



Healthy Mothers, Healthy Babies:

Ophthalmic Considerations when Prescribing for
Pregnant and Lactating Patients



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Financial Disclosures

- None to disclose

Learning Objectives

- **Discuss** general considerations for safely prescribing to pregnant and lactating patients
- **Review** pharmacological mechanisms of action and drugs deliveries to fetus and babies
- **Discuss** the FDA Pregnancy Risk Categories
- **Review** ophthalmic considerations when prescribing medications to pregnant and postpartum patients



Lets Play a Game

- Everyone put up your hand
- A statement will be displayed on the screen
- If the question applies to you, drop a finger
- If not, keep your finger up



You have patients who are expecting or nursing mothers



You are sometimes apprehensive about dilating pregnant and nursing patients



You worry about prescribing oral and topical meds to pregnant and nursing moms



You are fearful of potential side effects to mom or child from medications prescribed



Expecting and nursing moms often ask questions about how topical and oral meds used in clinic or prescribed might affect their child



Why is this topic important?

Importance of Safely Treating & Managing Pregnant and Lactating Patients

- There are **approximately 6 million pregnancies** in the U.S. each year
 - Not all pregnancies are planned or known
- Many women **need to take medicines** when they are pregnant.
 - **>50%** of pregnant women report that they take at least one medicine.
- Some women take medicines for health problems, like diabetes, morning sickness or hypertension, that can start or worsen with pregnancy.



Did you know?

Did you know that.....

Over **80%** of physicians are apprehensive about prescribing medicine to or treating pregnant and postpartum nursing women

(Pregnancy & Medicine Initiative, 2014)

Additionally.....



Over **80%** of mothers fear taking medications during pregnancy and nursing

(Pregnancy & Medicine Initiative, 2014)

What are mothers and doctors afraid of?

TERATOGENS!!!!

Drug Use in Pregnancy; a Point to Ponder!

INDRAJIT GADGODKAR*, S. G. PATIL, AND R. K. PATIL
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Sarkodev, et al. Pregnancy and Drug Use

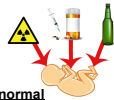
Pregnancy is a special physiological condition where drug treatment poses a special concern because the pharmacology of pregnancy affects the pharmacokinetics of medications used and even medications not used by the fetus and cause harm. Thus avoidance of pharmacological treatment in pregnancy is not possible and may be dangerous because some women come pregnancy with medical conditions that require ongoing and specific treatment (e.g., asthma, epilepsy, hypertension). Also during pregnancy new medical problems can develop and all may not be recognized in a pregnant woman for ongoing pharmacological therapy. The fact that certain drugs are being prescribed may prove harmful to the fetus than the ill effect of the medical problem. Medical literature is full of pregnant ladies who ingested fetalotoxic drugs like to children with phenothiazine. Various other examples of teratogenic effect of drugs on babies is, but have demonstrated the congenital abnormalities caused by human teratogenic drug across for less than 1% of total congenital abnormalities. Hence in 1979, Food and Drug Administration developed a system to determine the teratogenic risk of drugs by evaluating the amount of data from animal and human studies. FDA classified various drugs used in pregnancy into the categories: category A, B, C, D, and X. Category A is considered the safest category, and category X is absolutely contraindicated in pregnancy. This article discusses problems for the children. The article can be accessed from <http://www.ijpharm.com>

Key words: Teratogenic drugs, physiology of pregnancy, FDA categories of drugs, drug use in pregnancy



**WE ALL WORRY ABOUT
HARM TO BABY > HARM TO MOTHER**

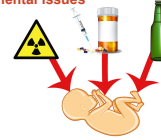
Principles of Teratology



- Definition
 - Any environmental agent that **may potentially alter normal embryological or fetal development**
- Examples:
 - **medicines**, recreational drugs, chemicals, metals, infections, systemic diseases
- Risk of birth defects **increases with certain categories and classes of medications**
 - Especially when teratogenic medications are **taken during early embryonic development**

Teratology Cont'd

- Teratogenic agents can result in specific types of **structural and functional birth defects**
 - Additionally,
 - Other adverse pregnancy outcomes
 - **Pregnancy loss, fetal or postnatal growth deficiency, cancers, long-term neurodevelopmental issues**



Teratology Adverse Effects Cont'd

- Problems for you before and during pregnancy, including
 - **Not being able to get pregnant**. This is called **infertility**.
 - **Problems with the placenta**. The placenta grows in your uterus and supplies your baby with food and oxygen through the umbilical cord.
 - **Preterm labor**. This is labor that happens **before 37 weeks of pregnancy**.
 - **Miscarriage**. This is when a baby **dies in the womb before 20 weeks** of pregnancy.
 - **Stillbirth**. This is when a baby **dies in the womb after 20 weeks** of pregnancy.

