Psychosocial Factors in Cardiology

Psychosocial factors such as anxiety, depression or low social status not only increase risk for cardiovascular disease, but lead to worse prognosis after disease onset.

Evidence for the importance of psychosocial factors in cardiology is outlined in an updated position paper from the German Society of Cardiology “Deutsche Gesellschaft für Kardiologie – Herz- und Kreislaufforschung” (DGK). Psychosocial factors are as important as aetiological and prognostic risk factors in estimating risk of coronary heart disease. In addition, treatment of psychosocial risk factors is indicated if the risk factors is harmful in itself or prevents treatment of the somatic risk factors.

The paper describes evidence-based recommendations for integrating psychosocial factors into cardiology practice. The authors note that although evidence for estimating the efficiency of psychotherapeutic and psychopharmacological interventions has increased since the policy document was first published in 2008, the evidence remains weak.

Summary of recommendations

Psychosocial risk factors should be taken account of when assessing the risk for CHD. There are both social factors to consider, such as low social status, a lack of social support, death of a partner and loneliness; as well as psychological factors (depression, depressed mood, vital exhaustion, anxiety, hostility and post-traumatic stress disorder). These factors are independent, etiological risk factors for the development of CHD and negatively affect prognosis for complications during treatment.
Recommendation level: I, Evidence grade A

The doctor-patient interactions should follow the principles of patient-centred communication. Age and sex-specific psychosocial aspects should be considered.
Recommendation level: I, Evidence grade C

Treatment of psychosocial risk factors with the aim of primary prevention of CHD should only by conducted when the risk factor itself is a diagnosable disorder (for example depression) or when the factor worsens classical risk factors.
Recommendation level: I, Evidence grade B

Individually tailored treatment services should be recommended to all patients with CHD. These may include education, exercise and movement therapy, motivational support with regard to healthy behaviours, relaxation methods and stress management.
Psychotherapy should be offered to CHD patients with affective comorbidity in order to improve quality of life. 

Psychotherapeutic strategies should be adapted to the specific needs of the CHD patient. Sex specific aspects should be taken account of.

Antidepressant pharmacotherapy of depression after an acute coronary syndrome should be offered to patients with at least moderate, recurring depressive disorders. In this case, selective serotonin reuptake inhibitors (SSRIs) are preferable.

Patients with chronic CHD with at least moderate depression should be offered antidepressant medication from the serotonin reuptake inhibitor (SSRI) group, especially when suffering a relapse.

The long-term care of ICD patients should consider the psychosocial consequences of ICD technology. In particular, relevant affective disorders or crises should be detected and treated according to guidelines. Specific recommendations for psychotherapeutic interventions are not currently available.

Patients undergoing cardiac surgery should be cared for by an interdisciplinary team, offering the opportunity to address psychosocial issues, since these patients often suffer from mental disorders such as depression, anxiety and post-traumatic stress disorder, which worsen prognosis.

Patients with chronic heart failure and comorbid depression should receive offers within the framework of primary psychosomatic healthcare. If these do not suffice, then psychotherapy should be considered as further treatment option.

Patients with heart failure and comorbid depression should only be treated with pharmacological therapy after a careful risk-benefit analysis, since no benefit has been shown thus far for antidepressants in these patients.

Patients with relevant cardiovascular diseases should not be treated with tricyclic antidepressants.

Class of recommendation
- Class I: conditions for which there is evidence and/or general agreement that a given procedure or treatment is useful and effective
- Class II: conditions for which there is conflicting evidence and/or a divergence of opinion about the usefulness/efficacy of a procedure or treatment
- Class IIa: weight of evidence/opinion is in favour of usefulness/efficacy
- Class IIb: usefulness/efficacy is less well established by evidence/opinion
- Class III: conditions for which there is evidence and/or general agreement that the procedure/treatment is not useful/effective and in some cases may be harmful.

Evidence classification
- Level of evidence A: recommendation based on evidence from multiple randomized trials or meta-analyses
- Level of evidence B: recommendation based on evidence from a single randomized trial or nonrandomized studies
- Level of evidence C: recommendation based on expert opinion, case studies, or standards of care.

When assessing evidence regarding diagnostic procedures, large, population-based prospective studies were included.
The position paper recommends education to allow doctors to competently diagnosis, communicate and refer in psychocardiology.

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