Psychotropic medication and pregnancy

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Educational aims

- To highlight the differences in prescribing psychotropic medications between the genders due to the potential teratogenic effects of psychotropic medications
- To show why this needs to be taken into consideration also in females of child bearing age that are not planning to get pregnant
- To understand issues that need to be taken into consideration when choosing the appropriate psychotropic medication to use in a pregnant female

Key words
Mental illness, psychotropic medication, gender differences, pregnancy

Abstract

Since most severe psychiatric conditions tend to start in young individuals who are of childbearing age, when prescribing psychotropic medication one needs to take into consideration the difference between males and females due to the potential teratogenic effects of psychotropic medication. This needs to be taken in consideration also in females who are not planning a pregnancy because of the high number of unplanned pregnancies. In a woman who starts to suffer from mental illness during pregnancy, one should choose an established drug at the lowest effective dosage. In a woman who is taking psychotropic medication and is planning a pregnancy, the main issue is whether to discontinue treatment or change medication. For this decision, several factors, mainly the severity of the condition, and possibility of relapse, should be taken into consideration. This is also the case in a woman who is taking psychotropic medication and discovers that she is pregnant.

Introduction

Mental illness affects individuals in all age groups and of both sexes. One of the main differences in gender when one considers treatment of mental illness by psychotropic medications is the risk of harmful effects that these medications can have to the foetus during pregnancy. More so, since the most common severe psychiatric conditions tend to start in young individuals who are of childbearing age.[1] Thus one needs to be constantly aware of the potential presence of a pregnancy during the course of illness when initiating treatment. This leads to possible scenarios that one needs to take into consideration.

Prescribing to a woman who is not planning pregnancy

In all women of child-bearing age the possibilities of a pregnancy should be discussed. Many pregnancies are unplanned.[2] So whatever the plans given by the patient, one should always consider in this age group the possibilities of a pregnancy, and as much as possible prescribe accordingly. Thus one should as much as possible avoid medications that are teratogenic in this age group. In psychiatry, for this particular age group this applies mostly for patients who suffer from Bipolar Affective Disorder. Firstly because the antiepileptic medications used as mood stabilizers (valproate and carbamazepine) are highly teratogenic.[3] Also, due to the particular symptoms of hypomania[4], unplanned pregnancy is not an uncommon consequence. When no alternatives to these medications are found, the woman should be persistently reminded about the possible teratogenic consequences, and contraceptive advice given. Also, folate should be prescribed.

A woman who starts to suffer from mental illness during pregnancy

Especially during the first trimester, when the organs of the foetus are being formed, psychotropic medications should be avoided as much as possible. Non pharmacological methods of treatment should be used as first line treatment. But there are instances when they are not effective or are not appropriate, and so for the mother's and baby's safety medication has to be used. Here one should choose an established drug at the lowest effective dosage. This choice arises from the fact that double blind clinical trials to assess the safety of psychotropic medication during pregnancy are obviously unethical to perform. So one chooses medication that has been used for a long time in pregnant women and natural studies have shown that the rate of malformations during pregnancies in which they were used were not higher than malformations occurring spontaneously during pregnancies in which no psychotropic medication was used. For depression this treatment is tricyclic antidepressants. The antidepressant of choice in these circumstances is Nortryptiline, because it is the one with less anticholinergic and hypotensive effects. In psychosis, the treatment of choice is one of the first generation antipsychotics such as trifluoprerazine or haloperidol. (See Table 1)

Key points

- Prescribing psycotropic medication is different in males and females.
- In choice of psychotropic medication in all females of child bearing age, due consideration must be given to the potential teratogenic effects of the medication.
- The decision to prescribe medication during preganacy is based on balancing between the potential risks of relapse and the consequences of mental illness with the potential damage of the medication to the foetus.
- The mother should be involved in the decision making process.
- When prescribing psychotropic medications for pregnant women, in general 'older' medications are preferable to 'newer' medications.

A woman who is taking psychotropic medication and is planning a pregnancy

The first thing that should be considered in these circumstances is discontinuation of medication. In taking this decision one needs to take into consideration the severity of the condition. In certain instances when the mental illness is severe and the risk of relapse without medication is high, it is unwise to stop medication completely. In those instances one should switch the medication to one that has much lower risk of teratogenicity. In choice of such medication the same principles of the choice of medication for mental illness that arises during pregnancy should be applied. When switching to a lower risk medication there is always a risk of relapse of the condition. Thus switching should be done gradually and with close monitoring.

A woman who is taking psychotropic medication and discovers that she is pregnant

In this instance one needs to decide whether to stop medication, to switch it to another medication or to continue with the present effective medication. There are no hard and fast rules, and the first thing that needs to be taken into consideration is how high would be the risk of relapse if medication is discontinued. In severe mental illness relapse may ultimately be more harmful to the mother and child, than the treatment that is being effective to control the mental illness. Thus automatic abrupt stoppage of medication once the woman discovers that she is pregnant is not the correct approach. Electro Convulsive Therapy can be an alternative or adjutant psychotropic medication in some pregnancies.

Conclusion

In taking the decisions regarding what medication should be used in pregnancy, the mother should always be involved in the discussion. In this discussion it is important that the following issues are addressed:

1. What the potential consequences could be if the mother's mental illness is left untreated. In this discussion, not only the impact of this on the mother should

Table 1 Summary of recommendations of use of psychotropic drugs in pregnancy

Psychotropic	Recommendations
Antidepressants	Tricyclic Antidepressants:[5, 6] (Nortryptiline Amitryptiline Imipramine) SSRI's: Fluoxatine[7]
Antipsychotics	No clear evidence that any antipsychotic is a major teratogenic Preferably use **First Generation Antipsychotics:** although safety is not fully established but they are considered to have minimal risk of teratogenicity[8, 9]. Most experience being with chlorpromazine, haloperidol and trifluoperazine. **Second Generation Antipsychotics :** not enough data available, Data most available on Olanzapine that seems to be relatively safe in respect to congenital malformations[10].
Mood stabilisers	If medication required first consider first generation **antipsychotic** as a mood stabiliser Avoid **anticonvulsants** unless risk and consequences of relapse outweigh the known risk of teratogenesis. It is recommended that women who potentially can become pregnant and are taking carbamazepine or valproate should receive folic acid as prophylaxis
Sedatives	Ideally use behavioural and psychotherapeutic approaches instead of psychotropic medication. **Benzodiazepines** are probably not teratogenic but are best avoided in late pregnancy[11].

be considered, but also the impact of this on the newborn;
2. The risks caused by stopping medication abruptly;
3. The quality and severity of previous episodes, since if relapse occurs it would likely be similar to those;
4. What treatment resulted in remission in previous episodes;
5. The risk of foetal malformations for pregnant women without mental disorder;
6. The potential harm that medication can do to the foetus during the pregnancy.

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