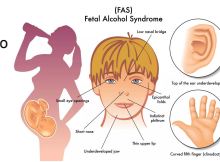
Teratogenic Drugs → Birth Defects

Each of the following drugs or drug groups may cause birth defects in a developing fetus:

- some anticonvulsant medications
- some cancer-fighting medications
- some drugs for certain rheumatic conditions
- some thyroid medications
- thalidomide
- the blood-thinning drug warfarin
- the hormone diethylstilbestrol (DES)
- ACE inhibitors
- angiotensin II antagonist
- isotretinoin (an acne drug)
- alcohol
- cocaine
- high doses of vitamin A
- lithium
- male hormones
- **some antibiotics**

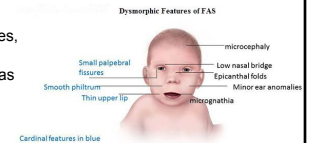
Alcohol Use While Pregnant

- **Fetal Alcohol Spectrum Disorder (FASD)**
 - Resultant of prenatal exposure to alcohol which causes abnormalities in the child
- Alcohol passes easily across the placental barrier
 - It is broken down more slowly in the immature body of the fetus than in the body of an adult.

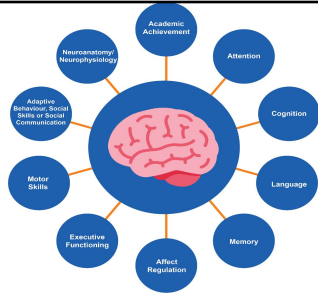


Fetal Alcohol Spectrum Disorder

- **FASD** is characterized by facial and cranial deformities, intellectual disability and behavioral problems such as hyperactivity
- The risk of infertility, miscarriage, stillbirth, and sudden infant death syndrome (SIDS) **increases with alcohol consumption**



Signs & Symptoms of Fetal Alcohol Spectrum Disorder



Substance Abuse & Pregnancy

- **Marijuana**
 - More women are using it to alleviate morning sickness and reduce stress.
 - The American College of Obstetricians and Gynecologists **recommends against using marijuana** both prenatally and while breastfeeding
 - Can lead to preterm birth or stillbirth
 - Babies may also face growth and development issues as they get older
- **Cocaine**
 - Declines in cognitive performance, information processing, and attention span are common in children and into adulthood
- **Benzodiazepines**
 - I.e. *Xanax, Ativan, Vallium or Klonopin*
 - can lead to **toxicity in newborns** → reduced muscle tone, breathing problems, and sedation
 - May suffer from **withdrawal** → sleep disturbances, irritability, and even seizures
 - **Preterm birth and low birth weight** are also more likely to occur

Opioid Abuse & Pregnancy

- **Opioid exposure** during pregnancy negatively impacts the fetus as well
- Associated with
 - **preterm birth, congenital disabilities, poor fetal growth, and even stillbirth**
- There's also a chance of neonatal abstinence syndrome (also known as neonatal opioid withdrawal syndrome),
 - A condition that causes tremors, sleep difficulties, vomiting, dehydration, hyperactive reflexes, seizures, etc
- First OTC **FDA approved** drug for opioid overdose, **Narcan** (Naloxone HCl)
 - Use for *opiates, heroin, fentanyl* cases



Teratologic Mechanism

- Medical science cannot always predict how exposure to a teratogenic drug will affect a fetus. The **potential for harm depends on a range of factors** including:
 - the **type** of drug
 - the **size** of the dose
 - **how often** it's taken
 - the **stage** of fetal development (gestational age) at the time of drug exposure
 - the **individual response** of the fetus to the drug
 - **other factors**, such as maternal diet or illness.

