

PATHOLOGY OF PREGNANCY

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Cancer Research***

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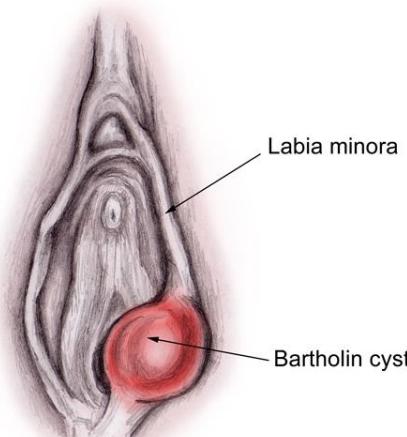


INFLAMMATIONS

Vulvitis

allergic contact dermatitis
irritative contact dermatitis

- Human papillomavirus
- Herpes simplex virus-1/2
- Neisseria gonorrhoeae
- Treponema pallidum
- Candida spp.



Bartholin-cyst
Bartholin-abscess

Cervicitis

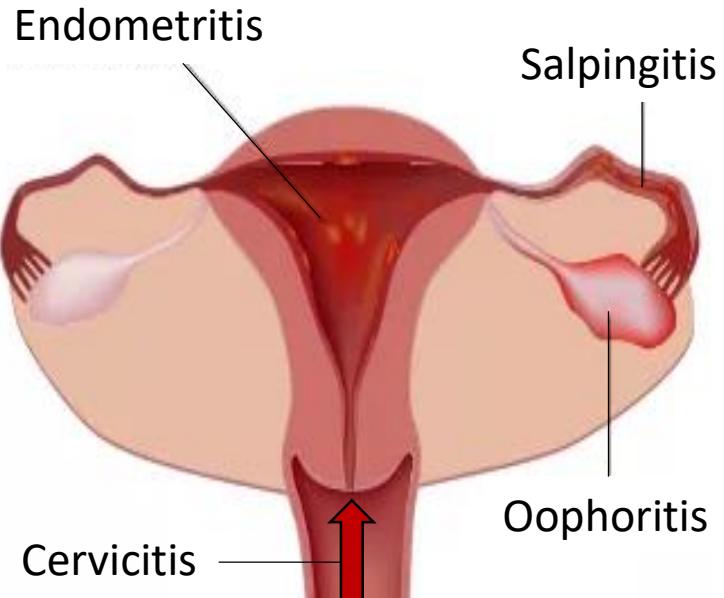
- Chlamydia trachomatis
- Neisseria gonorrhoeae
- Ureaplasma urealyticum
- Trichomonas vaginalis
- Escherichia coli
- Candida spp.
- Streptococcus
- Herpes simplex virus-2



**Pelvic inflammatory disease
Infertility
Ascending infections in pregnancy**

PELVIC INFLAMMATORY DISEASE

Tubo-ovarian abscess
Pelvo-peritonitis



<https://lmg2dthf2c-flywheel.netdna-ssl.com/wp-content/uploads/2017/03/PID.jpg>

Neisseria gonorrhoeae

Chlamydia trachomatis

Mycoplasma hominis

Gardnerella vaginalis

Anaerobes

Actinomyces israelii (IUD)

