Snips from the journals

Physical illness and psychiatric comorbidity

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Depression and cardiac disease: epidemiology, mechanisms, and diagnosis (1).

The rate of major depressive disorder has been reported to be threefold higher among patients with coronary artery disease (CAD) compared to the general population. Between 15-20% of CAD patients meet criteria for a diagnosis of depression at any given time, and 31- 45% are reported to have clinically significant depressive symptoms. Similarly, patients with other cardiac disorders also have a higher rate of depression. The course of depression in those with cardiovascular disease (CVD) is usually chronic and recurrent, and it is often co-morbid with anxiety symptoms. Younger patients, females and those with a prior history of depression have been reported as more likely to develop depression in the context of CVD.

In healthy individuals, depression has been independently associated with development and progression of CAD, and increased CVD mortality. Number of mechanisms are potentially implicated in the connection between depression and adverse cardiac outcomes. These are impaired health promoting behavior such as reduced adherence to low fat diet, physical activity, smoking cessation and medication and poor cardiac rehab attendance and adverse physiological effects, such as serotonin mediated elevated platelet activity, increased inflammation, endothelial dysfunction and reduced Brain Derived Neurotrophic Factor (BDNF).

The American Heart Association recommends routine screening of cardiac patients for depression, by use of screening tools such as the 2 and 9 item Patient Health Questionnaires. The authors of this article debate as to whether all patients should be routinely screened for depression, because of the risks of potential misdiagnosis of patients if positive screens are not followed up by confirmatory psychiatric interviews, unnecessary stigma for those misdiagnosed, and the lack of evidence regarding cost effectiveness of such screening programs.

The authors comment that screening for depression alone is not shown to improve outcomes in cardiac patients, and recommend that if cardiac patients are being screened for depression, this screening should be paired with a management protocol or system of care to treat depression in cardiovascular disease (for example collaborative care with a psychiatric team or a primary medical care team able to manage depression). Evidence shows that screening for depression, when combined with a management protocol, is associated with improved patient outcomes.

Natural history, predictors and outcomes of depression after stroke: systematic review and meta-analysis (2).

This is a systematic review and meta-analysis that looks at the natural history, predictors and outcomes of depression after stroke.

Out of 13 558 references initially found, 50 studies were included. Prevalence of depression was 29% (95% CI 25–32), and remains stable up to 10 years after stroke, with a cumulative incidence of 39–52% within 5 years of stroke. The rate of recovery from depression among patients depressed a few months after stroke ranged from 15 to 57% 1 year after stroke. Major predictors of depression are disability, depression pre-stroke, cognitive impairment, stroke severity and anxiety. Lower quality of life, mortality and disability are independent outcomes of depression after stroke.

This study reiterates the importance of identifying and treating depression in patients with stroke.

Antidepressants in the treatment of depression/ depressive symptoms in cancer patients: a systematic review and meta-analysis (3).

Research suggests an increased rate of depression and depressive symptoms among cancer patients, with reported rates of major depression of 16%. The assessment of depression in cancer patients is challenging, for two main reasons: first, the distinction between normal sadness or grief symptoms and a depressive episode is not always well defined. Second, there is a lack of specificity of depressive symptoms, with features such as loss of appetite, low energy, sleep disturbance often being common for both the depressive illness and the physical illness. The authors discuss possible options to address the challenge of diagnosing depression in cancer patients, including replacing physical/somatic symptoms with non-somatic symptoms (e.g., pessimism, poor reactivity, tearfulness) in the diagnosis, or by considering specific depressive symptoms rather than the clinical syndrome.

Data suggests that depression adversely influences the prognosis and survival of cancer patients. The objective of this paper is to determine whether pharmacology treatment is effective in the treatment of depression and depressive symptoms in patients with cancer. The authors reviewed double blind randomized-controlled trials in electronic databases Pubmed and the Cochrane Library, and 9 randomized-controlled trials were

ultimately included in the review.

Results showed that treatment with SSRI or tricyclic antidepressants improved depressive symptoms more than placebo. There was no significant difference in efficacy of SSRI and tricyclic antidepressants. Overall, the findings were limited by significant heterogeneity between studies, the small number of randomized controlled studies, the small study sizes, and the lack of any data on medication tolerability.

The authors suggest that the detection of depressive symptoms, rather than the syndrome of depression, should be considered in patients with cancer, and also highlight the need for good quality trials for assessment of antidepressant efficacy in this patient group.

Late-life depression and risk of vascular and Alzheimer's disease: systematic review and meta-analysis of community-based cohort studies (4).

