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SCREENING FOR DEPRESSION IN POST STROKE PATIENTS

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SUMMARY

Background: *Depression has a significant prevalence in patients following a stroke. Studies have found rates to be between 25-54%.*

Aims: *Within this audit we aimed to ascertain the proportion of patients who have been identified as having depression, and explore the methods employed to identify depressed patients. We also looked to assess the number of these patients who have been treated for depression and to explore the medications used for the treatment of depression.*

Methods: *This audit was conducted in two phases. Initially an audit was conducted to establish the current prevalence, screening and management of depression in post-stroke patients. Following this, we introduced the PHQ-9 as a screening tool for depression and a re-audited at four months. In phase 2, All patients admitted to the stoke ward in Bedford hospital between 10/9/09 and 13/12/09 were included in the audit. Patients were screened for depression using the PHQ-9 questionnaire two weeks after admission.*

Results: *The incidence of depression within the phase one group was 28%. In 9 of these cases there was no record of mood assessment or diagnosis of depression in the medical notes. Thirteen out of 60 patients were prescribed psychotropic agents during their stay. In phase 2, Of the 18 patients screened, 10 patients (56%) scored 5 or above, which according to the scoring system of the PHQ-9 is indicative of depression. One patient scored 10 indicative of moderate depression and one patient scored 19 indicative of moderately severe depression.*

Discussion: *Phase 1 of this audit revealed that there was no formal screening tool in use to identify depression in post stroke patients. Consequently we found the prevalence to be 28%. This correlates with the lower end of the rate expected within this group according to the literature. As no screening tool was being used, practice was not in accordance with the standards set by NICE guidelines. This led us to introduce the PHQ-9 screening tool in phase 2. Following this, we found the prevalence of depression had increased from 28% to 56%.*

Conclusions: *These results highlight the importance of formal screening in order to reliably identify patients who have signs of depression.*

Key words: *depression – screening - stroke*

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Introduction

Depression has a significant prevalence in patients following a stroke. Studies have found rates to be between 25-54% (Astrom et al. 1993).

The recognition and treatment of depression in post stroke patients is essential in promoting rehabilitation, recovery and quality of life in this patient group.

NICE guidelines recommend screening for depression in high risk patients, including those with chronic physical illness and mental health problems (NICE 2009).

Local hospital guidelines recommend that all stroke patients will have their mood assessed using a standard assessment by an appropriately trained member of the multidisciplinary team.

The literature suggests a number of different screening tools for use in screening for depression. These include the Beck Depression Inventory, Hamilton Rating Scale for depression and the Geriatric Depression Scale (Berg et al. 2008). Evidence suggests that the Patient Health Questionnaire - 9 (PHQ-9) has a greater sensitivity and specificity for depression and performs well as a brief screen for post stroke depression (Williams et al. 2005).

Aims

Within this audit we aimed to ascertain the proportion of patients who have been identified as having depression, and explore the methods employed to identify depressed patients.

We also looked to assess the number of these patients who have been treated for depression and to explore the medications used for the treatment of depression.

This audit was conducted in two phases. Initially an audit was conducted to establish the current prevalence, screening and management of depression in post-stroke patients. Following this, we introduced the PHQ-9 as a screening tool for depression and a re-audited at four months.

PHASE 1:

Methods

Data was collected retrospectively for 60 patients admitted to the stroke ward at Bedford Hospital between August 08 and April 09. Evidence of mood assessment, diagnosis of depression and use of antidepressant

medication was explored. This information was obtained from medical notes, nursing notes and drug charts of these patients.

Results

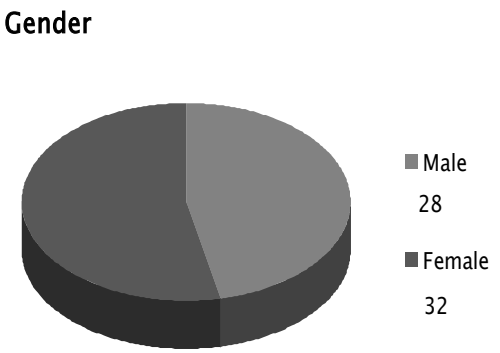

Figure 1. Gender distribution in subjects

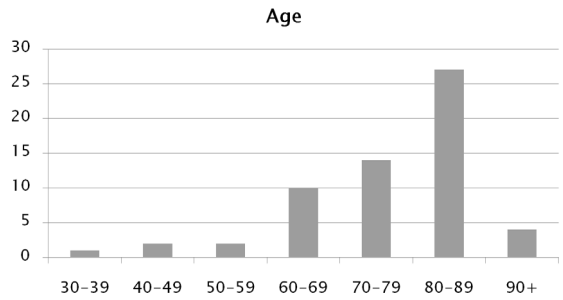

Figure 2. Age Distribution inpatients

Radiology results

Of 60 patients, on the Stroke ward, 46 were diagnosed as having had infarcts, hemorrhage or mixed CVA.

