

MANAGEMENT OF THE SMOKING HABIT IN A REHABILITATION PROGRAMME

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INTRODUCTION

Innumerable epidemiological, clinical and laboratory studies have demonstrated the role of cigarette smoking as a major risk factor in coronary heart disease (1-4). The main concern nowadays is not so much the evidence to prove the point, but the strategy to control this self-inflicted risk factor.

A rehabilitation programme is basically one of secondary prevention. The storm has already occurred, and if cardiac rehabilitation is to be of any benefit to patients, it must be able to help them regain their social position in life and resume normal activities. There must be renewed confidence in living without the paralyzing fear of another attack. Towards this end, it is logical that we should try to control the main risk factors in a holistic approach to the problem.

Smoking is but one of the main factors - besides serum cholesterol, physical activity, blood pressure and the less well-defined ones like personality type and stress. Thus, it would be futile for one to stop smoking without making any attempts to control the other factors. Conversely, one would not confine cardiac rehabilitation to exercise prescription without looking into the patient's diet, social habits and state of mind.

This short paper reports a very preliminary experience with some 28 patients on the Singapore Cardiac Rehabilitation Programme, details of which are presented elsewhere.

THE SINGAPORE PROGRAMME

All new entrants to the Singapore Programme are interviewed concerning their social habits. Smokers are then requested to meet with a member of the Working Group for a time of discussion. A detailed smoking history is then obtained, followed by a group discussion of the health hazards of smoking and possible strategies to stop the habit. As the numbers are small, these sessions are held on an ad-hoc basis depending on the availability of patients. Those requiring help in stopping the practice are provided with periodic motivating sessions (usually on a one-to-one basis) while the other members of the group are also enlisted to provide group support.

Unfortunately, the small numbers did not permit any controlled trial of strategies and techniques in promoting smoking cessation.

SMOKING PROFILES

The majority of the smokers, 78.6% of the total participants had started in their teens, while the rest started in their twenties and early thirties. In view of this early start, almost 75% of them have been smoking for more than 25 years.

Cigarette consumption was generally high, with 52% smoking 35 cigarettes or more daily, and another 26% in the moderate range (about 20-30). The habit was practised at all times, especially after meals and at work.

RESULTS

To date, 82% stopped almost immediately after the experience of the first attack. A further 2 (9%) managed to stop after sometime, while 2 more are still struggling to quit the habit.

DISCUSSION

The high fatality rate of coronary heart disease, with deaths occurring within minutes and hours of the onset of symptoms emphasises the need to look at prevention as the more definitive solution to this problem. Risk factor intervention, however, is not without its problems.

As mentioned earlier, many of the factors are inter-related. Smokers at every age tend to have lower levels of High Density Lipo-proteins (HDL) compared to ex-smokers and non-smokers (5). Smokers also tend to be associated with the Type A personality, although the relative risk of coronary heart disease is still raised after adjusting for one of the factors (6).

But, it would be pertinent to note that cigarette smoking is much more strongly related to the major manifestations like sudden death and myocardial infarction. Thus, the control of smoking would help to bring down mortality in this group of disease. Hammond and Horn have shown the following results from their follow-up study of almost 188000 men (7).

	Relative Risk of Dying	
GROUP I:		
Those smoking 20 cigs. or more	2.2	X non-smoker
Stopped for > 10 years	1.6	X non-smoker
GROUP II:		
Those smoking less than 20 cigs.	1.75	X non-smoker
Stopped for > 10 years	1.0	X non-smoker

In 10 years, light ex-smokers would have reached the mortality experience of non-smokers. But for heavier smokers, although the risks have declined, they are still slightly higher than normal. Many other studies (eg. the Framingham Studies) have been able to confirm these results (8).

Nussel and Wilcke (1976) reported from their Register in Heidelberg of 1155 men with first infarction a smoking rate of 60%. One year later, it had dropped to 25%. Those who restarted their smoking had more cardiac pain (9).

Wilhelmsson et al (10) were able to report the very encouraging results of the halving of the rate of non-fatal events as well as the cardiovascular mortality rate among M.I. survivors who stopped smoking. Of these survivors, 50% had stopped at 1 year, following

advice given by the physicians (10).

The actual therapeutic strategies are relatively unimportant compared to the motivation, commitment, effort and determination of smokers and the support they receive. Survivors of M.I. are among the most selected of patients and they respond readily to the advice of physicians without too much need for other aids (11).

Many smoking cessation clinics have developed out of chest and cardiac clinics. The initial experience in the Singapore Programme seems to support this idea. It is definitely feasible if not imperative that coronary patients be given anti-smoking advice while undergoing rehabilitation and follow-up.

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