



DEPRESSION AND THE HEART

Unhappiness is a normal emotion, but depression severe enough to be diagnosed as a medical disorder is also very common in the population. It is frequently associated with anxiety. It is even more common amongst those with physical illness, but less likely to be recognised and treated.

Depression in those with heart disease is important because it is associated with increased disability and is a risk factor for mortality in ischaemic heart disease. Successful treatment has direct benefits for the patient and is cost effective.

It is essential to be aware that although unhappiness and anxiety are common and appropriate reactions to acute or to chronic heart disease, intense or persistent unhappiness, lack of interest and pessimistic thinking are not usual in the physically ill. Most people are very resilient and are able to retain an interest in their families and in everyday life. *Marked depression should never be accepted as being appropriate and inevitable.*

Aetiology

The individual meaning and threat of having heart disease and of its treatment (or other unpleasant events at much the same time) are *precipitants*. The main predisposing aetiological factors are:

- Constitutional vulnerability (family history of emotional problems, previous episodes).
- Adverse social circumstances.
- Pre-existing chronic depression.

Some types of heart disease and treatment

Ischaemic heart disease - Depression may be a primary risk factor for onset and also for mortality in established disease. Minor depressive symptoms are frequent in the early days and weeks after an acute event and 15-20% of those with infarction or angina suffer major depressive disorder.

Heart failure - Heart failure causes fatigue and malaise which are similar to the symptoms of depression. Low mood occurs in 15-20% and exacerbates distress and limitation and also compliance with medical advice and treatment.

Cardiac surgery - Depressive symptoms are common in the weeks after surgery. They are an important cause of

complaints of poor memory and concentration which need to be distinguished from cognitive impairment.

Side effects of cardiac drugs - Some drugs used for treating hypertension cause lowering of mood.

Key symptoms of major depression

- Depressed mood
- Decreased interest or pleasure
- Significant weight loss or weight gain
- Insomnia or hypersomnia
- Psychomotor retardation or agitation
- Fatigue or loss of energy
- Feelings of worthlessness or inappropriate guilt
- Diminished inability to think or concentrate
- Recurrent thoughts of death or suicide or suicide intent

Diagnosis of depression

Diagnosis depends upon alertness to appearance, behaviour and speech. Most cases requiring treatment can be readily identified by direct questioning. A single question about depressed mood (for example, 'have you been feeling low in your mood?') can detect 85-90 per cent of those with major depression, and adding a second question about lack of pleasure in life increases sensitivity to 95 per cent.

Further questioning about the symptoms listed above provides a clinical basis for both diagnosis and treatment. It may also be helpful to use a simple self-report questionnaire, such as the Hospital Anxiety and Depression Scale (HAD) or the Beck Depression Inventory (BDI). However, answers need to be interpreted alongside clinical information. It is often helpful to speak separately to relatives.

Occasionally depression is denied by a patient who smiles and does not look unhappy - *masked depression*. In these circumstances, questioning about specific symptoms and talking to a relative are helpful. In severe depression enquiry should be made about suicidal thoughts. Suspicion of suicide intent must be taken seriously and is a reason for specialist referral.

Treatment

Mild depression is best treated by advice, information, discussion of patient's and family worries and practical help. This may be provided in primary care, in the cardiac clinic or during the course of cardiac rehabilitation.

More severe depression is likely to require antidepressant medication which should be given in a full dose and maintained for a period of at least three months following return to normal mood. Although the evidence on cardiovascular side-effects of antidepressants is limited, the selective serotonin re-uptake inhibitors (SSRIs) are generally preferred to the tricyclic antidepressants since they have fewer side-effects and are probably less cardiotoxic. It is sensible to avoid prescribing antidepressants in the immediate period after an infarction and in those with significant arrhythmias unless there has been a

specialist assessment of risks and benefits. If there is no response within six to eight weeks, the patient should be assessed by a specialist who may advise increasing the dosage, changing to another antidepressant or combination medication. The general principles of the treatment, the need to persevere, as well as common side effects should be explained not only to the patient but also to their families.

Drug treatment should be accompanied by any appropriate practical help and discussion of underlying factors related to the heart disease or to other independent stresses. It is usually difficult to discuss such matters when patients are deeply depressed, and in these cases discussion should be postponed until the patient has improved. It is essential that families are fully involved, especially because they may be finding the patient's irritability a major problem.

References:

1. Creed F (1999). The importance of depression following myocardial infarction. *Heart* 82: 406-408
2. Frasura-Smith N, Lesperance F and Talajic M. Depression and 18-month prognosis after myocardial infarction. *Circulation* 1995; 91(4): 999-1005 (*Erratum in Circulation* 1999; 97(7): 708)
3. Gelder MGG, Mayou, R and Cowen P. *Shorter Oxford Textbook of Psychiatry (4ed)* 2001. Oxford University Press
4. Ferketich AK, Schwartzbaum JA, Frid DJ, Moeschberger ML. Depression as an antecedent to heart disease among women and men in the NHANES I study. National Health and Nutrition Examination Survey. *Archives of Internal Medicine* 2000; 160(9): 1261-8

Further Reading

1. Factfile 9/2000 - Cardiac Rehabilitation