Published in final edited form as:
Acta Neuropsychiatr. 2013 December ; 25(6): . doi:10.1017/neu.2013.33.

Persistent delusional theme over 13 episodes of psychotic depression

S D Ostergaard[1,2,3], **A K Leadholm**[4], and **A J Rothschild**[5]

[1]Unit for Psychiatric Research, Aalborg Psychiatric Hospital, Aalborg University hospital, Aalborg, Denmark

[2]Institute of Clinical Medicine, Aarhus University Hospital, Aarhus, Denmark

[3]Depression Clinical and Research Program, Massachusetts General Hospital, Harvard Medical School, Boston, USA

[4]Copenhagen University Medical School, Copenhagen, Denmark

[5]University of Massachusetts Medical School and UMass Memorial Health Care, Worcester, USA

Abstract

Objective—Unipolar psychotic depression (PD) is a highly debilitating condition, which needs intense monitoring and treatment. Among patients with recurrent PD, delusions tend to be very similar or identical over several separate episodes during the course of illness, but case-reports illustrating this clinical phenomenon in detail are lacking from the literature.

Methods—Case report describing the 45-year-old Ms. J, who has experienced multiple episodes of PD. The report is based on a review of her medical file.

Results—The delusional theme of Ms. J's initial episode of PD reappeared at several subsequent episodes. During the majority of admissions, Ms. J was treated with electroconvulsive therapy, which resulted in significant improvement in the depressive, psychotic and catatonic features.

Conclusion—Ms. J's case illustrates that PD can be a stable phenotype over many episodes and that it is important to recognize psychotic symptoms in order to prescribe the best possible treatment.

Keywords

Affective Disorder; Depression; Psychosis; Delusions

Introduction

Depression with psychotic symptoms, or "psychotic depression" (PD), is a severe condition characterized by the simultaneous presence of clinical depression and psychotic symptoms, mainly in the form of delusions, hallucinations and catatonia (1). PD is currently classified

Corresponding author: Søren Dinesen Østergaard, Unit for Psychiatric Research, Aalborg Psychiatric Hospital, Aalborg University Hospital, Mølleparkvej 10, DK-9000 Aalborg, Denmark, sdo@rn.dk, Phone: + 45 61282753, Fax: +45 97643754.

Declaration of interest

S.D. Østergaard has received consultant honoraria and travel support from Janssen-Cilag until April 2011. Furthermore, he has received travel support from Bristol Myers Squibb at one occasion in 2010. A.J. Rothschild has received grant support from the National Institute of Mental Health (NIMH), Cyberonics, Takeda, and St. Jude Medical and has served as a consultant to Allergan, GlaxoSmithKline, Eli Lilly, Noven Pharmaceuticals, Pfizer, Shire Pharmaceuticals, and Sunovian. A.K. Leadholm reports no conflicts of interest.

as a subtype of severe depression in both the Diagnostic and Statistical Manual of mental disorders, 4th revision (DSM-IV) (2) and the International Classification of Disease, 10th edition (ICD-10) (3). This dichotomous subtyping is based on the presence/absence of psychotic symptoms during depression, but research has shown that PD differs from non-psychotic depression in many other aspects (4-13). It has previously been described that delusional themes in PD tend to be identical, or vary very little, over several episodes (14, 15), but case-reports illustrating this clinical phenomenon are lacking from the literature.

Case presentation

Ms. J is a 45-year-old woman who was referred to a general psychiatric hospital in Denmark due to severe depression with accompanying delusions. The first author of this manuscript met Ms. J as she participated in the study entitled “Clinical Validation of the Rating Scale for Psychotic Depression” (ClinicalTrials.gov Identifier: NCT01518049). The case report is based on a review of her medical file. None of the authors have been involved in Ms. J’s treatment in any way.

Ms. J’s symptoms had developed over approximately 2 weeks and had been noticed by her family members who were very worried about her wellbeing and safety. The contact to the psychiatric hospital was made by a nurse from the psychiatric outpatient clinic where Ms. J was receiving treatment because of previous episodes of severe depression. As Ms. J refused to be admitted voluntarily, compulsory admission was carried out in accordance with Danish law, which supports the admission and treatment of individuals who are psychotic and at risk of harming themselves.