Tuberculosis

- Lower abdominal pain
- Fever
- Mucopurulent discharge
- Pelvic tenderness

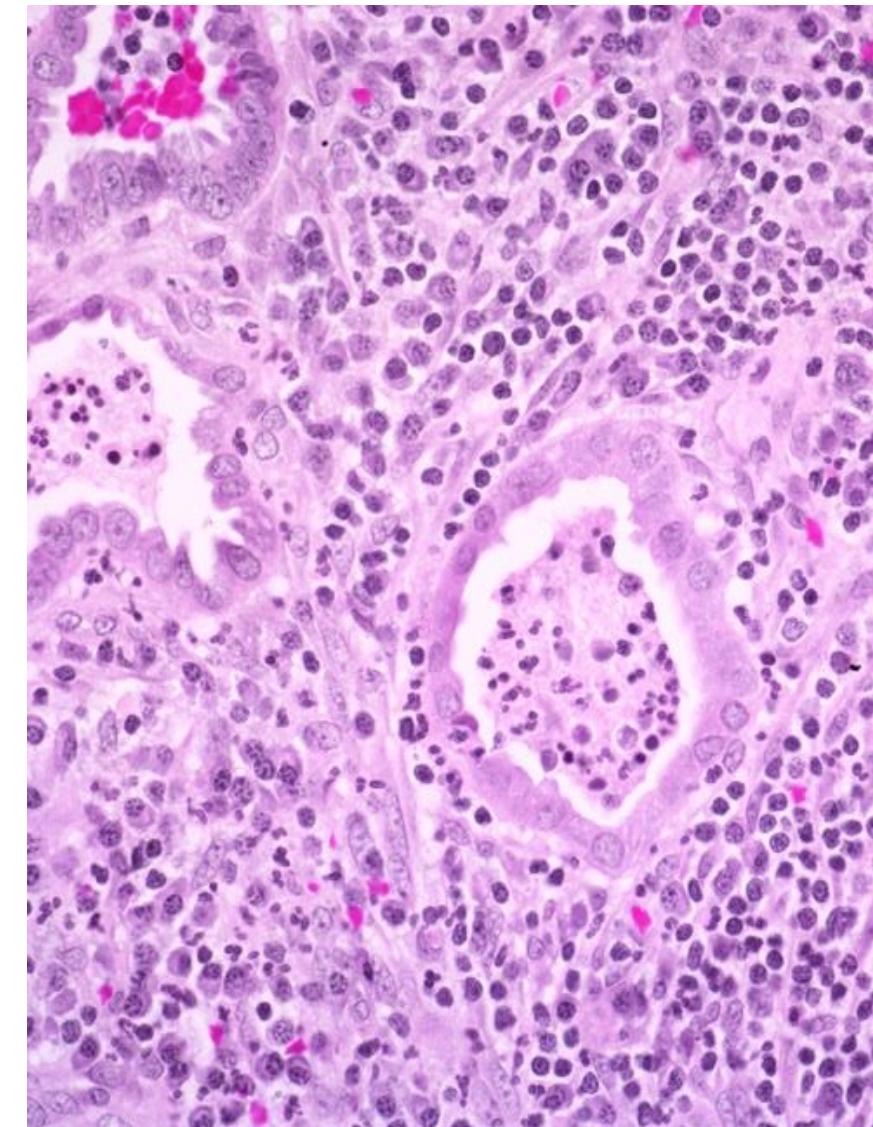
Post-abortion
Puerperal period



Long-term complications:

