**Williams OB Chapter 8: Preconceptional care & Chapter 12: Teratology, Teratogens, and Fetotoxic agents**

**CREOG 12th edition learning objectives:**

1. Describe principles of teratology

2. Describe fetal risk associated with exposure to the following:

1) antimicrobial agents (eg antibiotics, antivirals, antifungals)

2) exogenous hormones

3) anesthetic agents

4) radiation (eg X-ray) and radioactive imaging

5) recreational drugs and tobacco

6) nonprescription medications and supplements

7) environmental toxins

3. Describe and perform pre-pregnancy counseling and testing

**Practice Questions:**

For each scenario below choose the most likely clinical scenario involving medication exposure during pregnancy (A-E)

A. Ebstein’s anomaly

B. hydrocephaly and microtia

C. neonatal renal failure

D. neural tube defect

E. phocomelia

1. A 27-year old patient with epilepsy required multiple anticonvulsant medications, including valproic acid, because of poor seizure control during pregnancy

2. A 44-year old patient with hypertension initially presented for prenatal care at 24 weeks of gestation and is taking an angiotensin-converting-enzyme inhibitor

3. A 34-year old woman is taking lithium for bipolar illness

4. A 21-year old woman sought therapy for severe cystic acne and experienced unrecognized displacement of her IUD while taking isotretinoin.

Source: OB prolog 8th edition: 162-154

5. A patient was treated with methotrexate for suspected ectopic pregnancy. She returns to the clinic 4 weeks later with nausea, vomiting, breast tenderness, and a positive pregnancy test result. Ultrasonography reveals a 10-week sized fetus. As her physician, you inform her that methotrexate exposure in pregnancy is associated with

A. no major anomalies

B. congenital renal anomalies

C. anomalies that are preventable with folic acid supplementation

D. anomalies that are preventable with leucovorin rescue

E. limb and cranial anomalies

Source: OB prolog 7th edition #16

6. A 28-year old nulligravid woman with no medical problems comes to your office for an annual examination and contraceptive counseling. As part of your visit, you discuss her plans for future pregnancy and steps she should take to optimize obstetric outcomes. The one birth outcomes that preconception counseling has reduced is

A. aneuploidy

B. low birth weight

C. neural tube defects

D. prematurity

E. preeclampsia

Source: Office Prolog 6th edition # 79

7. A 32-year old G1 woman at 23 weeks’ gestation complains of intense abdominal pain. The decision is made to obtain a CT scan with IV contrast. Which of the following fetal outcomes is most associated with the use of iodinated contrast media for CT scans during pregnancy?

A. Congenital anomalies

B. Fetal thyroid dysfunction

C. Mutagenic effects

D. No adverse effects

E. stillbirth

Source: TrueLearn

**High-Yield Resources:**

* Committee Opinion 762: Prepregnancy Counseling
* Committee Opinion 717: Sulfonamides, Nitrofurantoin, and Risks of Birth Defects
* Committee Opinion 776: Immune Modulating Therapies in Pregnancy and Lactation
* Committee Opinion 723: Guidelines for diagnostic imaging during pregnancy and lactation
* Committee Opinion 575: Exposure to Toxic Environmental Agents

Answers

1. d 2. c 3. a 4. b 5. e 6. c 7.d