At the initial interview at the psychiatric hospital, Ms. J displayed severely depressed mood, loss of interest, feelings of guilt and worthlessness, psychomotor retardation, anxiety and lack of insight. Apart from the depressive symptoms, she was tormented by the false belief that her 17-year-old son had suffered severe weight loss caused by her incompetence as a mother – not providing him with enough food and care. Contrary to her conviction, her son was a perfectly healthy teenager with a large and satisfied appetite. Both physical examination and biochemical screening of Ms. J were normal and there was no suspicion of intracranial pathology requiring brain imaging. During the first week of the admission Ms. J was under constant 24-hour monitoring at a closed ward due to the risk of self-harm. After two days of stay she gave consent to bilateral electroconvulsive therapy (ECT), which had been used with very good response during previous episodes. After four bilateral ECT treatments she was no longer delusional and after 1 month of hospital stay, and a total of nine bilateral ECT treatments, she was discharged from the hospital for follow-up at the outpatient clinic. At this point she was euthymic and demonstrated full insight in relation to her mental illness. The psychopharmacological regimen at the time of writing is 50 mg Nortriptyline, 15 mg Aripiprazole and 200 mg Quetiapine (prolonged release). Prior to the episode described above, a variety of other psychopharmacological regimens had been employed in the attempt to prevent recurrence of Ms. J’s depressive illness. These included Lithium, Olanzapine, Risperidone, Zuclopenthixol and Chlorprothixen.

The course of the psychotic depressive episode described above is relatively common, but the particularity of Ms. J’s case lies in its history. Her first depressive episode developed 7 months after the birth of her son, i.e. 17 years prior to the present episode. At that time she was admitted in a state of severe depression accompanied by the delusion that she was a bad mother, and the conviction that her son communicated that he didn’t want her breast milk, merely through the way he looked at her. She responded very well to ECT treatment and was discharged with the ICD-10 diagnosis of F32.3 - severe depressive episode with psychotic symptoms (3). Since this first episode Ms. J has been admitted to a psychiatric

hospital for treatment of depression 15 times during a total of 13 separate episodes. At all these occasions she was delusional and the resulting ICD-10 diagnosis was F33.3 - Recurrent depressive disorder, current episode severe with psychotic symptoms (3). The delusional theme at practically all of the depressive episodes concerned her son and various false beliefs with accompanying guilt feelings regarding his lack of wellbeing/safety. The following examples are representative of the delusions: “I have caused damage to my son’s hearing and he will never recover”, “It was my fault that he fell down the stairs - my son would be better of without me”, “I will not let my son go to school because he is in danger and I’m to be blamed”. At some of the admissions she also suffered from visual/auditory hallucinations (seeing/hearing her son) and catatonia (stupor). There are no reports of hypomanic, manic or mixed episodes and a recent screening with the hypomania checklist (HCL-32) (16) was not indicative of bipolar disorder. During the admission in relation to episode number nine, Ms. J felt that the furniture at the department had “a special significance” and had voices telling her that she was a bad mother. In the course of the same admission she felt that her thoughts were being broadcast to her son and husband through radio waves. There are no other descriptions of bizarre delusions or Schneiderian first rank symptoms in her medical file. In between episodes, Ms. J. has experienced some tendency towards self-reference/paranoia (mood-congruent), especially when feeling stressed in relation to work or family affairs. At some occasions the self-referent ideas progressed to frank delusions and led to the admissions described above.

Discussion

In this case report we describe a 45-year-old female who has experienced multiple episodes of unipolar psychotic depression, since its onset 17 years prior to the most recent admission. The theme of her delusions has been largely consistent over the many episodes and the depressive, psychotic and catatonic features have all responded extremely well to ECT.

It can be argued that the bizarre delusions and Schneiderian first rank symptoms occurring during episode number nine are incompatible with the ICD-10 definition of psychotic depression, according to which the delusions or hallucinations should be different from those “listed as typically schizophrenic in F20” (3). Yet Ms. J was, rightfully in our opinion, diagnosed with psychotic depression again after this episode. In a recent paper of ours (17), we suggested the following regarding the psychotic symptoms in the ICD-11 diagnostic criteria for PD: “Psychotic symptoms (delusions or hallucinations) are present, but diagnostic criteria for schizophrenia or schizo-affective disorder are not fulfilled. However, bizarre delusions or Schneiderian first-rank symptoms persisting for less than 2 weeks during a depressive episode can still be classified as PD if the depression is the predominant state” (17). This paper was written prior to the meeting with Ms. J, but her case emphasizes quite clearly why the criteria for the psychotic symptoms in the ICD-11 definition of PD would benefit from the revision suggested above. The short bout of bizarre delusions and Schneiderian first-rank symptoms experienced by Ms J. does not change the overall impression of her course of illness as a case of recurrent PD. The criteria revision would also increase the consistency between DSM-5 and ICD-11, thereby facilitating research and improving transferability across the DSM/ICD border.

