



Service Priorities and Programmes
Electronic Presentations

Convention ID: 1357

Submitting author: Mrs Esther Lee

Post title: Department Manager (Nursing), Perianesthesia Nursing Services,

Descriptive Characteristics of Obstructive Sleep Apnea Patients at Risk of Longer Post-operative Hospital Stay

Lee, ET (1)

Daugherty, JS (1)

Chang, L (2)

(1) PeriAnesthesia Nursing Services, University of California San Diego Health (UCSD Health), San Diego, CA USA

(2) Department of Anesthesiology, University of California San Diego Health (UCSD Health), San Diego, CA USA

Keywords:

Obstructive Sleep Apnea (OSA)

Characteristics of OSA patients

STOP Questionnaires

Patient inclusion criteria

Extended length of Hospital stay

Oxygen desaturation episodes

Introduction

Obstructive sleep apnea (OSA) is defined as the occurrences of at least five apnea and hypopnea episodes in an hour accompanied by a decrease of oxygen saturation exceeding 4%. OSA may increase perioperative risk in patients requiring general anesthesia, sedation or intravenous analgesia as these agents may dampen the arousal mechanism. In the United States, an estimate of about 18 million people with OSA have gone undiagnosed resulting in various postoperative complications, extended length of stay and cost burden to the communities.

Objectives

The aim of this project is to examine the characteristics of OSA patients with postoperative risk in elective surgery and which risk factors that may lead to a longer length of hospital stay.

Methodology

A single site retrospective chart review study was chosen. The study included a sample of all 153 adults 18 years and older who were screened for OSA using the STOP questionnaire. The inclusion criteria were patients without surgical complications in elective surgeries and an absence of anatomical, genetic and mental abnormalities. The variables associated with characteristics of OSA patients were drawn from risk factors most studied by other researchers. These variables include patients' related factors, medical comorbidities, diagnostic and screening tools and OSA treatment. The lowest oxygen saturation and the number of oxygen desaturation episodes were chosen as measures of adverse events; Aldrete score

were used as the metric to determine the length of stay. The study was approved by the Institutional Review Board and data protection plan was addressed. Descriptive will be applied. Data analysis were performed using SPSS for Windows (Version 22).

Result

The study results of a pilot study showed that age>60, ASA classifications, anesthesia type and narcotic use in the post anesthesia recovery period were statistically significant factors correlating to postoperative risk factors and adverse events. However, several outliers differ from the majority of patients, diagnosed with hypertension and BMI>30, exhibited higher frequency of oxygenation and lowest level of oxygen saturation. The current study will examine risk factors for a sample of 51 patients.