- Pelvic pain
- Infertility
- Ectopic pregnancy

Endometritis



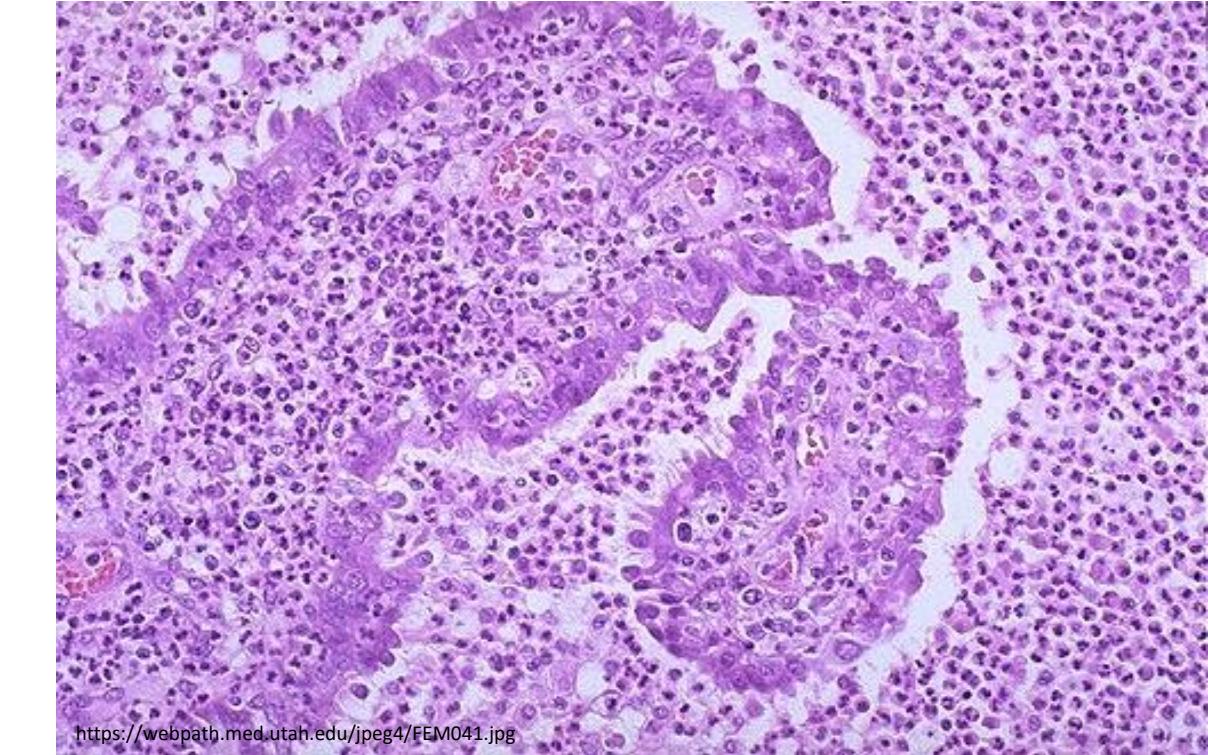
TUBO-OVARIAN ABSCESS



<https://www.memorangapp.com/flashcards/238136/4b+-+Ovary+and+Fallopian+Tubes/>



Pathologyoutlines.com



<https://webpath.med.utah.edu/jpeg4/FEM041.jpg>



Actinomycosis

ECTOPIC PREGNANCY

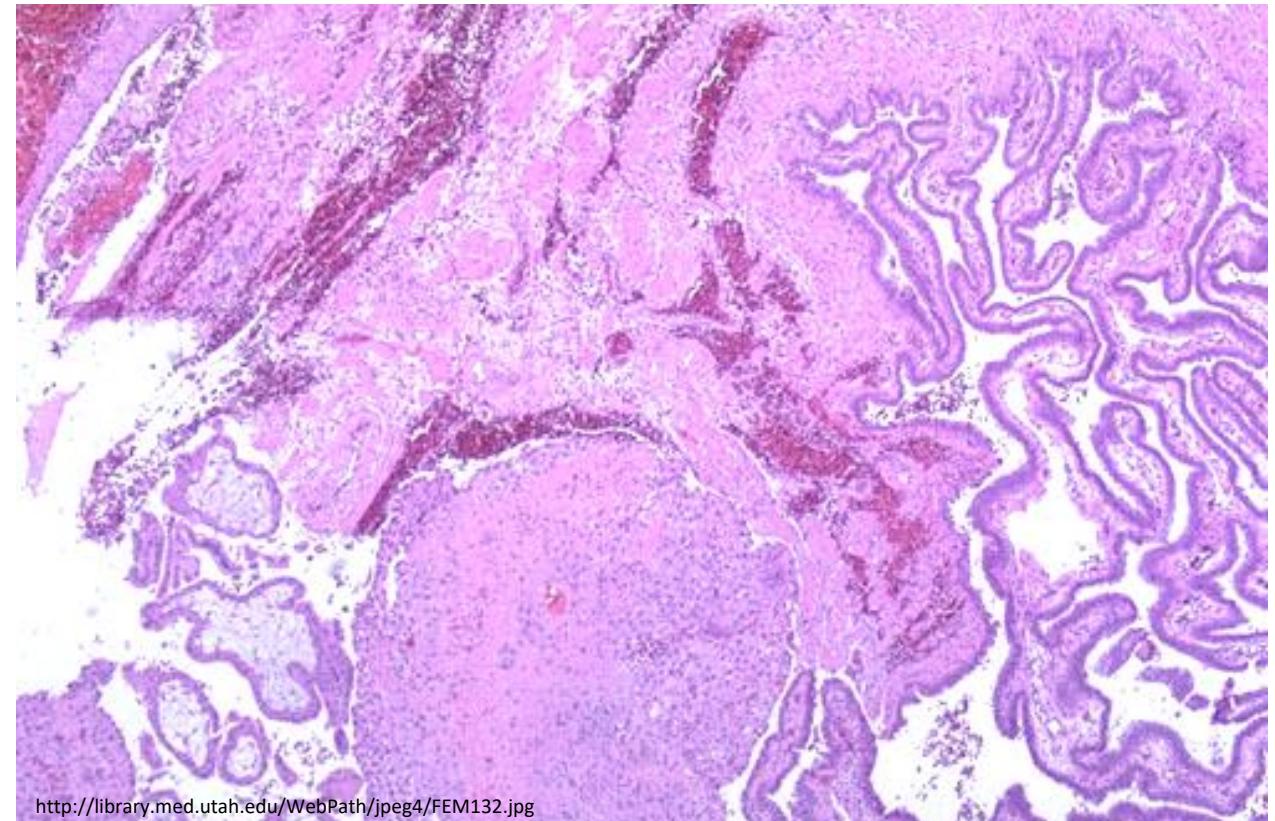
25/1000 pregnancies

- Fallopian tube (90%)
- Ovary
- Abdominal cavity
- Cervix
- Scar of cesarean section



Risk factors

- Salpingitis/pelvic inflammatory disease
- Previous abdominal/pelvic surgery
- Endometriosis
- Previous ectopic pregnancy
- Tubal ligation



ABORTION/MISCARRIAGE

Before 24th week of pregnancy
More than half of pregnancies

Maternal factors

- Diabetes
- Infections
- Anatomical causes
- Hormonal causes
- Systemic lupus erythematosus

