MedCrave
Step into the World of Research
International Physical Medicine & Rehabilitation Journal

Research Article

Open Access

CrossMark

Anxiety and depression after hemiplegic stroke

Abstract

Objective: Neuropsychiatric sequelae of stroke are common, with depression and anxiety being the 2 most frequent manifestations.1–3 Our objective was to investigate the incidence of depression and anxiety in our patients after stroke.

Material/Patients and methods: A longitudinal study over 12 months from September 2014 to September 2015. It covered all cases of new stroke supported the MPR service during this period. We used HAD depression (Hospital Anxiety and Depression Scale Sigmond and Snaith).

Results: Of 64 hemiplegic patients followed in our department only 18 patients demonstrated post-stroke depression (26.5%) and 14 patients a state of anxiety (20.6%). The mean age was 57.14 years with a range from 18 to 87 years. The sex-ratio was 1.1 for women. The majority of strokes were ischemic. Antidepressant treatment was instituted for the 18 patients.

Conclusion: Depression should be sought systematically in all patients after stroke, especially in the early phase and at regular interviews with family. It compromises functional prognosis and it is a source of demotivation especially in rehabilitation.4–7

Keywords: depression, stroke, hemiplegia

Volume 1 Issue 1 - 2017

Siham Zahi, Laila Mahir, Herman Azanmasso, Fatima Lmidmani, Abdellatif El Fatimi
Department of Physical Medicine & Rehabilitation, Chu ibn rochd-casablanca, Morocco

Correspondence: Siham Zahi, Department of Physical Medicine & Rehabilitation, Chu ibn rochd Casablanca, Morocco, Tel 00212522482020/00212522483030, Fax 00212522299483, Email zasi1986@hotmail.com, drzahisiham@gmail.com

Received: April 01, 2017 | **Published:** April 12, 2017

Introduction

Neuropsychiatric manifestations of stroke (including affective, cognitive, and behavioral symptoms) are even less likely to be recognized by patients or reported in the literature.[1] Neuropsychiatric sequelae of stroke are common, with depression and anxiety being the 2 most frequent manifestations.[1–3] Recent evidence estimates that one quarter of stroke patients develop anxiety,[2] one third of stroke patients develop depression, and more than half of all stroke patients will be affected by depression at some point.[3] Mood disorders significantly alter the lives of survivors and their families.[4–7] It's best to identify them early and accurately in order to prescribe treatment.

Methods

In our study we used Hospital Anxiety and Depression Scale (HADS)[8–10] administered during a face-to-face interview 2, 4, 6 and 12 months after stroke, from September 2014 to September 2015 at the physical medicine and rehabilitation department of IBN ROCHD University Hospitals.

The HADS consists of 14 items and is divided in two subscales directed at either depressive symptoms (HADS-D) or symptoms of anxiety (HADS-A) (7 items per subscale, range 0-21 on each subscale). According to the literature, both depression and anxiety may be defined by a HADS-subscale score >7.[10] The HADS has demonstrated good psychometric properties, including good internal consistency, in patients with stroke.[11]

All subjects had a clinical diagnosis of stroke that was made according to the World Health Organization monitoring. Diagnosis confirmed with computed tomography or magnetic resonance imaging evidence of an acute infarct, which was part of the standard clinical stroke protocol. Patients were eligible if: 1) the diagnosis of cerebral stroke (ischemic or haemorrhagic) was clinically confirmed; 2) patients have to be hemiplegic; 3) age was 18 years or older; 4) sufficient knowledge of the French language to complete the planned assessments. Patients with an impaired level of consciousness, other acute medical or neurological illness, or a pre-morbid Axis I psychiatric diagnosis were excluded.

Clinical and medical histories assessed through meticulous neurological assessment and patient's interviews. Demographic information included age, gender, marital status, living situation, employment, and educational history. Concomitant medications and time since stroke were recorded.

Results

From an initial cohort of 130 stroke patients, 64 were included. At one year post stroke, 17 patients had died, 15 patients had language difficulties, 9 patients had a low mood, 16 patients psychiatric problems other than depression and 9 patients were lost to follow-up. Mean age was 57.14 years with a range from 18 to 87 years old. Sex-ratio was 1.1 for women. The majority of strokes were classified as ischemic (93%), with only 4 hemorrhagic strokes (5%). Mean time to the first interview was 27 days with a range from 7 to 58 days. Of 64 hemiplegic patients followed in our department only 18 patients had post-stroke depression (26.5%) and 14 patients a state of anxiety (20.6%) 2 months after stroke. These results did not really change 4, 6 and 12 months later with 18 cases of depression and 16 cases of anxiety. Antidepressant treatment (Fluoxetine 20 mg/ day) was instituted for the 18 patients.

