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PREGNANCY AND ATYPICAL ANTIPSYCHOTICS

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SUMMARY

Scientific research aiming at discovering new generations of effective medications is a common practice in medicine, and psychiatric research is no exception. Antipsychotics are used to treat chronic mental illnesses such as schizophrenia. The new generation of antipsychotics (atypicals) gradually reveal their advantages in comparison to the older generation of antipsychotics (conventional, typicals) and are increasingly applied to the everyday practice. Although there are no differences in the therapeutic effectiveness between the two groups mentioned, atypical antipsychotics have become the drugs of choice.

A certain number of women in their reproductive age suffer from schizophrenia and other mental illnesses which demand antipsychotic treatment. Atypical antipsychotics have been available on the market since the mid 90's so the experience in the application of these medicaments in treating pregnant women is relatively modest.

This study will present our own experience in the treatment of a pregnant woman suffering from schizophrenia, who was treated with ziprasidone for the duration of her pregnancy. The psychotic symptoms remained in remission throughout the whole pregnancy period, during labour and after the birth. The pregnancy course remained normal all through to the birth, which was carried out naturally and normally. A healthy baby was born within the term expected.

Key words: *paranoid schizophrenia – pregnancy - ziprasidone*

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INTRODUCTION

Pregnancy is not an illness but a reflection of a healthy aspect of every woman as well as of women suffering from schizophrenia. Many women suffering from this illness already have children and their pregnancy is considered relatively risky, for several reasons. Obstetric and psychiatric complications can both be present in pregnant schizophrenia patients (Howard 2005, Levey et al. 2004).

The choice of antipsychotics in the treatment of pregnant schizophrenia women is a complex process, especially in the application of new drugs. Constant care needs to be taken when considering the risks and benefits for the mothers and their children, which prompts us to a rational application of antipsychotics in pregnant women. The antipsychotic application is a shared issue for obstetricians, psychiatrists and general practice doctors. According to the literature, typical antipsychotics are considered to be relatively safe in pregnancy (Briggs et al. 2002).

Little is known about the new antipsychotics so it is rather difficult to foresee their relative safety in pregnancy. The knowledge about the risks in regards prenatal treatment with atypical antipsychotics in comparison to the conventional ones is also rather modest (Tenyi et al. 2002). There are research results available in the literature on the new generation of antipsychotics such as quetiapine and risperidone (Tenyi et al. 2002, Ratnayake & Libretto 2002) and for olanzapine (McKenna et al. 2005).

The information available concerning exposure to ziprasidone in human pregnancy is scarce, while only two case reports involving aripiprazole use in human pregnancies have been published so far (Einarson & Boskovic 2009).

CASE REPORT

A 40 years old female patient, an economist, married, a mother to a year old child, lives with her parents, suffers from paranoid schizophrenia F20.0 (ICD-10; DSM IV). She was born as the second child to her parents; the mother is a housekeeper and is mentally disturbed, the father is mentally healthy, but according to the patient's opinion, he is extremely authoritarian. A two year older sister had a history of postpartum psychosis.

All together, the patient was admitted five times to a hospital during her lifetime, always due to the acute episodes of the illness. During the intervals between the episodes, she was treated ambulatorily. She was generally regular in her treatments. Her attitude about her mental illness was uncritical and she was quite oblivious of it. In the periods of her remissions she used to manipulate her medications or she would discontinue their use, which was the reason for further hospitalisation.

The patient has had an emotional relationship in the age of 20, which was terminated due to pressure from her father. She has never forgiven him for this. She was very fixated on to this relationship and also remained platonically in love, being quite possessed with it at the times.

The very first mental disturbances emerged wher she was frequenting the university, in terms of changes in behaviour (she became withdrawn, seemed rather distant, her contacts with the family became fewer and she did not manage to pass her exams as planned and scheduled. At the age of 22, she attempted suicide with pills, which led to her admission to hospital. On admission to hospital, she was manifestly psychotic, with psychopathological content similar to schizophrenia. She was treated with a combination of promazine and fluphenazine. At the end of the treatment, she was discharged from hospital and advised to continue with her ambulatory treatments.