Fetal factors

- Chromosomal abnormalities

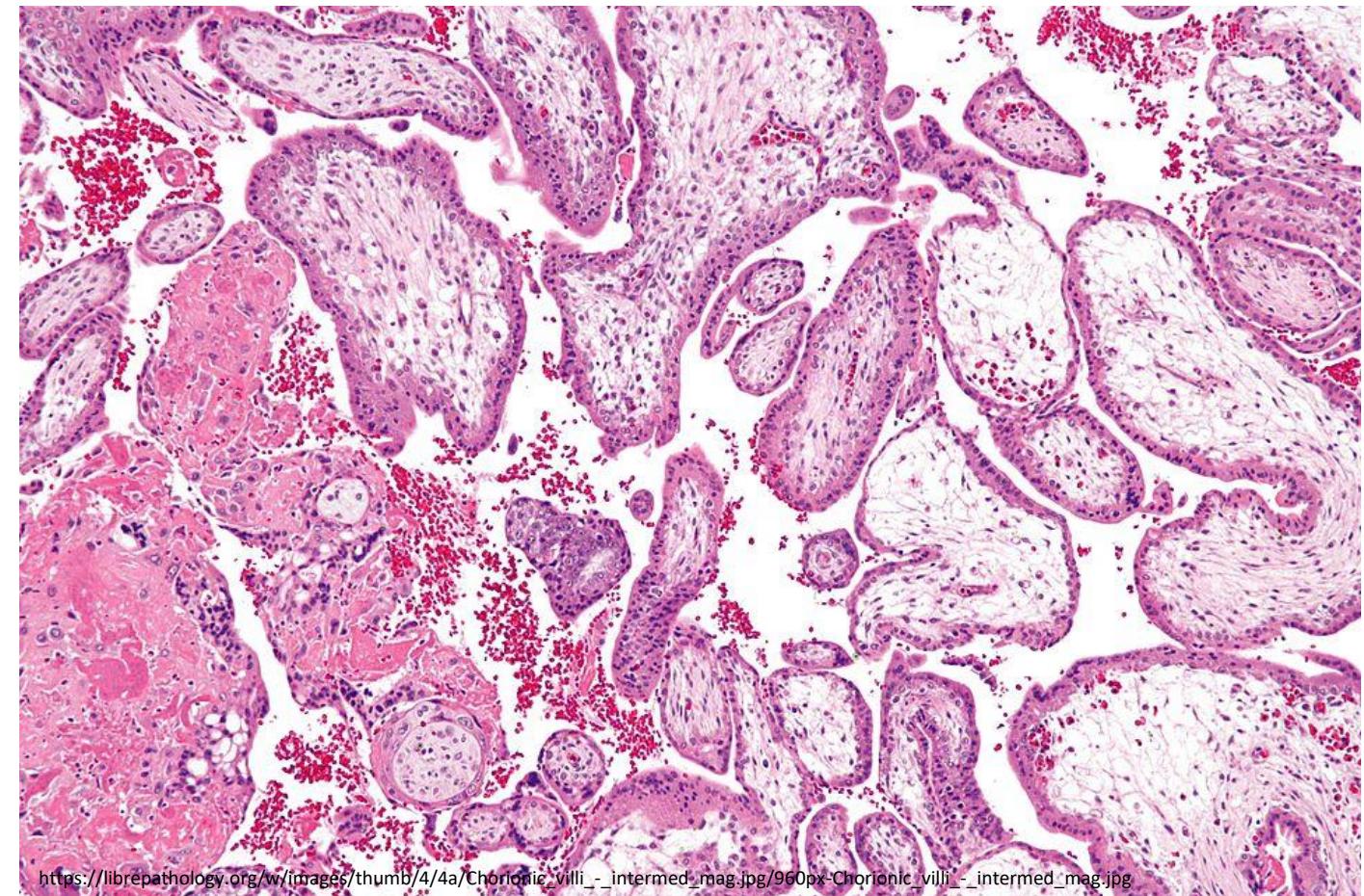
Threatening abortion

Incipient abortion

Incomplete abortion

Complete abortion

Missed abortion



https://librepathology.org/w/images/thumb/4/4a/Chorionic_villi_-_intermed_mag.jpg/960px-Chorionic_villi_-_intermed_mag.jpg

