Service Priorities and Programmes

Electronic Presentations

Convention ID: 523
Submitting author: Dr To Fung LEUNG
Post title: Associate Consultant, Queen Elizabeth Hospital, KCC

Early detection of Chronic Obstructive Pulmonary Disease (COPD) in smokers

Leung TF(1), Cham TF(1), Tse CT(1), Chan SL(1), Chen XRC(1), Chan KH(1)
(1)Department of Family Medicine & GOPC, Kowloon Central Cluster

Keywords:
COPD
smokers

Introduction

COPD is the fifth fatal disease in HK and this contributed to a heavy demand for our medical services. The main cause of COPD is smoking. Recent research suggests that as many as 50% of smokers will develop COPD. According to a study in 2003, the COPD prevalence rate in Hong Kong was 3.5%. The only way to prevent development of severe COPD is to identify smokers at an early stage and advise them to stop smoking. In KCC, smokers are invited to join the Smoking Counselling & Cessation Program(SCCP) located at Queen Elizabeth Hospital, YauMaTei General Outpatient Clinic and Central Kowloon Health Center, in which individualized counselling, pharmacotherapies and medical consultation are available to assist smokers to stop smoking.

Objectives

To identify the prevalence of undiagnosed COPD patients among smokers attended the SCCP of KCC.

Methodology

This is a retrospective descriptive study. All smokers aged 40 or above attended SCCP of KCC from 1st Aug 2013 to 31st July 2014 were screened by a trained nurse for chronic respiratory symptoms. Smokers with these symptoms were then invited to receive a lung function test. Those who already had a diagnosis of COPD were excluded from this study. Forced vital capacity (FVC) and forced expiratory volume at one second (FEV1) were measured. Demographic information of smokers as well as their smoking patterns were also collected. The diagnosis of COPD relies on clinical judgement based on a combination of history, physical examination and confirmation of the presence of airflow obstruction using spirometry. Airflow obstruction is defined as FEV1/FVC ratio <0.7. SPSS version 13 was used for the data analysis with $P<0.05$ as statistically significant.

Result

168 smokers were studied, 118 (70.2%) did not have obstruction while 50 smokers (29.8%) were suggested to have COPD according to spirometry results.COPD was found more common in older smokers ($P <0.05$). The mean pack year was 32 +-SD 20. Male smokers had more pack years than females: 33 and 24 pack years,

respectively (P=0.059). More COPD was detected in smokers with a higher number of pack years (P <0.05). The mean pack year was 38+-SD 27 and 30+-SD 16 in smokers with COPD and with normal lung function respectively.