

Service Priorities and Programmes Electronic Presentations

Convention ID: 22

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Project in Early Diagnostic Sleep Study

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Keywords:

OSA

PSG

CPAP

Introduction

Obstructive sleep apnea (OSA) is characterized by recurrent episodes of apnea and hypopnea during sleep, which causes intermittent hypoxia and frequent arousals. 130,000 Hong Kong residents suffer from the correctible affliction of sleep apnea such that 4% of males, 2% of females and 2% of children. Moreover, risk of motor-vehicle accidents is 3-4 times greater in sleep apnea sufferers then in normal people.

Objectives

OSA adversely affects patients with certain occupations or co-existing cardiovascular diseases as shown in previous studies. Proper recruitment of the risk groups will facilitate earlier diagnosis and treatment of their OSA.

Methodology

From 1st January 2012 to 31st December 2012, altogether 34 high risk patients had been recruited for portable polysomnography (PSG) tests. All patients under care of Respirology team were screened. Patients include 30 males and 4 females. They aged widely from 28 to 72 years old, with a mean age 47. 19 patients are recruited because of high risks drivers, such as occupational driver, 15 patients are recruited because of their co-morbidities, e.g. cardiac illnesses.

Result

The waiting time for routine PSG of confirmatory diagnosis is normally three years. With portable PSG being available, the waiting time has been shortened to 42 days in average. Almost all PSG findings were interpreted the next days after the assessment. Patients had positive PSG results, in which 8 are graded as mild OSA, as 7 moderate, and the remaining 16 are all severe cases. For those patients with confirmed OSA, inpatient continuous positive airway pressure (CPAP) titration at the following night would be offered to patients. 24 patients had accepted second night inpatient auto-CPAP titration. For others, their reasons for refusal include: opted to purchase auto-CPAP machine (3 patients), refused nocturnal CPAP as treatment, refused to stay (because of private matter, insomnia, etc.) On subsequent follow-up at sleep clinic, 21 patients continue to use nocturnal CPAP as the primary treatment for their OSA. Telephone follow was provided and CPAP evaluation was reviewed after CPAP

titration six months. 19 patients reduced the daytime sleepiness and improved the knowledge of CPAP treatment and device. Moreover, they have also improved their quality of life. In conclusion, the availability of portable PSG for screening did allow much earlier confirmation of OSA in those high risk patients to have implementation of definite CPAP treatment.