INFLAMMATIONS/INFECTIONS OF THE PLACENTA

Ascending infections

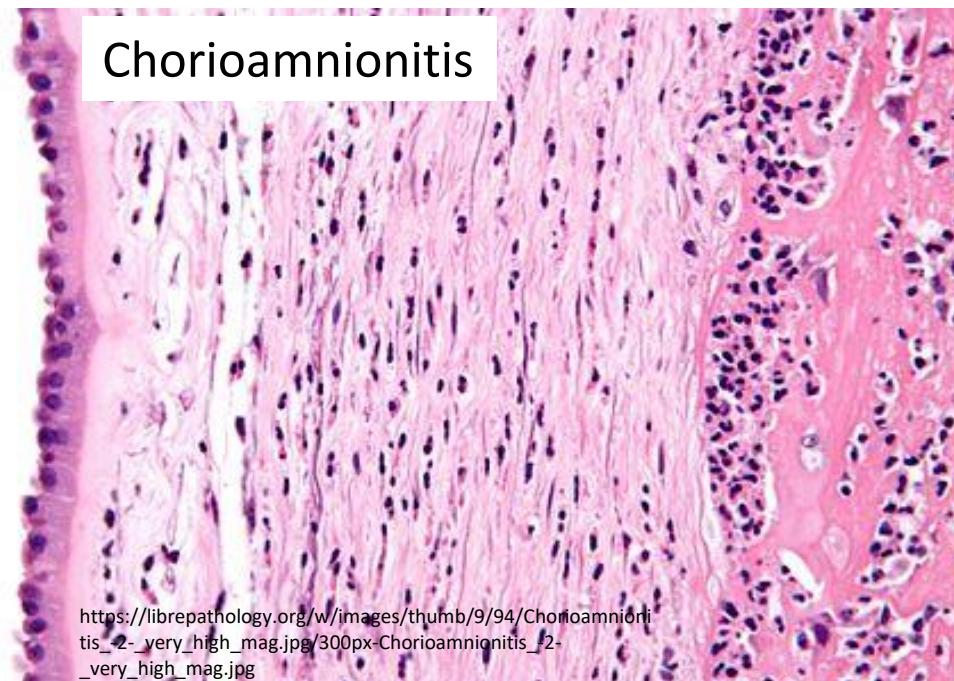
Mycoplasma hominis

Ureaplasma urealyticum

Streptococcus agalactiae

Candida

Vaginal/enteral flora



Hematogenous infections

Listeria monocytogenes

Tuberculosis

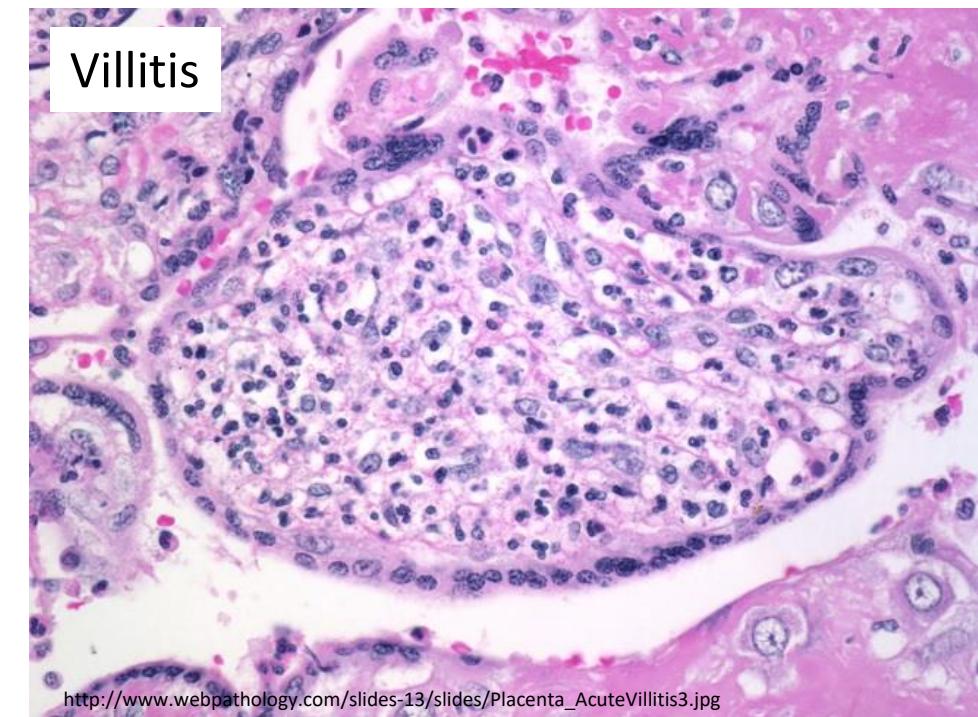
Syphilis

Toxoplasma

Rubella

Cytomegalovirus

Herpes



Premature rupture of the membranes

Complications

- Chorioamnionitis
- Funisitis
- Villitis
- Neonatal sepsis

GESTATIONAL HYPERTENSIVE DISEASES

Risk factors

- Hypertension
- Diabetes mellitus
- Obesity
- First pregnancy
- Previous pre-eclampsia
- Multiple pregnancy

Pre-eclampsia

Hypertension ($>140/>90$ Hgmm)

Proteinuria

Edema

- Impaired kidney function
- Impaired liver function
- Thrombocytopenia
- Headache, visual disturbances