The treatment choices in the case discussed in this paper are not unusual as it reflects the lack of an established, clearly superior, pharmacological treatment regimen in PD (18). International treatment guidelines on PD have proven to be heterogeneous, with both antidepressant monotherapy and antidepressant-antipsychotic combination therapy being advocated as first-line treatment (19). A recent meta-analysis on the optimal pharmacological treatment of PD concludes that antidepressant-antipsychotic combination therapy is significantly more effective than monotherapy with either an antidepressant or an

antipsychotic drug (20). However, the meta-analysis relies on the assumption that the effect of the combinations can be compared and summed (class-effect), despite the use of entirely different antidepressants and antipsychotics in the individual studies (20). When considering the heterogeneity in the pharmacological mechanisms of various antidepressants and antipsychotics, this assumption seems questionable. Furthermore, it remains unclear which antidepressant-antipsychotic combination is the most effective (19).

Regarding ECT, almost all treatment guidelines on PD suggest ECT as a first-line treatment on par with pharmacological options, or as the superior choice in cases where severe suicidality or threatening somatic conditions are present (for a review see Leadholm et al. (19)). The present case supports the efficacy of ECT in the acute phase of PD, but also underlines that, despite successful ECT treatment, there is a high rate of relapse. This is consistent with the literature (21-23). An ongoing study may provide important new knowledge regarding an effective relapse preventing pharmacological regimen for PD (24).

In conclusion, Ms. J's case illustrates that PD can be a stable phenotype over many episodes and that it is important to recognize psychotic symptoms in order to prescribe the best possible treatment of depression (19, 20, 25-27). In the present case, ECT has provided fast and safe response in the acute phase of illness, over many episodes in a time-span of 17 years. Relapse prevention has been more challenging.

Acknowledgments

Ms. J has given written and oral consent to the publication of this case report. The authors are grateful for her participation.

Financial support

S.D. Østergaard and A.K. Leadholm were funded by their respective institutions as listed under affiliations. A.J. Rothschild's contribution was supported in part by the NIMH (U01 MH062624) and the Irving S. and Betty Brudnick Endowed Chair of Psychiatry, University of Massachusetts MedicalSchool.

REFERENCES

1. ROTHSCHILD, AJ. Clinical Manual for Diagnosis and Treatment of Psychotic Depression. American Psychiatric Publishing, Inc.; Washington DC, USA: 2009.
2. AMERICAN PSYCHIATRIC ASSOCIATION. Diagnostic and Statistical Manual of Mental Disorders. 4th Edition. Washington, DC: 2000. Text Revision
3. WORLD HEALTH ORGANIZATION. Diagnostic criteria for research. WHO; Geneva: 1993. The ICD-10 Classification of Mental and Behavioural Disorders.
4. OSTERGAARD SD, PETRIDES G, DINESEN PT, et al. The Association between Physical Morbidity and Subtypes of Severe Depression. Psychother Psychosom. 2013; 82:45–52. [PubMed: 23147239]
5. OSTERGAARD SD, BILLE J, SOLTOFT-JENSEN H, LAUGE N, BECH P. The validity of the severity-psychosis hypothesis in depression. J Affect Disord. 2012; 140:48–56. [PubMed: 22381953]
6. OSTERGAARD SD, BERTELSEN A, NIELSEN J, MORS O, PETRIDES G. The association between psychotic mania, psychotic depression and mixed affective episodes among 14,529 patients with bipolar disorder. J Affect Disord. 2013; 147:44–50. [PubMed: 23122529]
7. MAJ M, PIROZZI R, MAGLIANO L, FIORILLO A, BARTOLI L. Phenomenology and prognostic significance of delusions in major depressive disorder: a 10-year prospective follow-up study. J Clin Psychiatry. 2007; 68:1411–1417. [PubMed: 17915981]
8. OSTERGAARD SD, WALTOFT BL, MORTENSEN P,B, MORS O. Environmental and familial risk factors for psychotic and non-psychotic severe depression. J Affect Disord. 2013; 147:232–240. [PubMed: 23228568]

