## Review of the Diagnosis and Treatment of Pregnant Psychiatric Inpatients

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Dear Editor.

Psychiatric disorder periods experienced during pregnancy are important because they affect both the pregnant woman and the fetus negatively (1,2). There is no standard treatment protocol specific for psychiatric patients during pregnancy. With the perspective to illuminate research into the diagnosis and prevention of potential risks, it is thought that a study evaluating data obtained from a review of patient files will be beneficial to avoid potential risks and to specify the treatment of psychiatric patients during pregnancy.

Data from 22 pregnant inpatients presenting to the psychiatry service of a Training and Research Hospital between August 2010 and August 2011 were evaluated retrospectively by reviewing the patient files. The most common psychiatric disorders experienced in the 1st and 2nd trimesters were mood disorders. In the 3rd trimester, schizophrenia, major depressive disorder (MDD), and schizoaffective disorder (SAD) were seen equally. Psychiatric disorders found throughout

pregnancy were schizophrenia (n=6; 27.5%), bipolar disorders (BD) manic attack (n=5; 23.0%), BD depressive attack (n=2; 9.0%), BD mixed attack (n=1; 4.5%), MDD (n=5; 22.5%), obsessive compulsive disorder (OCD) (n=1; 4.5%), and SAD (n=2; 9.0%). While psychotherapy was given to a patient in the form of cognitive behavioral therapy (CBT) in the 1st trimester, electroconvulsive therapy (ECT) was used for the three patients with psychotic features and suicidal thoughts in the 2<sup>nd</sup> and 3<sup>rd</sup> trimesters. A patient in her 7th gestational week with MDD who had taken venlafaxine before pregnancy and continued to do so when pregnant was found to have undergone spontaneous abortion. The OCD (schizo-obsessive) patient presenting in the 1st trimester was treated with ECT first; later, sertraline and CBT were added. In the 1st and 2nd trimesters, ECT and haloperidol were used in the patient with excited BD manic attack. In the patient suffering from BD mixed attack with suicidal thoughts in the 2<sup>nd</sup> trimester, after administering ECT, her pregnancy ended in an abortus. Two patients with

BD depressive attack, self-medicating with lithium before presenting to the hospital were determined to be in the 2<sup>nd</sup> trimester. While one of the patients was taking lithium irregularly, the other one was using it regularly, having started a few months earlier. An advanced investigation was performed for these patients by gynecologists and specialist obstetricians. Due to major malformation detection, medical abortion was preformed in the patient who had used lithium irregularly before. In the other patient, no prominent malformation was found and lithium treatment was continued with the consultation by a gynecologist and obstetrician. In the 1<sup>st</sup> and 2<sup>nd</sup> trimesters, schizophrenia patients with excitation and suicidal thoughts were treated by ECT, while only haloperidol was administered to those with neither of these symptoms. Olanzapine and quetiapine were given to the schizophrenia patients in the 3<sup>rd</sup> trimester, while ECT and haloperidol were applied to the patient in the 3rd trimester suffering from SAD. In another SAD patient, it was established that she had used clozapine and valproic acid before presenting to hospital in the  $3^{rd}$ trimester. No congenital defect was detected by the specialist gynecologist and obstetrician.

Selective serotonin reuptake inhibitors (SSRI) like sertraline and serotonin noradrenalin reuptake inhibitors (SNRI) like venlafaxine are used in MDD and OCD (2). Although there is no valid evidence for an increase of teratogenicity by using SSRI or SNRI, with the use of serotonergic antidepressants, like venlafaxine, adverse effects may be found (3). Our research is consistent with the literature. It is indicated that there are studies showing that CBT is as effective as medication in the treatment of mild-moderate MDD, but there is no published study on its effectiveness in

the treatment of MDD during pregnancy yet (4,5).

In life-threatening cases, such as psychosis and suicidal thought, the importance of ECT becomes clear (6). In our research, clinicians took the patient's treatment into consideration. Recent findings have shown that ECT is effective in perinatal mood disorders (7). ECT applied during pregnancy was examined retrospectively in the studies, and infant deaths were reported (8). We have found a similar result in our study. Unfortunately, no prospective, controlled studies inspecting ECT treatment in pregnancy have been carried out until now (7,8).

Clinicians prefer antipsychotic drugs to mood stabilizers as an alternative in the limited number of studies available (9-11). Though major malformations were detected after exposure to antipsychotic drugs such as haloperidol, olanzapine (10), quetiapine, and clozapine during pregnancy (9), it has been reported that no obvious malformations were seen in the case series and reports (11). Although lithium and valproic acid have a teratogenic effect, in some studies it was seen that these substances did not increase the incidence of major malformations. The negative information previously existing about these drugs was not confirmed by later research (12,13).

When these findings are taken into account, none of the psychotropic drugs required to be used during pregnancy is completely safe. It is very difficult to formulate a structured standardized treatment algorithm for pregnant psychiatric patients. Clinicians must select safe choices and should follow appropriate strategies in setting up personal treatment plans and in patient follow-up. In order to develop a treatment protocol, multicenter studies with more patients being analyzed both prospectively and retrospectively are necessary.

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