

# Perinatal Schizophrenia

Ramanpreet Toor, MD

# Perinatal Schizophrenia

**Epidemiology:** Peak onset childbearing age (26-32 years), almost 50% with diagnosis get pregnant. Risk of relapse in pregnancy if untreated. Most pregnancies are unplanned, poor prenatal care, high risk of rapid repeat pregnancy

## **Diagnostic criteria:**

2 or more of following

- Delusions
- Hallucinations
- Disorganized thinking
- Grossly disorganized or catatonic behavior
- Negative symptoms

Markedly low level of functioning in one or more major areas compared to before symptoms

Symptoms continue for 6 months or more

**Pregnancy complications:** more frequent smoking, alcohol and substance addictions. More Gestational hypertension, 2-fold increased risk of GDM, Genito-urinary infection, IUGR, threatened pre-term labor

**Delivery Complications:** Stillbirths or medical abortions, Unexplained fetal/infant death, fetal deaths from severe neurological malformation

**Neonatal/neurodevelopment complications:** Low birth weight, SGA, Preterm birth, development delay, higher risk of intellectual disability, Congenital malformations (6 studies), behavioral problems

## **Risk assessment:**

Worsening symptoms can lead to denial of pregnancy, poor antenatal care. Thoughts about harming baby related to command hallucinations or delusions possible. Important to monitor psychotic symptoms and evaluate safety throughout pregnancy and postpartum

[Columbia Suicide Severity Rating Scale \(C-SSRS\)](#)

Evaluate for thoughts about harming baby: Ask about hallucinations and specifically about command hallucinations (for example voices can tell patients to harm baby). Ask questions assessing specific content of the thought, and emotional and behavioral responses to thoughts.

## **Decisional capacity assessment:**

Assess capacity to make decisions for any procedures during pregnancy and postpartum. Also assess capacity to parent if psychotic symptoms present

## **Assessment of level of functioning, quality of parenting ability and need for social work or child protective services involvement**

## **Treatment:**

Individual risk-benefit analysis. In schizophrenia benefits of psychopharmacology mostly outweigh the risk. Increased risk of exacerbation of symptoms for 1 year postpartum so close monitoring recommended.

**Psychopharmacology:** Antipsychotics

-High potency typical antipsychotics preferred (e.g. Haloperidol)

- Atypical antipsychotics: start quetiapine or olanzapine if not on medication

- Long-Acting Injections: Very limited data. Consider continuing if patient stable prior to pregnancy. Levels more stable in pregnancy.

- **Psychotherapy:** More supportive approach and CBT can also help in psychosis

## References

Fabre C et al. [Pregnancy, delivery and neonatal complications in women with schizophrenia: a national population-based cohort study](#). The Lancet Regional Health- Europe 10. Sep 2021.

Gentile et al. [Schizophrenia and motherhood](#). Psychiatry and clinical neuroscience. 2019

Gupta et al. [Rapid repeat pregnancy in women with schizophrenia](#). Schizophrenia Research 212. 86-91. 2019.

Jones et al. Perinatal Mental Health 2. [Bipolar disorder, affective psychosis and schizophrenia in pregnancy and the post-partum period](#). Lancet. Vol 384. Nob 2014.

Straub et al. [Association of Antipsychotic Drug Exposure in pregnancy with risk of neurodevelopmental disorder](#). JAMA In Med. Mar 2022.

Uguz F. [Antipsychotic use during pregnancy and the risk of gestational diabetes mellitus. A systematic review](#). 2019

[Ncrptraining.org](http://Ncrptraining.org)

## Antipsychotic Medication Table

<b>Typical Antipsychotic (Brand Names)</b>	<b>Therapeutic dose range for psychosis</b>	<b>Pregnancy</b>	<b>Breastfeeding</b>
Haloperidol (Haldol)	4-20 mg/day Doses can be higher in more severe symptoms	Higher risk for extrapyramidal signs	<10 mg daily produce low levels and no adverse effects Negative effects when combined with other antipsychotics Monitor drowsiness and developmental milestones
<b>Atypical Antipsychotics (Brand Names)</b>			
Risperidone (Risperdal)	3-6 mg	Effective for psychosis, acute agitation Possible increase risk of cardiac malformation	Doses up to 6 mg produced low levels in milk Limited data
Quetiapine (Seroquel)	ER:400-800 mg IR: 300-750 mg	Lowest placental transfer Risk of metabolic syndrome	Doses up to 400 mg produced low levels in milk No adverse effects noted
Aripiprazole (Abilify)	10-30 mg	Lower risk of metabolic syndrome Risk of akathisia Possible low risk of neurodevelopment disorder (Straub et al 2022)	Doses up to 15 mg produced low levels in milk It can LOWER SERUM PROLACTIN
Olanzapine (Zyprexa)	10-20 mg	Effective for mood stabilization, psychosis Sedating Metabolic syndrome! Highest placental transfer: 72.1%	Doses up to 20 mg showed low levels in milk Recommended first line in breastfeeding
Ziprasidone (Geodon)	40-80 mg	Lower risk of metabolic syndrome Limited data	Other antipsychotics preferred given very little data
Clozapine (Clozaril)	300-450 mg/day	Effective for treatment resistant schizophrenia Risk of agranulocytosis for which close monitoring is needed	Limited data Sedation and risk of agranulocytosis

No human data for newer antipsychotics including: Asenapine, Cariprazine, Lurasidone, Brexiprazole.