International Conference on

## METABOLOMICS AND DIABETOLOGY

May 23-24, 2018 | New York, USA

## The role of polysomnography for detection of OSA in patients with type 2 diabetes in the Uzbek population

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**Introduction:** According to the International Classification of Sleep Disorders in type 2 diabetes, the risk of obstructive sleep apnea (OSA) in middle-aged people ranges from 18% to 36%. In a report by S D West et al., the incidence of sleep apnea in patients with diabetes is estimated at 23% compared with 6% in the general population. In a recent study, AS Peltier et al., it was found that 79.2% of patients with OSA had a violation of glucose tolerance and 25% were first diagnosed with diabetes mellitus. There is a high prevalence of type 2 diabetes and related metabolic disorders among patients with obstructive sleep apnea syndrome (OSAS). Sleep apnea has a negative effect on the function of the beta cells of the pancreas and insulin sensitivity.

**Purpose:** The purpose of this study was to detect the OSA by results of the Stop-bang questionnaire in patients with type 2 diabetes using polysomnography.

Material & Methods: We interviewed 150 women on the Stop-bang questionnaire, 40 women had a high risk of developing OSA, patients underwent polysomnography for confirmation of OSA: average of age 52.7; IAG 56.4; BMI-32.4; Hb1C - 7.9%; Desaturation -80. The same is divided by the severity of the course of OSA, by units of apnea/hypopnea index: mild 5-15, moderate 16-30, severe ≥30.

**Results:** According to the results, low degree of OSA-11 (27%) in women, an average severity of OSA-12 (30%), a severe degree of 17 (42.5%) in patients with type 2 diabetes, OSA revealed obesity of grade three and a high level of Hb1C (8.1%). The results of the study show that OSA is independently linked to insulin resistance of glucose, thus can lead to increased blood sugar levels.

**Conclusion:** The Stop-bang questionnaire is one of the promising methods for detecting OSA and direction patients for polysomnography. Patients were recommended to comply with HLS, the use of intraoral devices and CPAP therapy.

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