

## **Introduction**

Stroke is the third-most-common cause of death in developed countries, exceeded only by coronary heart disease and cancer (*Palomaki et al, 2005*).

Depression occurs in up to 50% of patients after stroke and limits rehabilitation and recovery (*Lai et al,1995; Anderson et al, 2001*).

In fact, the highest rates of incident depression have been reported in the first month following stroke (*Aben et al, 2006, Bour et al, 2010*). *Bour et al, (2011)* reported a decrease in incident cases of depression over the course of the first year following the stroke event.

Depression after stroke (Post Stroke Depression, PSD) is common and, compared with non-depressed stroke patients, is associated with worse long-term outcomes (*Gillen et al,2001; Taylor et al, 2003*).

As many as 55% of individuals identified as depressed at one assessment remained depressed on follow-up (*Ayerbe et al, 2011*).

Depression is a distressing illness and is associated with a substantial reduction in quality of life and increased risk of suicid (*Tennen et al,2001*).

Many stroke survivors can live in the community, provided they have support and are cared for by a family member (*Paolucci et al, 2008*).

Although depression may affect functional recovery and quality of life after stroke, such condition is often ignored. In fact, only a minority of patients is

diagnosed and even fewer are treated in the common clinical practice (*Carod-Artal et al,2000; Narushima et al ,2003*).

The coexistence of stroke and depression increases the risk of death (*Carota et al,2005*).

Unfortunately, depression is associated with poor stroke-related outcomes for both patients and their caregivers. Patients with depression experience worse stroke-related outcomes in the form of greater functional disability and higher mortality (*Verdelho et al ,2006* ) .

Patients with depression were 3.4 times more likely to die during a 10-year follow-up period than non-depressed patients (*Hamilton et al, 2005*).

They also observed that the relationship between mortality and depression was independent of other common stroke risk factors e.g. age, sex, social class, and level of social functioning ( *Robinson et al ,1999; Lesperance et al, 2000*).

Depression is thought to have a detrimental effect on stroke recovery through a number of mechanisms. For instance, a depressed patient may be less motivated to participate in stroke rehabilitation because of persistent fatigue or lack of hope (*Astrom et al,1993; Carson et al,2000*).

Post stroke depression is highly prevalent in both sexes, but appears to be more common among women than men (*Berg et al, 2003; Herrmann et al, 2008*).

Untreated depression after stroke can lead to a reduced quality of life, poorer prognosis, and increased mortality. All stroke patients should be routinely screened for depression (*Aben et al, 2001; Schulz et al ,2002*).

### **Aim of the work**

The aim of this study the correlation between cerebro-vascular stroke and the occurrence of post stroke depression at Sohag university hospital.