The psychopharmacology algorithm project at the harvard south shore program: 2012 update on psychotic depression

Michael Tang, David N. Osser.

Abstract

Background: The Psychopharmacology Algorithm Project at the Harvard South Shore Program (PAPHSS) has published evidence-supported algorithms for the pharmacological treatment of major depressive disorder with psychotic features (psychotic depression) in 1998 and 2008. This article is an update for the 2008 algorithm.

Method: Using similar methodology as with the 2008 update, PubMed and EMBASE searches were conducted to identify relevant literature in the English language from November 2007 through July 2012. Articles were evaluated for quality of the data and for whether they provided additional evidence support for previous recommendations or prompted changes to the prior algorithm.

Results: Minor changes were made to the algorithm: most prior recommendations were upheld. The most effective treatment for hospitalized, severe psychotic depression patients remains electroconvulsive therapy (ECT). The combination of an antidepressant (tricyclic [TCA], selective serotonin reuptake inhibitor [SSRI], or serotonin-norepinephrine reuptake inhibitor [SNRI]) plus an antipsychotic continues to be the preferred pharmacological modality when ECT is an unavailable/deferred option. Since the last update, new evidence tends to support using venlafaxine ER, a SNRI, as the first choice antidepressant. Regarding the antipsychotic, both olanzapine and quetiapine have new data demonstrating efficacy. Nevertheless, it is suggested that it may be reasonable to try other atypical antipsychotics with more benign safety profiles (e.g. ziprasidone, aripiprazole) as the first choice antipsychotic. New data also suggest at least four months of maintenance therapy is effective. If the first antidepressant-antipsychotic combination produces an unsatisfactory outcome, and ECT is still not acceptable or appropriate, the second pharmacotherapy trial can be with a change in the antidepressant, as was recommended in the 2008 algorithm. After two trials of combination therapy have failed (and, again, ECT is not an option), the algorithm continues to recommend augmentation with lithium. Limited evidence also suggests consideration of a switch to clozapine monotherapy. Augmentation with methylphenidate is a newly mentioned possible option based on very small evidence. When combination therapy is deferred, evidence suggests monotherapy with a TCA may be more effective than an SNRI or SSRI. However, safety issues and possible increased risk of psychosis exacerbation are unfavorable factors for TCA monotherapy. ECT or addition of an antipsychotic should be reconsidered if antidepressant monotherapy failed.
Conclusion: This heuristic further refines the previous PAPHSS analysis of the available evidence for pharmacological treatment of psychotic depression. The validity of the conclusions is limited by the quality and quantity of the literature available: the number of head-to-head prospective trials in psychotic depression is still relatively small. However, this algorithm may serve as a guide for clinicians in the management of psychotic depression.

Key words: affective disorders, psychotic, psychotic depression, delusional depression, pharmacological treatment, psychopharmacology