Drugs Use in Pregnancy

- Effect of Pregnancy on Drugs
 - **Pharmacokinetics**
 - "What the **body does to the drug**"
 - Process
 - Absorption
 - Distribution
 - Metabolism
 - Excretion
- Effect of Drugs on Pregnancy
 - **Pharmacodynamics**
 - "What the **drug does to the body**"
 - Pharmacological effect of the drug → **TOXICITY**

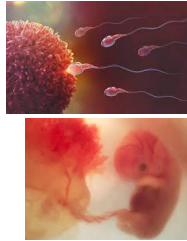


Pregnancy Timeline



First Trimester: Embryogenesis & Primary Morphogenesis

- Blastocyst embeds within uterine lining
- First 14-16 days = **formation of an embryo**
- Histiotropic nutrition - relies on uterine secretions for oxygen and metabolic substrates
- Establishment of the Placenta
 - Digestion of maternal tissue to release metabolic substrates
 - Primary Decidualization Reaction
- **Weeks 1-12**



Embryogenesis & Primary Morphogenesis

- Disruption of the earliest developmental stages (gametogenesis; fertilization, cleavage, and blastulation)
 - results in the **loss of the conceptus** ---->
 - **a miscarriage, major abnormal defects of structures**
- **Examples**
 - neural tube defect (spina bifida)
 - ventral body wall defect (gastrochisis)
 - heart defect (abnormal tract)
 - limb anomaly (phocomelia)
 - facial cleft (cleft lip or palate)



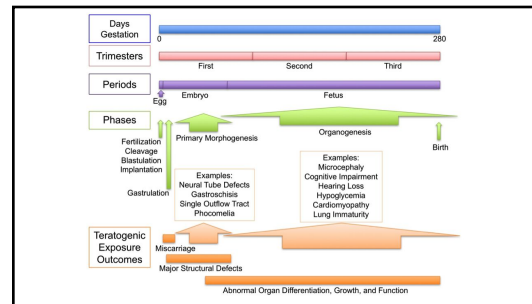
Second & Third Trimesters: Fetal Development & Organogenesis

- Involves the growth and differentiation of precursor cells and tissues contained within each of the organ rudiments formed during **primary morphogenesis**.
- **Organogenesis** occurs over the longest period of time, extending from about four weeks of development (during the period of the embryo), throughout the fetal period, and for some organ systems even continuing postnatally.



Second & Third Trimesters: Fetal Development & Organogenesis

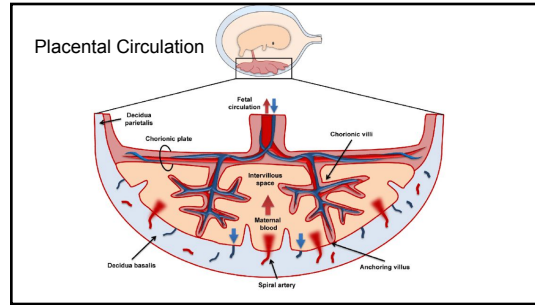
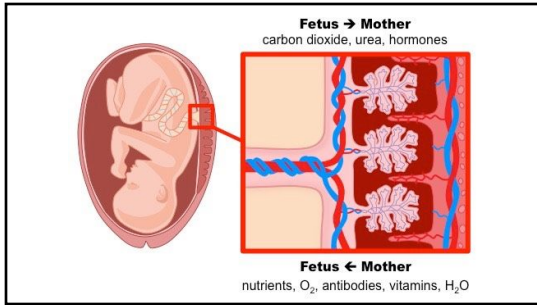
- **Disruption during the late embryonic** and fetal period generally results in abnormal organ differentiation, growth, and function
 - I.e. **cognitive impairment, hearing loss, neonatal hypoglycemia, lung immaturity**).
 - the most likely teratogenic outcomes are **microcephaly, preterm birth, low birth weight, organ abnormalities/defects, and intellectual disability**



