Return to Work after Acute Myocardial Infarction

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Cardiovascular diseases represent the second leading cause of death in Hong Kong. According to the recent statistic published in Statistical Report Hospital Authority 2006/2007 of Hong Kong,[1] 5619 deaths (15% of all deaths) in 2006 were accounted for cardiovascular disease.

Ischaemic heart disease, being the major component of cardiovascular disease, is therefore an important cause of both mortality and morbidity. The objective of cardiac rehabilitation is to restore an optimal physical, mental and social condition in patients with ischaemic heart disease; allowing them to resume an active role in the community as soon as possible after the heart attack. The cardiac rehabilitation program is a multidisciplinary practice involving not only the patient and the physician but also the patient's relatives, the occupational therapist, physiotherapist, nursing specialist, dietician, and clinical psychologist.

The incidence of myocardial infarction rises with increasing age but the age of onset is in turn decreasing. The onset of myocardial infarction even happened as young as at early 30. These patients are at working age and most of them are expected to return to work.[2] Thus, to assist the patient to return work is one of the important goals of cardiac rehabilitation and also the responsibility of occupational therapist.[3]

During the process of recovery from a heart attack, the occupational therapist provides unique intervention to both the physical and psychological dysfunctions of the patients. In order to facilitate the patients return to work, work evaluation and training are offered. The process starts in the in-patient phase. Early intervention will anticipate, identify and modify barriers to return to work and alleviate the anxiety of patients.[4] The return to work process usually includes clinical evaluation, work evaluation, work simplification & modification, simulated work training and vocational counseling.

Clinical Evaluation

For cardiac patients, cardiac function is the primary consideration. They include the disease nature, functional capacity, exercise testing result (MET), ejection fraction and the existing cardiac related sign & symptom. In general, the objective data of exercise testing result gives a guideline in advising patients to safe activity level and daily engagement.

Work Evaluation

Work evaluation includes the identification of various demands of a specific job. The barriers that exist and the potential hazards at the workplace are explored before resumption of work. Job analysis provides step-by-step breakdown of job task to find out critical job demands.[5] In addition, the information of working environment, and related work stress allow us to give more appropriate recommendation to our patients in return to work.

Work Simplification & Modification

In order to decrease cardiac workload and energy consumption, several methods are employed in activity

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modification. For instance, avoiding extreme hot and cold environment, and increasing awareness to the ventilation in working environment. Optimal structuring of the daily schedule can eliminate the emotional stress due to time pressure. The use of pacing control and frequent rest increase the activity tolerance throughout work process.[6] Besides, work simplification will also be used to educate patients in analyzing new tasks so as accomplish the work tasks in a more efficient way.

Simulated Work Training

Work simulation for cardiac patient in the occupational therapy is important.[4] A simulated work situation can evaluate the readiness of patient to return to previous work type, so that we can determine the need for any adapted method and its effectiveness. Throughout the training process, it provides more objective data of the physiological changes and also enhances the sign & symptom monitoring by patient.[7] The intensity and the duration of the activity can gradually increased up to a level comparative to the patient's work demands.

Vocational Counseling

Psychological and social factors play an important role to work resumption.[8] Thus patients' perception on return to work is a crucial factor of a successful intervention. In addition to patient's physical state, we also have to focus on the motivation to return to work, financial situation, work stress and future career planning. Therefore, counseling to patients' value, satisfaction, expectation must be included in a comprehensive rehabilitation program.

Return to work is an important marker of the success of cardiac rehabilitation. It enables patient to maintain economic independence.[9] Therefore, a comprehensive cardiac rehabilitation program should include the above components in order to help patients to resume a productive life roles, hence improve their quality of life.

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