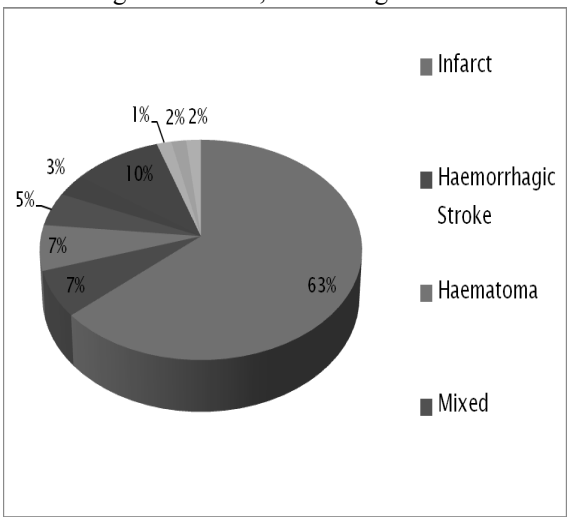

Figure 3. Radiology results indicating type of cerebrovascular accident

Therefore the incidence of depression within this group is 28%. In 9 of these cases there was no record of mood assessment or diagnosis of depression in the medical notes.

Medication

13 out of 60 patients were prescribed psychotropic agents during their stay. Of the 13 patients started on medication, 12 were started on citalopram and 1 on quetiapine. In only 3 of these 13 cases was there written documentation of low mood in the medical notes, and in 1 case low mood was documented in the physiotherapy notes. The 9 remaining patients were commenced on antidepressants during their hospital stay, with no documentation in the medical notes of a psychiatric assessment, observation of low mood or diagnosis of depression.

Previous psychiatric diagnoses

Of the 60 patients included, 5 had a known diagnosis of mental illness. 2 patients had a known diagnosis of dementia on admission, 1 patient had a known diagnosis of depression, 1 patients had an anxiety disorder, 1 one had learning disabilities.

In addition to these patients 4 were currently taking psychiatric medications; however no clear psychiatric history was documented in the notes.

PHASE 2:

Method

All patients admitted to the stoke ward in Bedford hospital between 10/9/09 and 13/12/09 were included in the audit. Patients were screened for depression using the PHQ-9 questionnaire two weeks after admission. Exclusion criteria were met if patients lacked mental capacity to be screened; the patient declined or was discharged or deceased within 2 weeks.

Results

Of 83 admitted between 10/9/09 and 13/12/09, 18 (22%) were screened using the PHQ-9 questionnaire. 65 patients were excluded, of these 12 were due to cognitive impairment, 42 had been discharged or had deceased prior to screening date, 1 could not be screened due to language barriers, and 9 were either unconscious or critically ill.

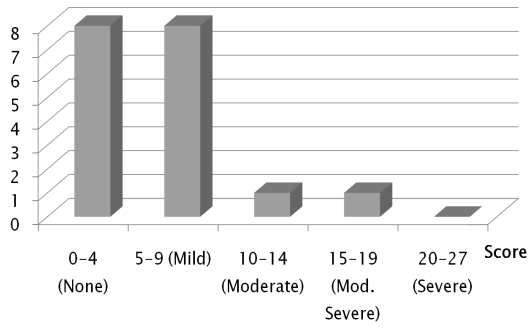

Figure 4. PHQ-9 Score

Of the 18 patients screened, 10 patients (56%) scored 5 or above, which according to the scoring

system of the PHQ-9 is indicative of depression. One patient scored 10 indicative of moderate depression and one patient scored 19 indicative of moderately severe depression. 6 of these patients were male and 12 female.

Discussion

Phase 1 of this audit revealed that there was no formal screening tool in use to identify depression in post stroke patients. Consequently we found the prevalence to be 28%. This correlates with the lower end of the rate expected within this group according to the literature. As no screening tool was being used, practice was not in accordance with the standards set by NICE guidelines. This led us to introduce the PHQ-9 screening tool in phase 2. Following this, we found the prevalence of depression had increased from 28% to 56%. These results highlight the importance of formal screening in order to reliably identify patients who have signs of depression.

It is important to emphasize that the PHQ-9 questionnaire is a screening tool, and not a diagnostic tool. It should be used to prompt further psychiatric assessment.

Phase 1 revealed that documentation of mood assessment and diagnosis was poor. By introducing a formal screening tool, documentation would automatically improve as there is a structured assessment to be completed by clinicians.

A significant proportion of patients were excluded due to cognitive impairment. As a self report assessment, the PHQ-9 has difficulty in screening those who lack mental capacity or those with communication problems such as dysphasia. Further studies could explore methods for screening for depression in this patient population.

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