The aim of this study was to evaluate the risk of incident all-cause dementia, Alzheimer's disease and vascular dementia in individuals with late-life depression. The authors conducted a systematic review and meta analysis of community based prospective cohort studies, identified via the Medline and Scopus databases. Total of 23 studies were included in the final meta-analysis, with a total sample of 49612 participants (5116 with late-life depression and 44496 non-depressed controls).

Results showed that individuals with late life depression had a significantly higher risk of incident all-cause dementia, Alzeheimer's disease and vascular dementia, compared with elderly controls. This association remained even after subgroup analysis to adjust for potential confounders. Comparison between the types of dementias showed that the risk of incident vascular dementia was significantly higher than Alzheimer's disease, in individuals with late-life depression ($p=0.03$).

Based on these findings, the authors suggest that depression is a potentially preventable and modifiable risk factor for preventing or delaying dementia in later life. Further research is needed to investigate the potential impact of prevention of depression on risk of cognitive impairment and dementia in elderly people.

Main limitations of this study are that depression in the elderly were identified by screening tools rather than structured interviews, the varying durations of follow up in the studies included for review (ranging from 1-17 years) and study heterogeneity.

Suicidal behavior and severe neuropsychiatric disorders following glucocorticoid therapy in primary care (5).

The authors assessed the incidence rates of depression, mania, delirium, panic disorder, and suicidal behaviors in patients treated with glucocorticoids in primary care settings and the risk factors for developing these outcomes.

Data was obtained for all adult patients registered between 1990 and 2008 at U.K. general practices contributing to The Health Improvement Network (THIN) primary care database. The incidence rates for the outcomes of interest were assessed in patients who received prescriptions for oral glucocorticoids and compared with those in patients who did not receive such prescriptions. The predictors of these outcomes in exposed patients were ascertained using Cox proportional hazards models.

Overall, 786,868 courses of oral glucocorticoids were prescribed for 372,696 patients. The authors identified 109 incident cases of suicide or suicide attempt and 10,220 incident cases of severe neuropsychiatric disorders in these patients. The incidence of any of these outcomes was 22.2 per 100 person-years at risk for first-course treatments. Compared to people with the same underlying medical disease who were not treated with glucocorticoids, the hazard ratio for suicide or suicide attempt in exposed patients was 6.89 (95% CI=4.52–10.50); for depression, 1.83 (95% CI=1.72–1.94); for mania, 4.35 (95% CI=3.67–5.16); for delirium, confusion, or disorientation, 5.14 (95% CI=4.54-5.82); and for panic disorder, 1.45 (95% CI=1.15–1.85). Older men were at higher risk of delirium/confusion/disorientation and mania, while younger patients were at higher risk of suicide or suicide attempt. Patients with a previous history of neuropsychiatric disorders and those treated with higher dosages of glucocorticoids were at greater risk of neuropsychiatric outcomes.

Glucocorticoids increase the risk of suicidal behaviour and neuropsychiatric disorders. The findings are relevant to day to day psychiatric practice, particularly in liaison general hospital settings in Sri Lanka.

Difference in the prescribing of medication for physical disorders in individuals with and without mental illness: meta-analysis (6).

Previous evidence has suggested that people with mental illness may receive suboptimal treatment and care for established medical conditions, whereas such individuals often have higher rates of medical co-morbidities compared to the general population.

The aim of this review was to quantify possible difference in the prescription of medication for medical conditions in those with and without mental illness. The authors searched Medline/Pubmed and Embase

databases from inception to November 2010. They focused on treatment of medical conditions in persons with non-organic psychiatric disorders, thus excluding studies pertaining to delirium or dementia. The search identified 61 drug-level analyses regarding prescribing adequacy in 23 publications, involving 1,931,509 patients, and in total 12 classes of medication was included in the analysis, most of which were for cardiovascular health indications, e.g., ACE inhibitors, anticoagulants, beta blockers et al.

Results showed that patients with severe mental illness had a lower than expected ratio for comparable medication prescription (OR 0.74, 95% CI 0.63-0.86). Based on their findings the authors estimate that the actual rate of under-treatment in those with mental illness compared to the comparison group was 12% in schizophrenia, and 10% in other severe mental illness. The authors suggest several possible explanations, such as physical illness being overlooked in persons with mental illness, primary care physicians considering such patients 'difficult to manage' and possible cautious prescribing by the physician due to the comorbid mental illness.

Limitations of this review include study heterogeneity – for e.g. the definition of severe mental illness varied between studies. Most of the studies included in the review examined drugs prescribed for cardiovascular conditions, and therefore small sample size limited analysis of drugs prescribed for most other medical conditions.

Declaration of interest

None declared

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