

Case Report: Discussion about phenotypic subtypes of obstructive sleep apnea from clinical viewpoints

Background:

Phenotypic subtypes of obstructive sleep apnea (OSA) is mentioned recently but its clinical application is still doubted.

Case Presentation:

This 50-year-old male patient has coronary artery disease, hypertension and diabetes mellitus. He suffered from acute myocardial infarction and accepted coronary stent insertion. There were snoring, difficulty to fall asleep, and poor spirit daytime noted so he went to our sleep center for help. His body mass index was 41.6 kg/m² and Epworth sleepiness scale (ESS) showed 5. Polysomnography showed severe obstructive sleep apnea hypopnea (Apnea-hypopnea index: 52.7) and autonomic dysfunction. The mean oxygen saturation was 90% and oxygen desaturation index was 52.4/hour. Weight control was educated to him and continuous positive airway pressure (CPAP) therapy was initiated. His adherence to CPAP therapy was well (86% more than 4 hours). His sleepiness in afternoon, dizziness and easy to wake up improved little but there were still poor sleep and fatigue noted.

Discussion:

For this patient, further treatment of CPAP or surgery was suggested at that time. His AHI (REM / Non-REM) < 2, indicating that limited surgical improvement can be predicted, and AHI (Supine / Non-supine) < 2, indicating that limited body position therapy can be predicted. Weight control was still educated. Phenotypic subtypes classification can help clinicians to decide further treatment and this will be further application for precision medicine especially for sleep center, health examination, and outpatient department. However, there were still some limitations of phenotypic subtypes classification such as female patient, biomarker profiles, or racial issues.

Conclusion:

Although phenotypic subtypes of obstructive sleep apnea (OSA) is still needed to be further discussed, it is still thought to be a precision medicine in the future.

中文題目：個案報告：睡眠中止呼吸症分型於臨床應用探討

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