



Fund “Nauka” Project № 20024 Resume – Competition-Based Session 2020:

“Clinical significance of abdominal visceral adipose tissue in patients with sleep related respiratory disorders”

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Abdominal obesity has greater predictive value for the severity of diseases in which it is an important risk factor. Epidemiology studies in different groups determine weight as the most important risk factor for OSA. In Wisconsin Sleep Cohort study, a standard deviation of BMI is associated with a 4-fold increase of OSA morbidity. Data from longitudinal studies like Sleep Heart Health Study, Wisconsin Sleep Cohort Study, the Cleveland Family Study show that increase of weight accelerates the progression of the OSA and advance of its moderate to severe form.

The **purpose** of the current study is to assess and evaluate the abdominal visceral fat as an independent and prognostic risk factor for the severity of the SRRD.

Patients with established SRRD, aged 18 and more, will be included with signed informed consent.

The assessment uses abdominal CT with a proved protocol for abdominal fat. The method allows distinction between subcutaneous and visceral fat, and the surface of the latter correlates and is used for assessment of the risk for obesity-related diseases, in particular SRRD.

With the successful implementation of the project, it is expected for the first time in Bulgaria to obtain data for a direct relationship between the severity of SRRD and excessive abdominal visceral fat deposition as a prognostic risk factor for clinical manifestations. Risk stratification will be performed in patients with SRRD and abdominal visceral obesity. The phenotypic characteristics of patients with SRRD in Bulgaria will be defined.