Discussion

The aim of our study was to explore the incidence for developing depressive symptoms and symptoms of anxiety after stroke. The identified prevalence of 26.5% for depressive symptoms post stroke in the present study was in line with the prevalence reported in a recent meta-analysis (33%, 95% CI:23-43),[3] while for symptoms of anxiety post stroke the observed prevalence in this study (20.6%) corresponded with the prevalence reported in a recent review (24%, 95% CI:19-29).[2]

From a clinical perspective, our results indicate that the long term risk of symptoms of depression and anxiety post stroke can be estimated based on a relatively set of diagnostic information available at two months post stroke. Psychological characteristics, early mood problems and neuroticism, constitute the core of these diagnostic sets. The early HADS-D makes a large contribution to determine probability of developing depressive symptoms and symptoms of anxiety post stroke.[12] Previous studies[13,14] found that stroke severity, in terms of functional dependency, makes a unique contribution to the risk of developing post stroke depressive symptoms.

Our study has limitations. It seems plausible that patients lost at follow up may have had a greater prevalence of mood disorders. Patients refusing assessments may be more likely to have mood disorders, and so our results are therefore likely to underestimate the true burden of symptoms of mood disorders. Moreover, the lack of a full radiological assessment for other important factors contributing to mood disorders (e.g., white matter changes and silent infarcts) may limit the generalization of our results. Another limit is that our assessment of symptoms was based on a metric "screening" scale, and not on a comprehensive clinical evaluation. We are aware that a short scale is not a substitute for expert clinical assessment; however, the scale we used is one of the most widely used tools to detect mood disorders after stroke.[15]

Conclusion

The results of this study suggest that depression and anxiety were commonly experienced post stroke. Post-stroke mood disorders should be sought systematically in all hemiplegic patients, especially in the early phase and at regular interviews with family. They compromise functional prognosis and they are a source of demotivation especially in rehabilitation.

Acknowledgements

None.

Conflict of interest

The author declares no conflict of interest.

References

1. Hackett ML, Köhler S, O Brien JT. Mead GE Neuropsychiatric outcomes of stroke. *Lancet Neurol.* 2014;13(5):525−534.
2. Campbell Burton CA, Murray J, Holmes J, et al. Frequency of anxiety after stroke: a systematic review and meta-analysis of observational studies. *Int J Stroke.* 2013;8(7):545−559.
3. Ayerbe L, Ayis S, Crichton S. The natural history of depression up to 15 years after stroke: the South London Stroke Register. *Stroke.* 2013;44(4):1105−1110.
4. Nelson LD, Cicchetti D, Satz P. Emotional sequelae of stroke–a longitudinal perspective. *J Clin Exp Neuropsychol.* 1994;16(5):796–806.
5. Parikh RM, Robinson RG, Lipsey JR, et al. The impact of post stroke depression on recovery in activities of daily living over a 2-year follow-up. *Arch Neurol.* 1990;47(7):785–789.
6. Morrison V, Pollard B, Johnston M. Anxiety and depression 3 years following stroke: demographic, clinical, and psychological predictors. *J Psychosom Res.* 2005;59(4):209–213.
7. Flick CL. Stroke rehabilitation. 4. Stroke outcome and psychosocial consequences. *Arch Phys Med Rehabil.* 1999;80(5 Suppl 1):S21–S26.
8. Zigmond AS, Snaith RP. The hospital anxiety and depression scale. *Acta Psychiatr Scand.* 1983;67(6):361−370.
9. Brennan C, Worrall-Davies A, McMillan D. The hospital anxiety and depression scale: A diagnostic meta-analysis of case-finding ability. *J Psychosom Res.* 2010;69(4):371−378.
10. Aben I, Verhey F, Lousberg R, et al. Honig Validity of the beck depression inventory, hospital anxiety and depression scale, SCL-90, and hamilton depression rating scale as screening instruments for depression in stroke patients. *Psychosomatics.* 2002;43(5):386−393.
11. Spinhoven P, Ormel J, Sloekers PP, et al. A validation study of the hospital anxiety and depression scale (hads) in different groups of dutch subjects. *Psychol Med.* 1997;27(2):363−370.
12. Kootker JA, van Mierlo ML, Hendriks JC, et al. Risk factors for symptoms of depression and anxiety one year post stroke: a longitudinal study. *Archives of physical medicine and rehabilitation.* 2016;97(6):919–928.
13. De Ryck A, Brouns R, Geurden M, et al. (2014) Risk factors for poststroke depression: Identification of inconsistencies based on a systematic review. *J Geriatr Psychiatry Neurol.* 2014;27(3):147−158.
14. Kutlubaev MA, Hackett ML. Predictors of depression after stroke and impact of depression on stroke outcome: An updated systematic review of observational studies. *Int J Stroke.* 2014;9(8):1026−1036.
15. Lees R, Fearon P, Harrison JK.Quinn. TJ Cognitive and mood assessment in stroke research: focused review of contemporary studies. Stroke. 2012;43(6):1678−1680.