Eclampsia

Seizures following pre-eclampsia



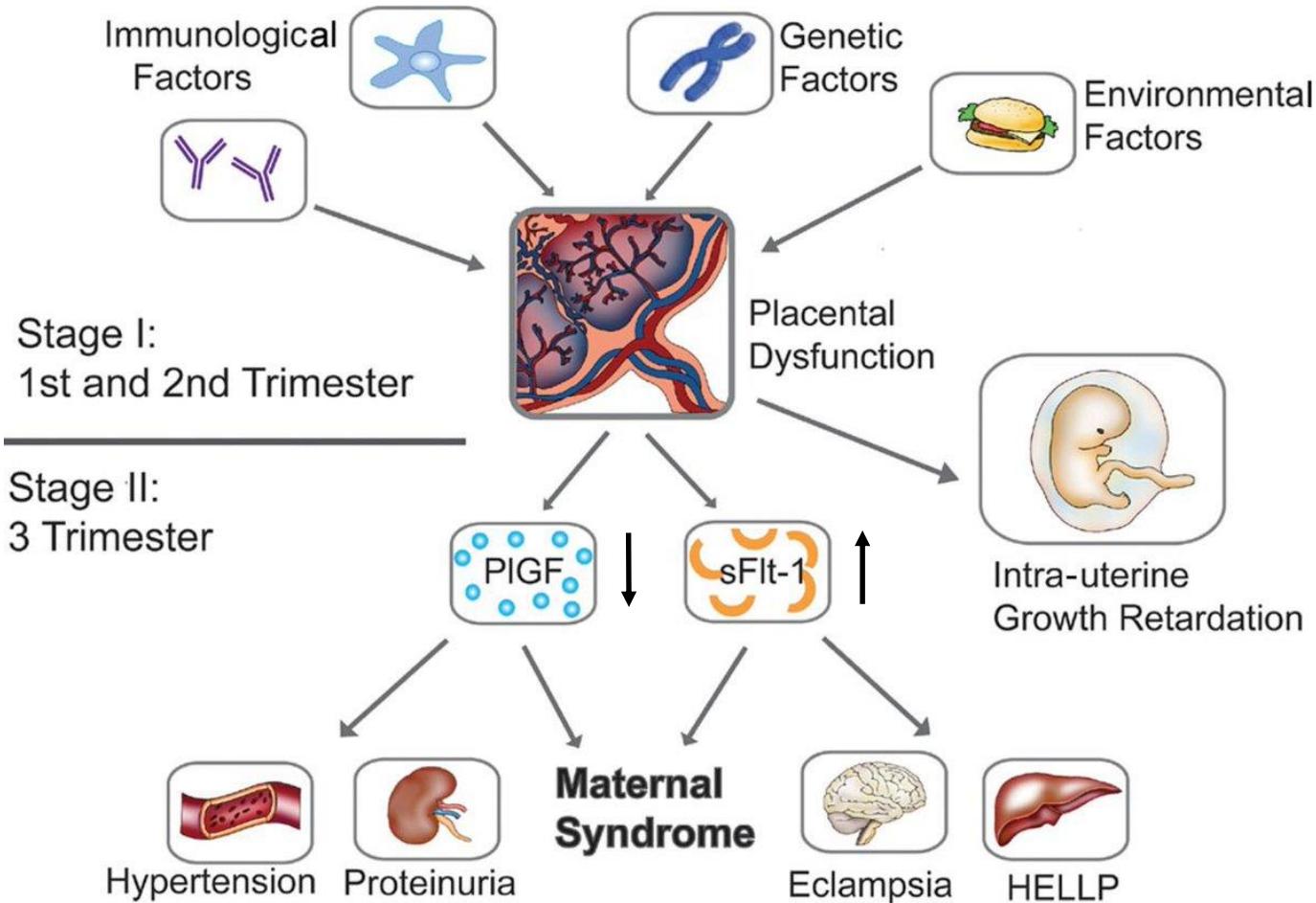
HELLP-syndrome

- Hemolysis
- Elevated Liver enzymes
- Low Platelet count
- Abdominal pain
- Headache
- Nausea, vomiting

Complications

- DIC
- Liver failure, hemorrhage, rupture
- Renal insufficiency
- Lung edema
- Cerebral hemorrhage

