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Guest Editorial

POST STROKE DEPRESSION: IS IT IMPORTANT?

In Sri Lanka, stroke is a leading cause of adult disability. It is reported that each year, one in 110 people in Sri Lanka will suffer a stroke. And given the aging population in Sri Lanka, this is likely to increase. Depression after stroke, or post-stroke depression (PSD) is a common sequel of stroke, seen in upto 33% of post-stroke patients [1]. Not only do patients with PSD show significantly less recovery from functional impairments compared to their non-depressed counterparts, they are also 3.4 times more likely to die within the next 10 years[2].

Despite it's wide prevalence, our understanding of the pathophysiology of PSD is still limited. On one hand PSD could be a psychological reaction to post-stroke functional deficits and disability. A past history of depression also increases the risk of PSD. However there is much evidence to suggest that PSD is not only a psychological reaction in response to a newly acquired disability. Biological hypotheses proposed as explanation for PSD include, decreased levels of serotonin and noradrenaline levels in the brain, increased brain cytokine levels after stroke, and genetic susceptibility[3]. There is also debate on whether the location of the stroke lesion influences the development of depression. While some authors have suggested that left hemisphere strokes are more likely to be followed by PSD, more recent reviews report no evidence for association between site of the brain lesion and development of depression[4]. Thus overall, PSD is most likely to be due to a complex combination of factors, both psychological and biological.

Depression after stroke is associated with greater stroke severity and cognitive impairment; PSD also predicts greater functional impairment during recovery. Major depression after stroke is associated with more severely impaired activities of daily living, and greater degree of cognitive impairment at two-year follow-up, compared to post-stroke patients with no depression. But perhaps the most significant outcome associated with PSD is that of mortality.

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Depression is known to be associated with a 3.4 times higher risk of mortality when compared to non-depressed patients with stroke, after controlling for other risk factors[2].

The diagnosis of depression in patients after a stroke can be challenging, for several reasons. On one hand some of the features of depression, such as change in appetite, weight and sleep, may also be caused by the physical illness itself. Post-stroke patients may have features such as aphasia, which make the diagnosis of depression more difficult; although there are now screening tools specifically developed for the detection of depression among post-stroke patients with aphasia.

Despite these shortcomings, several different screening tools have been used, for the detection of depression in post-stroke patients. Both the CES-D (Centre for Epidemiological Studies Depression Scale) and the PHQ-9 (Patient Health Questionnaire 9) have shown satisfactory results in the detection of post-stroke depression; and importantly, these scales have been validated for use in the Sri Lankan population.

The screening and detection of depression in post-stroke patients would be of little value, unless it is followed by effective management. Evidence regarding treatment is limited by heterogeneity of available RCTs, and exclusion of patients with aphasia or cognitive impairment from drug trials, thus limiting generalizability of findings. Nevertheless, antidepressants, such as selective serotonin reuptake inhibitors (SSRIs), have been shown to improve mood and recovery of ADLs, and –it has been suggested – also improve cognitive symptoms, in post-stroke patients with depression. The use of SSRI can be associated with gastro-intestinal side-effects; but fears of bleeding complications associated with SSRI, due inhibition of platelet aggregation, have been unfounded. As yet, there is also no agreement as to when (after the stroke) antidepressants would be most efficacious, and for how long prescription should be continued.

There is no evidence to show benefit of psychotherapy, such as cognitive behavioural therapy, in the treatment of PSD; though brief psychosocial interventions, such as brief counseling for adapting to the stroke, and problem solving, maybe helpful.

Stroke is common worldwide, including in Sri Lanka, and post-stroke depression is an inevitable association, which leads to both increased stroke mortality and disability. Thus depression is a very important consequence of stroke, though unfortunately our understanding of this phenomenon, and management options are still somewhat limited. Nevertheless, increased awareness, detection and management of this phenomenon is essential to provide optimal care for post-stroke patients with depression. There is also a need for further research, particularly from countries such as Sri Lanka, regarding the presentation and treatment options for PSD.

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