9. PETRIDES G, FINK M, HUSAIN MM, et al. ECT remission rates in psychotic versus nonpsychotic depressed patients: a report from CORE. J ECT. 2001; 17:244–253. [PubMed: 11731725]
10. BIRKENHAGER TK, PLUIJMS EM, LUCIUS SA. ECT response in delusional versus non-delusional depressed inpatients. J Affect Disord. 2003; 74:191–195. [PubMed: 12706521]
11. VON WERNE BAES C, DE CARVALHO TOFOLI SM, MARTINS CMS, JURUENA MF. Assessment of the hypothalamic–pituitary–adrenal axis activity: glucocorticoid receptor and mineralocorticoid receptor function in depression with early life stress – a systematic review. Acta Neuropsychiatrica. 2012; 24:4–15.
12. ANDREATINI A. Depression and the hypothalamic-pituitary-adrenal axis: increasing the scope. Acta Neuropsychiatrica. 2012; 24:1–3.
13. LOO CK, MAHON M, KATALINIC N, LYNDON B, HADZI-PAVLOVIC D. Predictors of response to ultrabrief right unilateral electroconvulsive therapy. J Affect Disord. 2011; 130:192–197. [PubMed: 20961620]
14. CHARNEY DS, NELSON JC. Delusional and nondelusional unipolar depression: further evidence for distinct subtypes. Am J Psychiatry. 1981; 138:328–333. [PubMed: 6110345]
15. LYKOURAS E, CHRISTODOULOU GN, MALLIARAS D. Type and content of delusions in unipolar psychotic depression. J Affect Disord. 1985; 9:249–252. [PubMed: 2934458]
16. ANGST J, ADOLFSSON R, BENAZZI F, et al. The HCL-32: towards a self-assessment tool for hypomanic symptoms in outpatients. J Affect Disord. 2005; 88:217–233. [PubMed: 16125784]
17. OSTERGAARD SD, ROTHSCHILD AJ, UGGERBY P, MUNK-JORGENSEN P, BECH P, MORS O. Considerations on the ICD-11 Classification of Psychotic Depression. Psychother Psychosom. 2012; 81:135–144. [PubMed: 22398817]
18. ROTHSCHILD AJ. Challenges in the Treatment of Major Depressive Disorder With Psychotic Features. Schizophr Bull. 2013
19. LEADHOLM AK, ROTHSCHILD AJ, NOLEN WA, BECH P, MUNK-JORGENSEN P, OSTERGAARD SD. The treatment of psychotic depression: is there consensus among guidelines and psychiatrists? J Affect Disord. 2013; 145:214–220. [PubMed: 23021823]
20. FARAHANI A, CORRELL CU. Are antipsychotics or antidepressants needed for psychotic depression? A systematic review and meta-analysis of trials comparing antidepressant or antipsychotic monotherapy with combination treatment. J Clin Psychiatry. 2012; 73:486–496. [PubMed: 22579147]
21. SACKEIM HA, HASKETT RF, MULSANT BH, et al. Continuation pharmacotherapy in the prevention of relapse following electroconvulsive therapy: a randomized controlled trial. JAMA. 2001; 285:1299–1307. [PubMed: 11255384]
22. SACKEIM HA, PRUDIC J, DEVANAND DP, DECINA P, KERR B, MALITZ S. The impact of medication resistance and continuation pharmacotherapy on relapse following response to electroconvulsive therapy in major depression. J Clin Psychopharmacol. 1990; 10:96–104. [PubMed: 2341598]
23. ARONSON TA, SHUKLA S, HOFF A. Continuation Therapy After ECT for Delusional Depression: A Naturalistic Study of Prophylactic Treatments and Relapse. Convuls Ther. 1987; 3:251–259. [PubMed: 11940926]
24. FLINT AJ, MEYERS BS, ROTHSCHILD AJ, et al. Sustaining remission of psychotic depression: rationale, design and methodology of STOP-PD II. BMC Psychiatry. 2013; 13:38-244X–13-38. [PubMed: 23351522]
25. FINK M. Separating psychotic depression from nonpsychotic depression is essential to effective treatment. J Affect Disord. 2003; 76:1–3. [PubMed: 12943927]
26. FINK M. Rediscovering catatonia: the biography of a treatable syndrome. Acta Psychiatr Scand Suppl. 2013; (441):1–47. doi:1-47. [PubMed: 23215963]
27. ROTHSCHILD AJ, WINER J, FLINT AJ, et al. Missed diagnosis of psychotic depression at 4 academic medical centers. J Clin Psychiatry. 2008; 69:1293–1296. [PubMed: 18384244]