GESTATIONAL HYPERTENSIVE DISEASES

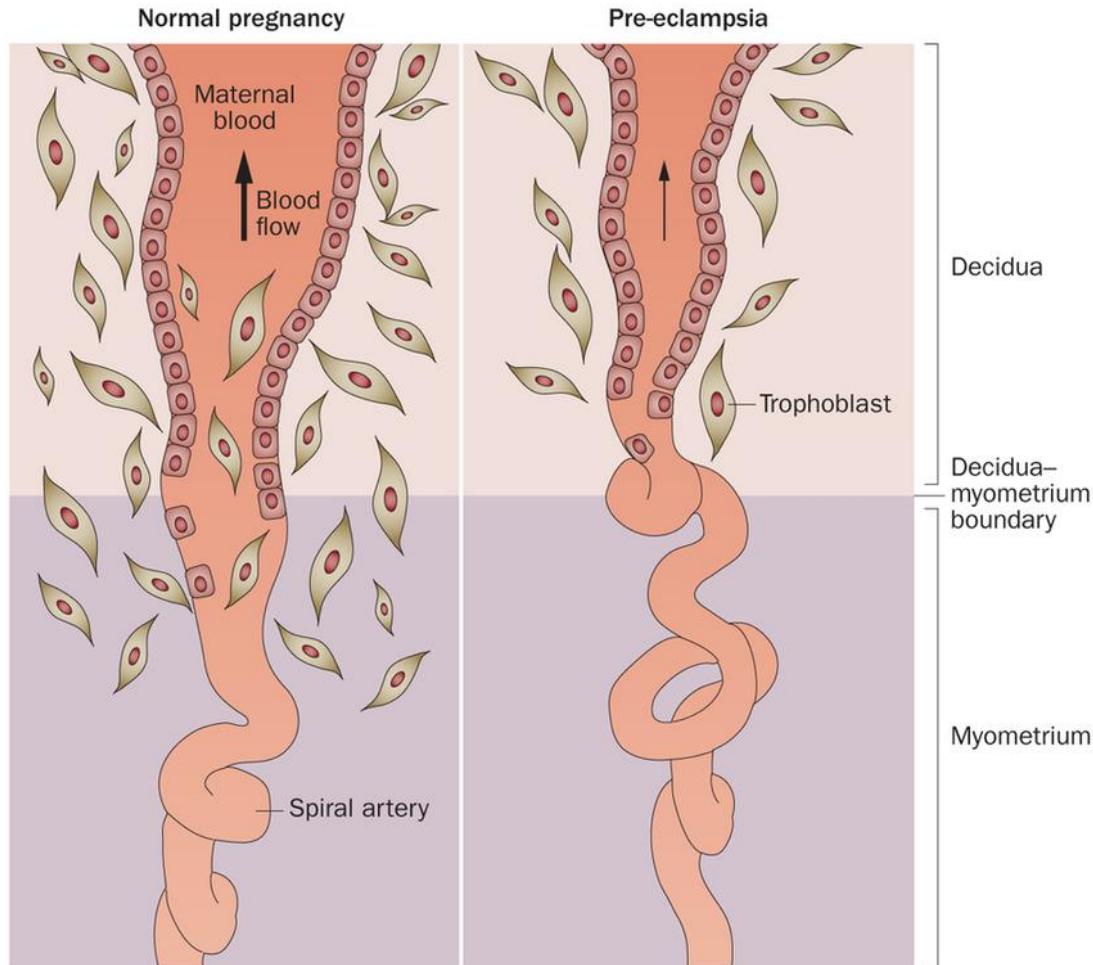


<https://pbs.twimg.com/media/DBHr0vuVoAEmZXX.jpg>

PIGF: Placental growth factor

sFlt-1: sVEGFR-1 (solubilis VEGF receptor-1)

Defective remodeling of spiral arteries



www.researchgate.net/figure/Failure-of-physiological-transformation-of-the-spiral-arteries-is-implicated-in-fig3_263739560

GESTATIONAL TROPHOBLASTIC DISEASES

Hydatidiform mole

- Partial
- Complete

Gestational choriocarcinoma

Placental Site Trophoblastic Tumor (PSTT)

HYDATIDIFORM MOLE

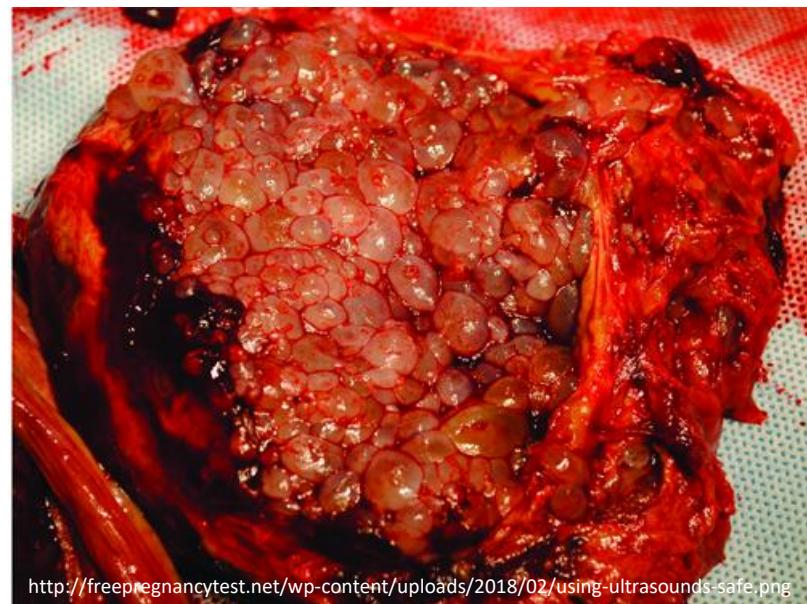
Partial mole

Karyotype 69,XXY (XXX, XYY)

hCG ↑

Embryo/fetus yes (abnormal)

Risk of choriocarcinoma <0.5%



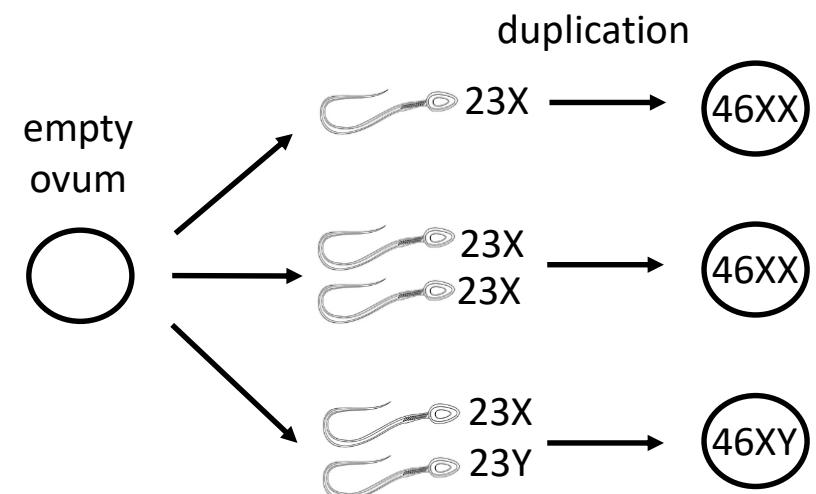
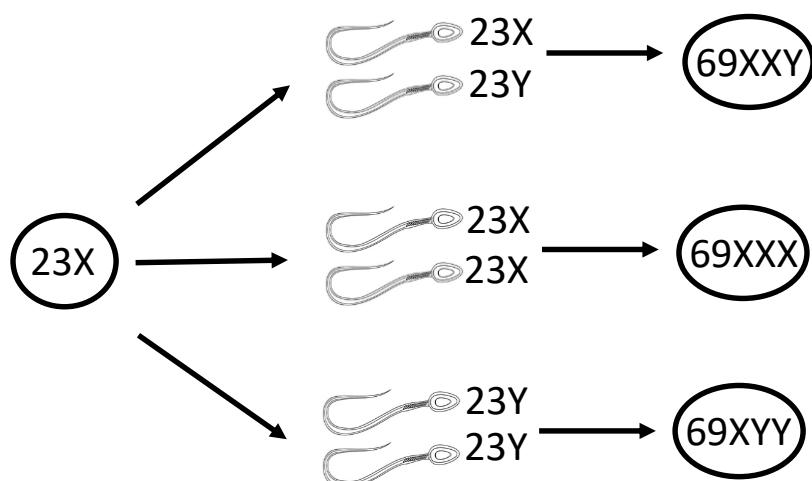
Complete mole

