ELSEVIER

Journal of Affective Disorders 101 (2007) 123–129

JOURNAL OF AFFECTIVE DISORDERS

www.elsevier.com/locate/jad

Research report

Long-term outcome of depressive pseudodementia in the elderly

J Andrés Sáez-Fonseca [a,*], Lean Lee [b], Zuzana Walker [c]

[a] *Specialist Registrar North Essex Mental Heath Partnership NHS Trust, UK*
[b] *Specialist Dementia Nurse, North Essex Mental Health Partnership NHS Trust, UK*
[c] *Senior Lecturer in Psychiatry of the Elderly, University College London, UK*

Received 6 October 2006; received in revised form 3 November 2006; accepted 3 November 2006
Available online 20 December 2006

Abstract

Background: The term depressive pseudodementia has proved to be a popular clinical concept. Little is known about the long-term outcome of this syndrome.
Aims: To compare depressed elderly patients with reversible cognitive impairment and cognitively intact depressed elderly patients.
Methods: All patients suffering from moderate or severe depression admitted to St Margaret's Hospital, UK as inpatients or day hospital outpatients between January 1 1997 and December 31 1999 ($n=182$) were screened for entry into the study. Eligible patients were divided into those presenting with pseudodementia and those who were cognitively intact and followed up for 5 to 7 years.
Results: Seventy-one point four percent of those suffering from pseudodementia had converted into dementia at follow-up compared to only 18.2% in the cognitively intact group. The relative risk was 3.929 (95% CI: 1.985 to 7.775) and the 'number needed to harm' 1.88.
Conclusions: Reversible cognitive impairment in late-life moderate to severe depression appears to be a strong predictor of dementia. Inpatients and day hospital outpatients with depressive pseudodementia should probably have a full dementia screening, comprehensive cognitive testing and ongoing monitoring of their cognitive function.

Keywords: Pseudodementia; Cognitive impairment; Depression; Dementia

1. Introduction

The term depressive pseudodementia has proven to be a popular clinical concept despite not being accepted as a separate nosological category in any classification system. Bulbena and Berrios defined it as reversible cognitive impairment of the type seen in dementia which correlates positively with delusions, unipolar illness, past history of affective illness and positive outcome and negatively with non-affective illness and confusion (Bulbena and Berrios, 1986).

1.1. Prevalence studies of pseudodementia

There are very few studies of the prevalence of pseudodementia. Ferran et al. (2006) found that pseudodementia accounted for 18% of referrals to a presenile dementia service, but was missed by most referrers. Copeland et al. (1992) identified 6 cases among 1070 individuals over 65 living in the community (0.6%). Rabins (1981) studied the rates of reversible dementia in a group of hospital inpatients. In one year 41 patients presented to a large psychiatric hospital suffering from dementia. Of those 4 were found to have reversible cognitive impairment. In addition 16 elderly patients with admission diagnoses of depression were found to be suffering from comorbid dementia; 13 of these were

* Corresponding author.
E-mail addresses: j.andres.saez.fonseca@doctors.org.uk (J.A. Sáez-Fonseca), z.walker@ucl.ac.uk (Z. Walker).

0165-0327/$ - see front matter © 2006 Elsevier B.V. All rights reserved.
doi:10.1016/j.jad.2006.11.004

reversible. Thus in total there were 17 patients out of 41 who would meet criteria for a hypothetical reversible cognitive impairment in a depressive syndrome making the annual incidence among demented patients referred to secondary services 41 per 100.

1.2. Depression as a risk factor for cognitive decline

A number of studies have looked at depression and associated cognitive impairment. Some found no relationship between the two (Bickel and Cooper, 1994; Dufouil et al., 1996; Henderson et al., 1997). Some suggested that depression is a prodromal or early sign of cognitive impairment rather than a risk factor (Broe et al., 1990; French et al., 1985; Heyman et al., 1984).

On the other hand a study of 1070 individuals over the age of 60 in the Washington Heights community of Manhattan, New York, found that, after 5 years of follow-up, subjects with depressed mood had a moderately increased risk of developing dementia (Devanand et al., 1996). Others made the same observation (Baldwin and Jolley, 1986; Murphy, 1983). Thus there is a continuing debate concerning the relationship between depression – whether late or early onset – and cognitive decline.

1.3. Pseudodementia as a risk factor for cognitive decline

There is some evidence that clinically depressed patients who present with pseudodementia develop irreversible dementia in 2 or more years (Alexopoulos et al., 1993; Reding et al., 1985; Reynolds et al., 1986) although others disagree (Pearlson et al., 1989; Rabins et al., 1984).

Forty-four community-dwelling elderly patients suffering with depressive pseudodementia were followed up for up to 18 years (mean 8) at 6-monthly intervals (Kral and Emery, 1989). All of them were vigorously treated during their index episode of depression restoring cognitive function to its premorbid level. During follow-up the cohort was assessed clinically and also by using imaging and EEG in some cases. Neuropathology was also available in a number of cases. Thirty-nine of the 44 patients originally recruited for the study (89%) developed dementia by the endpoint. The main limitation of this study was the lack of a control group. Another study followed up 19 individuals diagnosed with reversible cognitive impairment due to functional cause – mostly, but not exclusively, depression and psychosis – for 10 years (Sachdev et al., 1990). Only 2 developed dementia and it was felt that those two probably met the diagnosis at the start of the study. They did not have a control group either.

1.4. Aims

The aim of this study was to compare depressed elderly patients with reversible cognitive impairment and cognitively intact depressed elderly patients.

2. Methods

2.1. Participants

All patients admitted to a psychiatric inpatient unit and a day hospital at St Margaret's Hospital, UK, during the period of January 1997 to December 1999 ($n=603$) were screened for entry into the study according to the inclusion and exclusion criteria (see below).

2.1.1. Inclusion criteria

- All patients suffering from an ICD-10 (World Health Organisation, 1992) diagnosis of either moderate or severe depressive episode as evidenced by the patients' case records ($n=182$).

2.1.2. Exclusion criteria

- Patients whose records had insufficient information or whose records were missing ($n=43$).
- Patients suffering from severely disabling physical illnesses (including severe sensory impairment), as it was felt it would be difficult to attribute both their loss of function and poor performance on cognitive testing ($n=19$).
- Patients with comorbid dementia at recruitment ($n=32$).
- Patients with comorbid schizophrenia ($n=1$).
- Patients with comorbid significant anxiety; enough to afford them a separate ICD-10 diagnosis of an anxiety disorder ($n=2$).
- Patients with comorbid ICD-10 substance or alcohol dependence syndrome ($n=3$).
- Patients who had reversible cognitive impairment and otherwise met inclusion criteria but who failed to achieve a mini-mental state examination (MMSE) (Folstein et al., 1975) score of 26 or greater at recovery from the index episode ($n=15$).

2.1.3. Cohort

After applying the selection criteria a group of 67 patients was included in the analysis. Comparing the 115 patients that were excluded with the 67 that were