Placenta

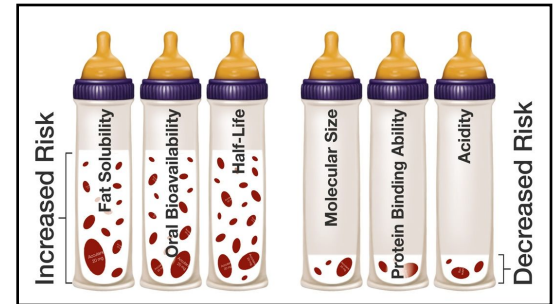
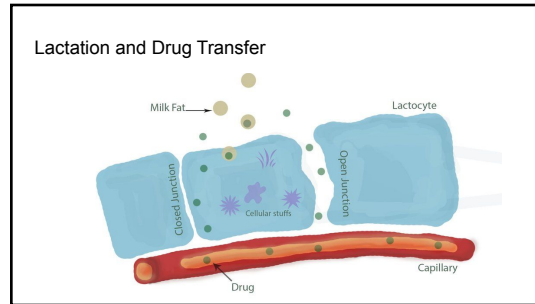
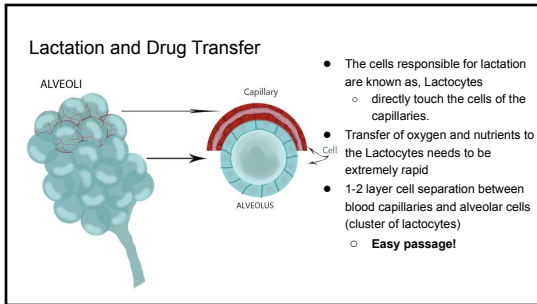
- Transports oxygen to fetal bloodstream
- Removes carbon dioxide
- Carries in nutrients
- Eliminates waste products to mother for disposal
- Barrier against noxious agents circulating in maternal blood
 - **BLOOD PLACENTA BARRIER**





Lactation (Breast Feeding)

- Describes the **production of breast milk and its secretion** from mammary glands after delivery
- Most drugs enter milk at very **low levels and are safe**
- There are exceptions, though, in which drugs can **become concentrated in breast milk.**



Lactating Clinical Pearls

- A drug considered safe for patients who are pregnant may not be safe for patients who are nursing.
- Mothers with medically fragile infants may need different dosing to minimize drug accumulation and toxicity in the infant
- **Consult with their lactation specialist**

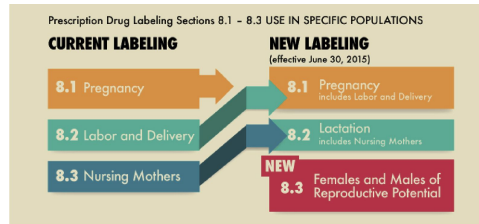


Drug Categories

FDA Pharmaceutical Labeling

- FDA Pregnancy Risk Factor Categories
 - **Category A**
 - Safest to take during pregnancy
 - **Category B**
 - Showing no risk in animal studies but a lack of controlled studies on pregnant women
 - **Category C**
 - Animal studies showed risk to the fetus but no human studies have been performed or unavailable
 - **Category D**
 - Exhibited positive evidence of potential fetal risk but benefits for pregnant women may be acceptable despite the risk
 - **Category X**
 - Contraindicated in women who are pregnant or may become pregnant because of known fetal risk and abnormalities

FDA Updates (June 2015)



Most ophthalmic medications are safe.....

Many are CATEGORIES B & C

The risk of birth defects resulting from topically-applied medications is **extremely low**, suggesting that, although prescribing for the pregnant patient requires an increased level of caution, especially in gestational weeks two through 10, there are a variety of relatively safe options available for most ocular disease conditions.

What are some possible expected ophthalmic changes in pregnancy and postpartum?



Physiological Changes in Pregnancy

- Decreased intraocular pressure
- Fluctuations in refractive error
- Dry eye symptoms
- Subconjunctival hemorrhages
- Decreased corneal sensitivity
- Ptosis
- Lenticular Changes

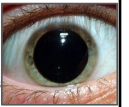


Is it safe to Dilate My Pregnant or Nursing Patient During A Routine Eye Exam?



Comprehensive Eye Exam: Dilation

- **Benefits>Risks**
- Occasional dilation is acceptable
- Caution against **repeated dilation**
- Topical Tropicamide 0.5% vs. 1% (Category C)
- Punctal Occlusion-
 - Decreases systemic absorption
 - Reduces amount of drug excreted into the breast milk
 - Use manual or temporary plugs
- Long-term use in lactating mothers
 - May inhibit lactation and result in slow weight gain, ins



Comprehensive Eye Exam: Dilation

- Evidence is **unknown** if cycloplegics and mydriatics cross the placenta or excreted into human breast milk
- **Avoid the use of longer duration and increased half life** parasympatholytics such as
 - atropine, scopolamine and homatropine
- The **shorter acting agents** such as tropicamide or cyclopentolate are **considered safer for use in pregnancy and lactation.**



