Service Priorities and Programmes

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Case series study on breathing reeducation for mouth breathing asthmatic children

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Introduction

Asthmatics are more likely to breathe through their mouth, a factor which may contribute to the pathogenesis of their asthma. Mouth breathing also causes a reduction in lung function in mild asthmatics and plays a role in the pathogenesis of acute asthma exacerbations 1. However, mouth breathing is less addressed in the management of asthmatic patient previously. Therefore, a service review on this area is necessary in order to ensure a quality service to be delivered to asthmatics children.

Objectives

To review the effectiveness of the breathing reeducation program for mouth breathers in asthmatic children.

Methodology

A structured 8- weeks breathing reeducation program are being implemented at physiotherapy department of Kwong Wah Hospital. Program consisted of Butekyo breathing reeducation method such as diaphragmatic breathing exercise, nose breathing exercise, breath holding exercises and paces.
Outcome Measures included: a) severity of nasal obstruction by Visual Analogue Scale (VAS); b) breath hold time; c) number of steps preformed with breath hold; d) severity of mouth breathing.

Result

3 asthmatic children (Female: 1, Male: 2) with age ranged from 9 to 15 years old had completed the 8-weeks breathing reeducation program. The mean VAS of severity of nasal obstruction improved from 8 to 4. Their mean breath hold time was increased from 18 seconds to 29 seconds. The mean number of steps performed with breath hold also increased from 32 steps to 52 steps. The mean percentage of mouth breathing decreased from 73.3% to 36.7%.
Conclusion:
An 8-week breathing reeducation program appears to reduce nasal obstruction and mouth breathing pattern in children with asthma. Further RCT and larger sample is

required to confirm these findings.