



# ANXIETY IN PREGNANCY

FLAME LECTURE: 40A

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# Learning Objectives



- ▶ Describe how certain medical conditions affect pregnancy
- ▶ Describe how pregnancy affects certain medical conditions
- ▶ Recognize appropriate treatment options for mood disorders during pregnancy
- ▶ Prerequisites:
  - ▶ NONE
- ▶ See also – for closely related topics
  - ▶ FLAME LECTURE 39 – Depression in Pregnancy
  - ▶ FLAME LECTURE 40B – Bipolar in Pregnancy
  - ▶ FLAME LECTURE 134 – Postpartum Depression
  - ▶ FLAME LECTURE 235 – Depression in Women
  - ▶ FLAME LECTURE 135 – Postpartum Psychosis

# Anxiety Disorders - Introduction

- ▶ 21% of pregnant women have clinically significant symptoms of anxiety<sup>2</sup>
- ▶ Many women whose anxiety was previously well controlled can experience a relapse during pregnancy as they discontinue their medications and have greater life stressors with pregnancy
  - ▶ Women with a history of panic disorder are especially likely to experience a relapse during pregnancy

# Anxiety Disorders - Risk Factors

- ▶ Life stress, including adverse life events
  - ▶ Lack of social support
  - ▶ Domestic violence
  - ▶ History of anxiety prior to pregnancy
  - ▶ Unintended pregnancy or ambivalence towards the pregnancy
  - ▶ Lower income or lower education
  - ▶ Single status (non-cohabitation) or poor relationship quality
  - ▶ Family history of depression or anxiety (especially during previous pregnancy or postpartum)
  - ▶ Discontinuing or decreasing psychiatric medication
  - ▶ History of a traumatic event
- most significant!

# Clinical Consequences of Anxiety

## Consequences on maternal health:

- ▶ Increased incidence of prolonged labor and operative deliveries
- ▶ Increased incidence of precipitous delivery
- ▶ Increased fetal distress and preterm delivery
- ▶ Increased spontaneous abortion

## Consequences on fetal/neonatal health:

- ▶ Decreased developmental scores and inadaptability
- ▶ Slowed mental development at 2 years old

# Anxiety Treatment – *medications*<sup>3,4</sup>

## ▶ Benzodiazepines:

- ▶ Possible small increase in risk for oral cleft with lorazepam and cardiovascular defects with clonazepam, thus Category D (however evidence is limited or inconsistent)
- ▶ **Floppy infant syndrome** can occur if moderate-to-high dose BZDs are taken during the 3<sup>rd</sup> trimester or just prior to delivery. Manifests as hypothermia, lethargy, poor respiratory effort and feeding problems, thus NICU should be at delivery to mothers on BZDs
- ▶ Though these risks are present, the risks of stopping BZDs in patients with moderate to severe anxiety during pregnancy are NOT benign. Thus, the general recommendation is to continue these medications if they are needed.

## ▶ Physiology changes during pregnancy affects pharmacology of BZDs, thus dosing may need to be adjusted

- 50% increase in maternal blood volume by 24-26 weeks
- Glomerular filtration rate increases by 50% in the second trimester

# Treatment – medications<sup>4</sup>

In general, using a long-acting BZD for a long-acting problem is preferred to the short-acting BZDs which have more addictive potential



Anxiety Disorder Medications			
Generic Name	Brand Name	Pregnancy Risk Category	Lactation Risk Category
<i>Benzodiazepines</i>			
Alprazolam	Xanax	D	L3
Chlordiazepoxide	Librium	D	L3
<b>Clonazepam</b>	Klonopin	D	L3
Diazepam	Valium	D	L3
Lorazepam	Ativan	D	L3
Oxazepam	Serax	D	L3
Estrazolam	ProSom	X	L3
Flurazepam	Dalmane	X	L3
Quazepam	Doral	X	L2
Temazepam	Restoril	X	L3
Triazolam	Halcion	X	L3
<i>Other Anxiolytic</i>			
Busprione	BuSpar	B	L3
Chloral hydrate	Noctec	C	L3
Eszpolicone	Lunesta	C	N/A
Zaleplon	Sonata	C	L2
Zolpidem	Ambien	B	L3



# IMPORTANT LINKS / REFERENCES



1. UpToDate
2. Heron et al, *J. Affective Disorders* 2004
3. Briggs. *Drugs in Pregnancy and Lactation* 9<sup>th</sup> Ed
4. [ACOG Practice Bulletin 92](#), April 2008 (“Use of Psychiatric Medications during Pregnancy and Lactation”)