Comprehensive Eye Exam: Phenylephrine

- **Avoid phenylephrine**
- Topical vs. Oral
- MOA: vasoconstriction
 - → reduces the blood flow to the placenta
 - Possible risk for fetal malformations, fetal hypoxia, and bradycardia during early embryonic development
- Evidence of systemic hypertension in low birth weight babies when phenylephrine 2.5% or 10% is used



OTC Phenylephrine

- **Oral decongestants** (Category C)
 - may also result in **vasoconstriction**
 - →induce maternal hypertension
 - →impaired blood flow to the fetus
- The decongestants pseudoephedrine and phenylephrine are **generally not recommended during the first 13 weeks of pregnancy**
 - → potential increased risk of gastroschisis (an abdominal wall defect)
- After the first trimester, caution should be use
 - **Benefits>Risks**



How Do I Manage My Pregnant or Nursing Papilledema Patient?



CHECK BP!!! Possible Preeclampsia or Eclampsia Crisis!

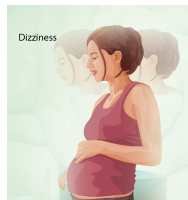
Preeclampsia

- Preeclampsia is a pregnancy complication characterized **primarily by high blood pressure, edema, and protein spillage in the urine**
- Occurring frequently **after the 20th week of pregnancy or after giving birth** (postpartum preeclampsia).
- Most pregnant women with preeclampsia have healthy babies.
 - **If not treated, it can cause serious problems, like premature birth and even death.**



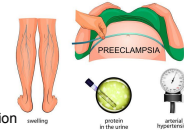
Eclampsia

- Eclampsia
 - is **seizures** that occur in pregnant people with preeclampsia
- **Symptoms of eclampsia**
 - High blood pressure
 - Headaches
 - Blurry vision
 - Convulsions
- Eclampsia is **rare**
 - affects less than 3% of people with preeclampsia
- Serious condition that occurs in the second half of pregnancy



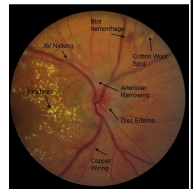
Warning Signs of Preeclampsia & Eclampsia

- Many people will have warning signs before having a seizure caused by eclampsia.
 - Severe headaches
 - Difficulty breathing
 - Nausea or vomiting
 - Trouble urinating or not urinating often
 - Abdominal pain
 - Blurred vision, seeing double or loss of vision
 - Swelling of the hands, face or ankles
- **Seizures**
- **Distress or Confusion**
- **Loss of consciousness**



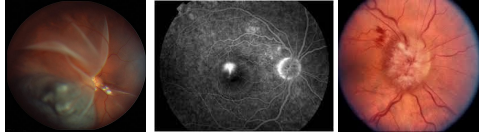
Preeclampsia & Eclampsia Ocular Manifestations

- Visible retinal vascular changes in **40-100%** of preeclamptic patients
 - Visual symptoms in 25-50%
 - Blurred or decreased vision, scotoma, photopsia, diplopia, VF defects, reduced vision/blindness
- **Most common: constriction or spasm of retinal arterioles with decreased retinal artery to vein ratio**
 - If severe, changes associated with hypertensive retinopathy may occur

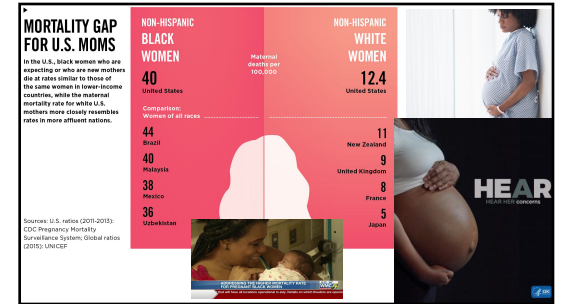


Preeclampsia & Eclampsia Ocular Manifestations

- Exudative Retinal Detachment
- Cortical Blindness
- Visual Field Defects
- Central Serous Chorioretinopathy (CSR)

