

President's Message

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DEPRESSION AND HEART

M. Mohsen Ibrahim, MD

Prof. of Cardiology - Cairo University

President of the Egyptian Hypertension Society

Psychic depression is a common co-morbidity among hypertensive and cardiac patients. At least a quarter of cardiac patients suffer from depression and adults with depression often develop heart disease. Unfortunately many heart specialists may not have the time or expertise to address depression.

Major depression affects 10-13% of medical out patients.

On the other hand the majority of patients with major depression present with somatic complaints. Primary care physicians fail to diagnose depression in up to 50% of their depressed patients. Physical symptoms are often the chief complaint in depressed patients.

The diagnosis of depression is based upon the presence of the following complaints nearly every day for two weeks: depressed mood most of the day, inability to experience pleasure in normally pleasurable acts (anhedonia), significant change of weight, insomnia or hypersomnia, psychomotor agitation or retardation, fatigue or loss of energy, feelings of worth less-ness or guilt, impaired concentration and recurring thoughts of death or suicide. Symptoms must cause impairment of functioning.

Depression has been proven to be a risk factor in cardiac disease that the American Heart Association has recommended that all cardiac patients

be screened for depression using simple screening questions. Healthy individuals who suffer from depression are at significantly increased risk of developing heart attacks and strokes later in life.

The combination of depression and heart disease tripled the risk of death from all causes and quadrupled the risk of dying from a heart attack or a stroke. In the first six months after a heart attack, a depressed person's chances of dying are four times higher than a non-depressed person, even if they have the same heart damage. Depressive symptoms have been shown to increase risk of stroke mortality over a 29 year period.

The physiological derangements linking depression to the heart include high sympathetic tone, hypercortisolemia, elevated catecholamine levels, abnormal platelet activation and endothelial dysfunction. Sympathetic outflow is increased in depressed patients.

Corticotropin- releasing factor (CRF) is increased in cerebrospinal fluid of depressed patients. CRF increases the levels of corticosteroids which may trigger atherosclerosis. Arterial endothelial function is significantly impaired in the depressed patients.

Anatomic abnormalities are present in the structures of limbic system (amygdala, hypothalamus, septal nuclei, cingulate and hippocampus with reduction in volume of prefrontal cortex and hippocampus).

Treatment of depression is effective and includes medications, psychotherapy or both. The type of treatment recommended depends on the type of symptoms, the severity of symptoms and the patient's personal preferences. Combined treatment with antidepressants and psychotherapy

is recommended as first line treatment for patients with severe major depressive disorder.

Anti-depressant drugs include selective serotonin reuptake inhibitors (SSRIs) which are the most commonly prescribed, selective serotonin norepinephrine reuptake inhibitors (SNRIs) and tricyclic antidepressants.

Examples of SSRIs are citalopram (depram) , escitalopram (cipralex), paroxetine (seroxat), fluoxetine (Prozac), sertraline (modapex).

Examples of SNRIs are venlafaxine (effexor) and desvenlafaxine (pristiq) .

Examples of tricyclic which are less commonly used are amitriptyline.

Paroxetine (seroxat) is more anxiolytic than the others, while sertraline (modapex) is more effective in panic disorders.

Side effects are common with the majority of these drugs, and include nausea, sexual dysfunction, weight gain, drowsiness and dry mouth. It is recommended to start with an SSRI medication and increase the dose to therapeutic maximum dose. If patient does not tolerate the medication or does not show clinical improvement in 2-4 weeks, switch to antidepressant from the same class or preferably from another class with a different mechanism of action.

SSRIs, sertraline (Modapex) and citalopram (Depram) are safe for patients with coronary heart disease (CHD), and are the first line antidepressant drugs for patients with CHD.

Prevention of depression is based upon social support, physical exercise and stress management.

There is a need to educate physicians and to establish a system to identify, treat and follow-up cardiac patients with depression.