In a short period of time (age 26 to 28) she was hospitalized three times due to psychotic episodes. The cause was discontinuation of her therapy. Paranoid delusions, derealisation and depersonalisation phenomena, with a phenomena of personality transformation and cenesthetic hallucinations, were dominant in the psychopathology. On the basis of clear and distinguishing symptoms and a valid diagnostic criterion, paranoid schizophrenia was diagnosed. A combination of promazine, fluphenazine and diazepam was effective, and biperiden was introduced due to the side-effects.

Following her fourth hospitalization, the psychotic symptoms were less intense, the patient expressed concern about her condition and existence, she reflected intensively about her illness and the possible ways of treatment. We used and channelized her thoughts and advised aripiprazole therapy as part of a clinical study, which she gladly accepted. The patient did not develop any side-effects following the 30 mg dose of aripiprazole per day. She was regular at her check-ups during which she was monitored (vital signs, evaluation scales, laboratory tests for blood and urine, pregnancy test). During her seven year remission period, she was cooperative in her treatment. That was the longest remission period ever, since the onset of her illness.

However, the patient started avoiding and manipulating her therapy again. The reasons for such behaviour became evident shortly. She found a partner who was disapproved of by her father. She manipulated her parents and doctors, in order to protect her relationship and become pregnant and give birth to a child she had yearned for over many years, as became evident later on. She married in secrecy. Her husband did not accept her illness and, as she appeared quite healthy to him, this resulted in him encouraging her to terminate the therapy. Evidently, the deterioration of the illness occurred due to non-adherence to the medication, as was in the end admitted by the patient herself.

In this episode, considering the positive experience with an atypical antipsychotic, we decided on treatment with ziprasidone (2x80 mg) combined with a lower dose of fluphenazine (2,5 mg) and promazine (25 mg). The patient reacted well to this combination of medications, psychotic symptoms disappeared and no side-effects developed.

She expressed interest in her pregnancy in relation to her illness and treatment. We discussed this matter in detail together. The young couple was counselled and warned about the eventual pregnancy risks. Apart from the worsening of the mental illness during the pregnancy, at the time of labour and afterwards, the genetic heredity risk for the illness, risk was present simply because of the age of the patient (39 years). The patient became pregnant. We agreed to encounter the risk equally responsibly, each one of us with our own concerns about the matter.

The patient remained on a stable ziprasidone (160 mg) and fluphenazine dose (2.5 mg) throughout her whole pregnancy period and after the birth. During the pregnancy she was regular for her gynaecologiical examinations. She managed her pregnancy well. She gave birth to a girl within the expected term, with the baby weighting 4210 gr, and 54 cm of length. She went through a normal labour, which ran smoothly. Ablactation was carried out. The child is a year old now, progressing well in development and growth. The mother is psychophysically well. She takes care of the baby with help from her parents, as she left her husband. The psychosis is still in a stable remission with the same dose of antipsychotic.

DISCUSSION

In treating pregnant patients suffering from schizophrenia, results of such treatment need to be considered, the effect on the patient as well as on the foetus. Taking into account the possibility that the pregnancy might induce a psychophysical distress in pregnant schizophrenic patients, exceptional care needs to be taken in preventing a potential schizophrenic relapse during the course of the pregnancy and after the birth.

This can be achieved with good interdisciplinary cooperation of specialists (psychiatrists, obstetricians and General Practice doctors) and a continuous application of antipsychotics. However, the essential prerequisite is clearly the patient's cooperation. Antipsychotic dosage is recommended to be minimal and effective, which does not need to be the rule, as is evident from the case presented. The benefit and the potential risks need to be measured and identified individually for each patient.

The research that has been conducted so far and the available data unquestionably make choosing the antipsychotic easier, as well as making a decision about the therapy dose. Other's experiences are always welcome and quite priceless as these can be of immense use in practice.

CONCLUSION

It was not in our intention to depict ziprasidone as a medication which is "safe" as a treatment in pregnancy. Our objective was to present a personal experience as a contribution to the findings and application of atypical antipsychotics in pregnancy.

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