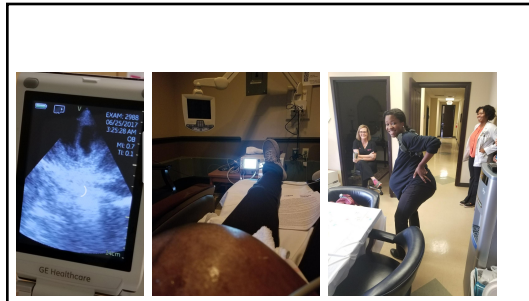


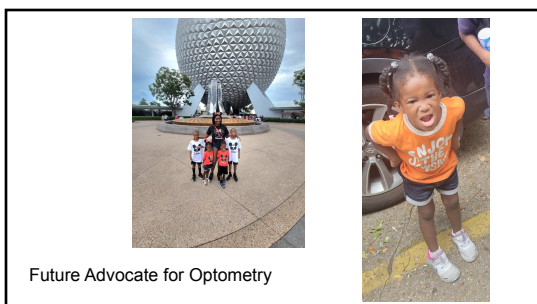
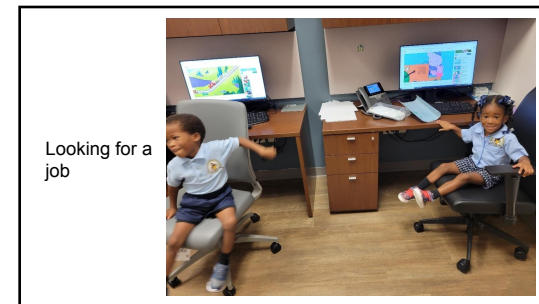
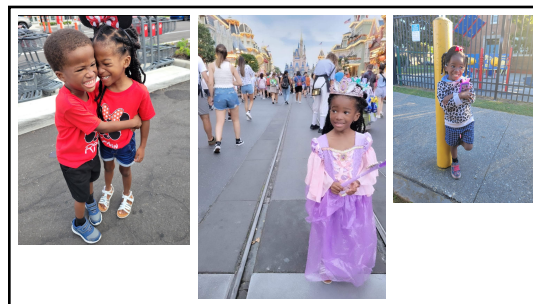
Maternal Health Crisis



7 minutes


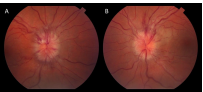
My Preeclampsia Story






Papilledema

- Dx of Exclusion
 - MRI/MRV (w/ and w/o contrast)
 - LP for elevated CSF - **NOT REPEATED**
- Idiopathic Intracranial Hypertension (IIH)
- Tx
 - Oral Topiramate or Acetazolamide (dose dependent)
 - Category C
 - Minimal risk for fetal defects
 - Metabolic Panel
 - **DEHYDRATION**
- Most cases, monitor x 3 months
 - Repeat VF/OCT
 - Co-manage w/ OB-GYN and neuro-OPH

My Pregnant or Nursing Patient Has Diabetic Retinopathy & Other Associated Findings, Is it safe to treat?



Gestational Diabetes

- **Gestational diabetes** is a type of diabetes that can develop during pregnancy in women who don't already have diabetes.
- **Gestational diabetes** occurs when your body can't make enough insulin during your pregnancy.
- **Every year, 2% to 10% of pregnancies** in the United States are affected by gestational diabetes.
- **About 50%** of women with gestational diabetes go on to **develop type 2 diabetes**
- Managing gestational diabetes will help make sure you have a healthy pregnancy and a healthy baby

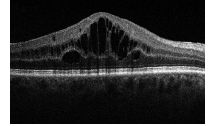
Diabetic Retinopathy

- If a pregnant patient presents initially with **mild to moderate DME**, then it's reasonable to recommend close observation with an emphasis on blood glucose control.
- In severe cases, if DME does not improve after a period of observation, the first treatment option should be **laser, grid or focal for CSME**, per Early Treatment Diabetic Retinopathy Study (ETDRS)



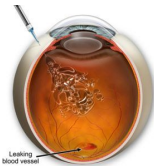
Diabetic Retinopathy

- If laser therapy yield poor results, **intravitreal steroids are thought to be a safe option during pregnancy.**
 - **the systemic absorption of intravitreal triamcinolone has been shown to be minimal compared to topical and systemic steroids**



Proliferative Diabetic Retinopathy

- The use of anti-VEGF drugs during pregnancy is **controversial** because they may potentially cause systemic side effects in the mother and fetal harm, as spontaneous miscarriage, defective embryogenesis and/or preeclampsia
 - **VEGF contributes to fetal and placental vasculature**



Are oral antibiotics safe for lid infections in these demographics of patients?



