. Inventiveness of this method lies in the possibility of examining of dynamics of blood oxygen saturation during patient's sleep. All received data are stored and can be reported in special 1-hour step intervals to facilitate comparative analysis of subsequent examinations and assess effectiveness of the treatment.

Keywords: biomeasurement, pulseoximetry, Respiratory Disorders During Sleep, Sleep Apnea Syndrome