British Heart Foundation

Factfile 09/2000

Cardiac Rehabilitation

Cardiac Rehabilitation (CR) can promote the recovery of people who have sustained a myocardial infarction or have undergone coronary artery bypass surgery. Meta-analyses of randomised trials have shown that cardiac rehabilitation reduces mortality by 20-25%[1].

Exercise programmes improve physical aspects of recovery but exercise alone is not sufficient to reduce risk, morbidity, mortality or improve psycho-social outcomes. Patients' anxiety or misconceptions often cause problems in recovery and rehabilitation programmes should incorporate both psychological and educational interventions to alleviate these.

Currently less than half of the 150,000 people who survive a heart attack annually receive any form of rehabilitation. Disadvantaged social groups include women, the elderly, those in rural locations, ethnic minorities and people with other manifestations of coronary heart disease (see below).

Clinical guidelines for CR have been published and endorsed by the Royal College of Physicians[2] and the British Cardiac Society[3]. They recommend that rehabilitation should be an intrinsic part of the management of all forms of cardiac disease and should cross traditional boundaries. Virtually all patients are suitable for rehabilitation. Programmes need to be based on the assessment of individual needs rather than a regimented process of attending a fixed number of talks and exercise sessions. One in four patients will manifest either anxiety or depression at a level that would benefit from treatment. Exercise should be moderate and regular; brisk walking, gradually increasing up to periods of thirty minutes five times per week. Several studies have shown that rehabilitation programmes are cost-effective, reducing both medical and social costs. Consequently the National Service Framework for coronary heart disease has recommended that NHS Trusts should put in place agreed protocols/systems of care so that, prior to leaving hospital, people suffering from coronary heart disease have been invited to participate in a multi-disciplinary programme of secondary prevention and cardiac rehabilitation. The aim of the programme will be to reduce the risk of subsequent cardiac problems and to promote the return to a full and normal life.

A list of some 300 UK programmes can be found on the internet at www.cardiacrehabilitation.org.uk together with contact details for the co-ordinator. Alternatively these can be obtained from Clara Jenkins at the British Heart Foundation on 020 7487 7125. BHF Rehabilitation Audit packs are available to give practical advice about setting up rehabilitation programmes and these include useful contacts and references. Other materials include a Business Plan Package designed to assist those making a business case to persuade NHS purchasers.

Looking to the future it should be recognised that many other people could benefit from CR. They include patients with stable angina pectoris[4] and those with heart failure.

As with other forms of CR the programmes need to be multi-disciplinary and to be effective must include attention to appropriate medication, lifestyle changes, psychological adjustment and stress management. Unfortunately the average 6-12 weeks of exercise which are commonly found in CR programmes in the UK appear insufficient to reduce angina.

14 Fitzhardinge Street, London W1H 6DH
Telephone 020 7935 0185

Factfile *is produced by the British Heart Foundation in association with the British Cardiac Society and is compiled with the advice of a wide spectrum of doctors, including general practitioners. It reflects a consensus of opinion.*

References:

1. O'Connor, G. T. Buring, G. E. Yusof, S. et al. 'An Overview of Randomised Clinical Trials of Rehabilitation with Exercise After Myocardial Infarction' Circulation 1989.80 234-244.

2. Thompson, D. R. Doman, G. S. deBono, D. P. Hopkins, A. 'Cardiac Rehabilitation: guidelines and audit standards'. London Royal College of Physicians. 1997

3. Horgan, J. Bethell, H. Carson, P. Davidson, C. Julian, D. Mayou R. A. Nagle, R. E. British Cardiac Society: working party report on cardiac rehabilitation. British Heart Journal 1992 67. 412-418

4. Lewin, R. J. P. Improving Quality of Life in Angina: A Rehabilitative Approach. Heart 1999 82, 654-655.

British Heart Foundation

09/2000

Factfile Correspondence

Many general practitioners have told us that they value our monthly Factfiles but understandably some generate correspondence. Consequently the Factfile Committee thought that we should draw attention to some of the more important points raised by our readers. Hopefully, you will find these interesting and helpful.

Factfile 3/99 Mild Hypertension

Of all the Factfiles published last year this one generated the greatest amount of correspondence.

One question was "if the base line BP is 175/105 and reduction to 165/100 is achieved, what is the evidence that further reduction in blood pressure to 145/90 is beneficial?"
Answer: No single study addresses the specific question, however arguments, which support lowering BP beyond 165/100, are as follows:

a) Observational prospective data show a clear straight dose-response effect of BP on risk across the whole BP range.
b) BP's of 165/100 are typical and often higher than those used as entry criteria into several studies. These trials have consistently demonstrated large benefits due to BP reduction below these levels.
c) The HOT trial is the only study which set out to evaluate optimal target BP levels (diastolic of <90 vs <85 vs <80). They report an optimal pressure of 139/83 mmHg.

References:

1. Hansson L, Zanchetti A, Carruthers SG et al. Effects of intensive blood pressure lowering and low dose aspirin in patients with hypertension: principal results of the Hypertension Optimal Treatment (HOT) randomised trial. Lancet 1998;351:1755-1762.

Factfile 8/99 Part 1 – Lifestyle and therapeutic targets for Secondary and Primary Prevention

Several readers queried the recommendation of aspirin 75mg daily for all patients over 50 years with controlled hypertension. The evidence for this recommendation can be found in the 'HOT Study' referred to above. This study showed a 15% reduction in major cardiovascular events and a 36% reduction in (non-fatal) myocardial infarction with no effect on stroke. There were, however, 129 non-fatal major bleeds compared with 70 in the control group. The decision to use aspirin must be weighed against potential benefits and the joint British guidelines recommend it's use in those patients with a ten year coronary heart disease of >15%.
A recent publication by Professor Meade in The British Medical Journal 2000:7252; 1317 reinforces the importance of lowering blood pressure prior to introducing aspirin therapy.

Factfile 11/99 - Heart Failure

Two problems arose in relation to drug doses. The first related to the use of abbreviations to indicate the number of times a medicine should be taken per day. In future we will use plain English to avoid mistakes. The second query related to the initial dose of carvedilol, which the author recommended (3.125mg once daily). Although this departs from the data sheet recommendation, our expert author erred on the side of caution recognising that when problems do occur they are often in response to the first dose.

Factfile 12/99 - Emergency Thrombolysis

In this edition it was suggested that aspirin should be given only on ECG confirmation of myocardial infarction. However since many general practitioners will not carry an ECG machine with them (and in any event ECG changes may be delayed) several respondents thought it more appropriate to administer aspirin on strong clinical suspicion of myocardial infarction. We agree with them.

14 Fitzhardinge Street, London W1H 6DH
Telephone 020 7935 0185

Factfile *is produced by the British Heart Foundation in association with the British Cardiac Society and is compiled with the advice of a wide spectrum of doctors, including general practitioners. It reflects a consensus of opinion.*