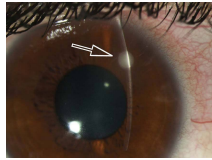
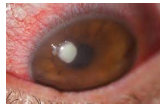
Soft Tissue & Gland Infections

- **Preseptal, MGD, Lid Edema, Hordeolum**
- TX:
 - Category B
 - **Oral Penicillins**
 - (Augmentin 875 mg BID/ Amoxicillin 875mg X BID)
 - **Oral Cephalosporins**
(Cephalexin 500 mg x BID)
 - **Oral Azithromycin** (500 mg/ Zpak)
 - **Oral Erythromycin** (500 mg x BID)



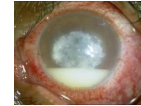
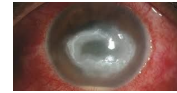
Corneal Bacterial Keratitis

- Tx
 - Topical Antibiotics (Category B)
 - Tobramycin
 - Polymyxin B
 - Erythromycin
 - Azithromycin
 - **Severe cases** → Fortified cephalosporins



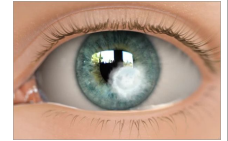
Infectious Microbial Keratitis

- **Fortified Therapies have an excellent safety profile for severe bacterial keratitis**
 - Topical cephalosporin antibiotics,
 - such as cefazolin and ceftazidime
 - Topical tobramycin antibiotics



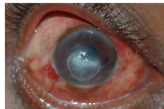
Topical Fluoroquinolones

- The use of topical fluoroquinolones during pregnancy has not been well studied;
 - however, because of their undisputed efficacy in the treatment of corneal ulcers,
 - these medications may be necessary if the benefits outweigh the potential risk to the developing fetus.



Fungal Keratitis

- Topical administration of **amphotericin and voriconazole** is not considered to be harmful in pregnant and lactating women.
 - **voriconazole** should be avoided during the first trimester and used sparingly during 2nd and 3rd trimester.
 - For antifungal medications, **clotrimazole, miconazole and nystatin** are considered first-line agents.
- There are however contraindications to the use of systemic antifungal therapy in pregnancy and lactation.



Acanthamoeba Keratitis

- **Brolene and Polyhexamethylene biguanide (PHMB) (Category C)**
 - It should only be used during pregnancy if considered essential
 - **Lacrimal occlusion with punctal plugs** is one of the available options available in cases of pregnant patients to **reduce the risk of teratogenicity**.
 - CULTURE!!!!
 - Early **DIAGNOSIS & MANAGEMENT** ARE IMPORTANT!



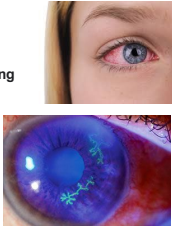
Systemic Medications to Avoid

- **Oral Antibiotics**
 - **Category D** → increased risk of pregnancy complications and congenital malformations
 - **Doxycycline**
 - **Sulfonamides**
 - **Trimethoprim**
 - **Neomycin**
 - **Fluoroquinolones**
 - **Tetracyclines**



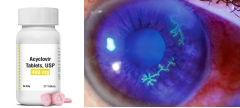
HSV

- **Oral Antivirals (Category B)**
 - Acyclovir 400 mg 5x/day x 10 days
 - **ONLY antiviral approved for use in lactating women**
 - Valacyclovir 250 mg tid x 7 days
 - Famciclovir 500 mg tid x 7 days
- **Topical Antivirals (Category C)**
 - Trifluridine
 - Zirgan
- **Stromal/AC Rxn Involvement**
 - Topical Prednisolone Acetate 1%
 - Loteprednol 1%



HSV

- H/O recurrence
- Prophylaxis (Category B): Oral therapy
 - Acyclovir 400 mg bid po
 - Valacyclovir 250 mg bid po
 - Famciclovir 500 mg qd po



Other treatment considerations



Oral Pain Management

- Acetaminophen (Category B) **safe in all three pregnancy trimesters**
- Avoid OTC aspirin and ibuprofen (Category D)
- Vicodin (acetaminophen and hydrocodone)- Category C
 - **Safe** in pregnancy and nursing
- Tylenol #3 (acetaminophen and codeine)- Category C
 - Safe in pregnancy (avoid prolonged use→risks)
 - **Avoid** in nursing→ drug overdose in infant
 - Potential cause of **CNS depression and apnea in infants**→ **increased risk for SIDS**



