

European Respiratory Society Annual Congress 2012

Abstract Number: 2181

Publication Number: P3867

Abstract Group: 4.2. Sleep and Control of Breathing

Keyword 1: Sleep disorders **Keyword 2:** Sleep studies **Keyword 3:** No keyword

Title: Association of cardiovascular diseases, metabolic syndrome and obstructive sleep apnea: Data from 1,000 Japanese PSG cases

Dr. Akemi 10838 Matsuo atakami-aaa@umin.ac.jp MD ^{1,2}, Dr. Makoto 10839 Kosaka m.kosaka@hotmail.co.jp MD ^{1,2}, Dr. Nobumitsu 10841 Kobayashi konomeru@shinshu-u.ac.jp MD ², Dr. Toshimichi 10845 Horiuchi toshi@shinshu-u.ac.jp MD ², Dr. Toshihiko 10862 Agatsuma t.agatsuma@nagano-hosp.go.jp MD ², Dr. Atsuhito 13375 Ushiki atsuhito@shinshu-u.ac.jp MD ², Dr. Shintaro 13384 Kanda skanda@ncc.go.jp MD ² and Prof. Keishi 13848 Keishi keishik@shinshu-u.ac.jp MD ². ¹ Divisions of Respiratory Medicine and Sleep Respiratory Center, Shinonoi General Hospital, Nagano, Japan, 3888004 and ² First Department of Internal Medicine, Shinshu University School of Medicine, Matsumoto, Nagano, Japan, 3908621 .

Body: Background: Obstructive sleep apnea (OSA) is usually associated with cardiovascular diseases and also metabolic syndrome including diabetes, lipid metabolism Objectives: The aim of the study was to evaluate the prevalence of hypertension (HT), diabetes mellitus (DM), hyperlipidemia (HL), and cardiovascular diseases (CVD) in the Japanese with proven OSA. Methods: We retrospectively analyzed the data accrued in 1,000 patients who underwent the first time polysomnography (PSG) in our hospital from June 2001. They were 836 males and 164 females, the mean age of 54.5 years, the mean body mass index (BMI) of 26.0kg/m², and the mean apnea-hypopnea index (AHI) of 38.0. We examined the association between OSA and cardiovascular diseases, metabolic syndrome. Results: 938 between 1,000 patients were diagnosed with OSA. 41.2% of patients with OSA had HT compared with 21.0% of patients with non-OSA. And the OSA patients had 18.6% of DM, 45.3% of HL, 25.2% of liver dysfunction, 7.6% of CVD, comparing with 6.5% of DM, 29.0% of HL, 19.4% of liver dysfunction, and 3.3% of CVD in the non-OSA patients. In addition, the OSA patients treated with continuous positive airway pressure (CPAP) had 69.7% of HT, 23.8% of DM, 77.1% of HL, 40.7% of Liver dysfunction, and 21.2% of CVD. The blood pressure was reduced significantly by CPAP. Conclusions: The risk of HT, DM, and CVD in OSA patients was almost two times more than those of non-OSA patients. We suggested that the OSA patients with higher severity OSA patients tended with a higher rate of complications.