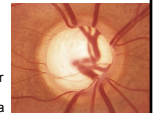
Viral Conjunctivitis

- Mild-Moderate Cases: AT's and monitor
- Severe: Topical Steroid
 - Prednisolone or Loteprednol 1%
 - Presence of pseudomembranes and/or subepithelial infiltrates (SEIs)
- Betadine Therapy (EKC)
 - **CAUTION:**
 - **should be used during pregnancy only if the potential benefit to the mother justifies the potential risk to the fetus; non-prescription use should be avoided.**
 - increases breast milk iodine levels and can cause transient hypothyroidism in breastfed infants

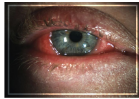


Glaucoma

- Most anti-glaucoma topical therapeutics are **Category C**
- Alpha-agonist, Category B (safest option)
 - Increased risk for CNS depression and apnea
 - **Discontinue prior to breastfeeding**
- Caution with
 - **Prostaglandins**
 - Increased risk for miscarriage and preterm labor
 - **Beta Blockers**
 - Risk for neonatal hypoglycemia and bradycardia
 - AVOID in 1st trimester→ Systemic HYPOTension
 - **CAIs**
 - Increased risk for hepatorenal abnormalities and teratogenic effects
 - **Rho-kinase inhibitors**
 - Limited clinical data regarding teratogenic effects
- Surgical Options: **MIGS or SLT may be considered**



Dry Eye & Ocular Allergies



- Dry Eye Syndrome
 - Anti-inflammatory medication → cyclosporine A
 - Category C
 - Caution due to **risk of teratogenic and fetal abnormalities**
 - OTC AT's and Gels (safe)
 - OTC low dose Brimonidine
 - **LUMIFY** has not been tested on pregnant or lactating women. If pregnant or breastfeeding, consult with OB-GYN prior to use.
- Ocular Allergies
 - Most topical antihistamines are Category B and **safe to use** → alcaftadine 0.25%
 - However, Pataday and Pazeo are Category C (caution with use)
- Low dose topical steroid use; short term
- Omega 3 fish oil supplements are safe (fish oil allergies are RARE)

Safely Using & Prescribing

- Medication Selection
 - A & B Categories safest
 - Benefits > Risks for Category C
 - Category D & X contraindicated use
- Medication Use
 - Short-term use
 - Topical > Oral if available → limited systemic absorption
 - Punctal occlusion



Prescribing to Nursing Mothers

- According to the AAP, health care providers should weigh the risks and benefits when prescribing medications to breastfeeding mothers by considering the following:
 - a. **Need** for the drug by the mother
 - b. **Potential effects** of the drug on milk production
 - c. **Amount of the drug excreted** into human milk
 - d. **Extent of oral absorption** by the breastfeeding infant
 - e. **Potential adverse effects** on the breastfeeding infant
 - f. **Age** of the infant
 - g. **Proportion of feedings** that are breast milk



Pregnancy Registries

List of Pregnancy Exposure Registries

National Pregnancy Registry for Psychiatric Medications II

Medication: Clobazam (CLBZAM)

Medication	Medical Condition	Registry	Phone	Status	Setting
Clobazam (CLBZAM)	Epilepsy	National Pregnancy Registry for Psychiatric Medications II	Phone: 1-800-833-4774 Email: pregnancyregistry@npsm.org	Open	Research

LactMed

LactMed A To Z Drug Database

SEARCH LACTMED

SEARCH TERMS: amphetamine

RESULTS: 1 of 1 results

SEARCH TERMS: amphetamine

RESULTS: 1 of 1 results

About LactMed

Did you know?

The LactMed® database contains information on drugs and other chemicals to which breastfeeding mothers may be exposed. It includes information on the levels of such substances in breast milk and infant blood, and the possible adverse effects in the nursing child. Suggested therapeutic alternatives to those drugs are provided where appropriate. All data are derived from the scientific literature and fully referenced. A peer review panel oversees the data to ensure scientific validity and currency.

Updates: LactMed is updated monthly.

Find Drug by Name | Find by Drug Class | About LactMed

Summary

- **Co-manage with OB-GYN and other appropriate specialists**
- **Benefits > Risks**
- **Thoroughly educate patients**
- **Establish Trust with patients**
- **Educate Yourself**



Questions & Answers

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