46,XX (XY)

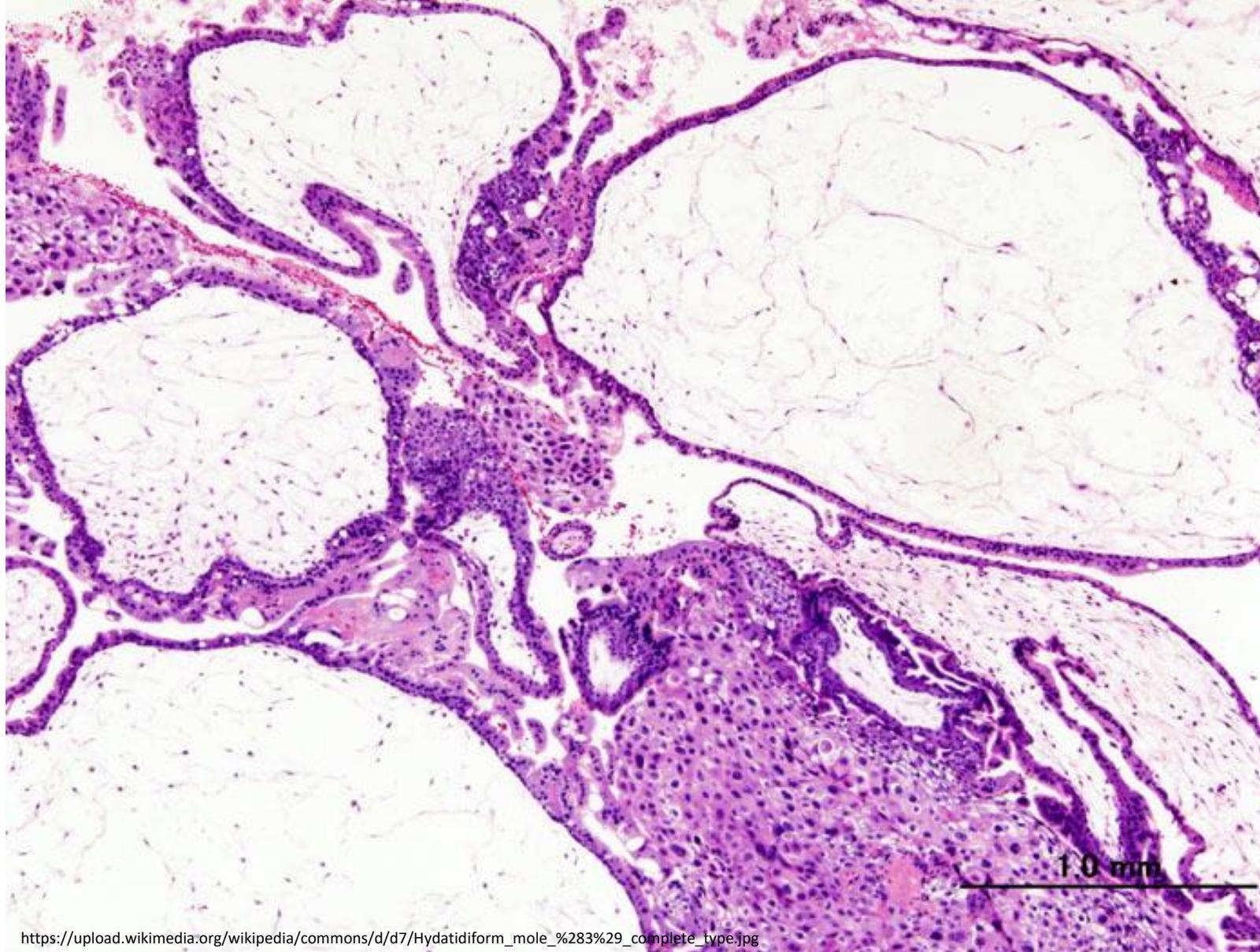
↑↑

none

2-3%



COMPLETE MOLE



Progression

10-15% >>> invasive
2-3% >>> choriocarcinoma

GESTATIONAL CHORIOCARCINOMA

preceded by

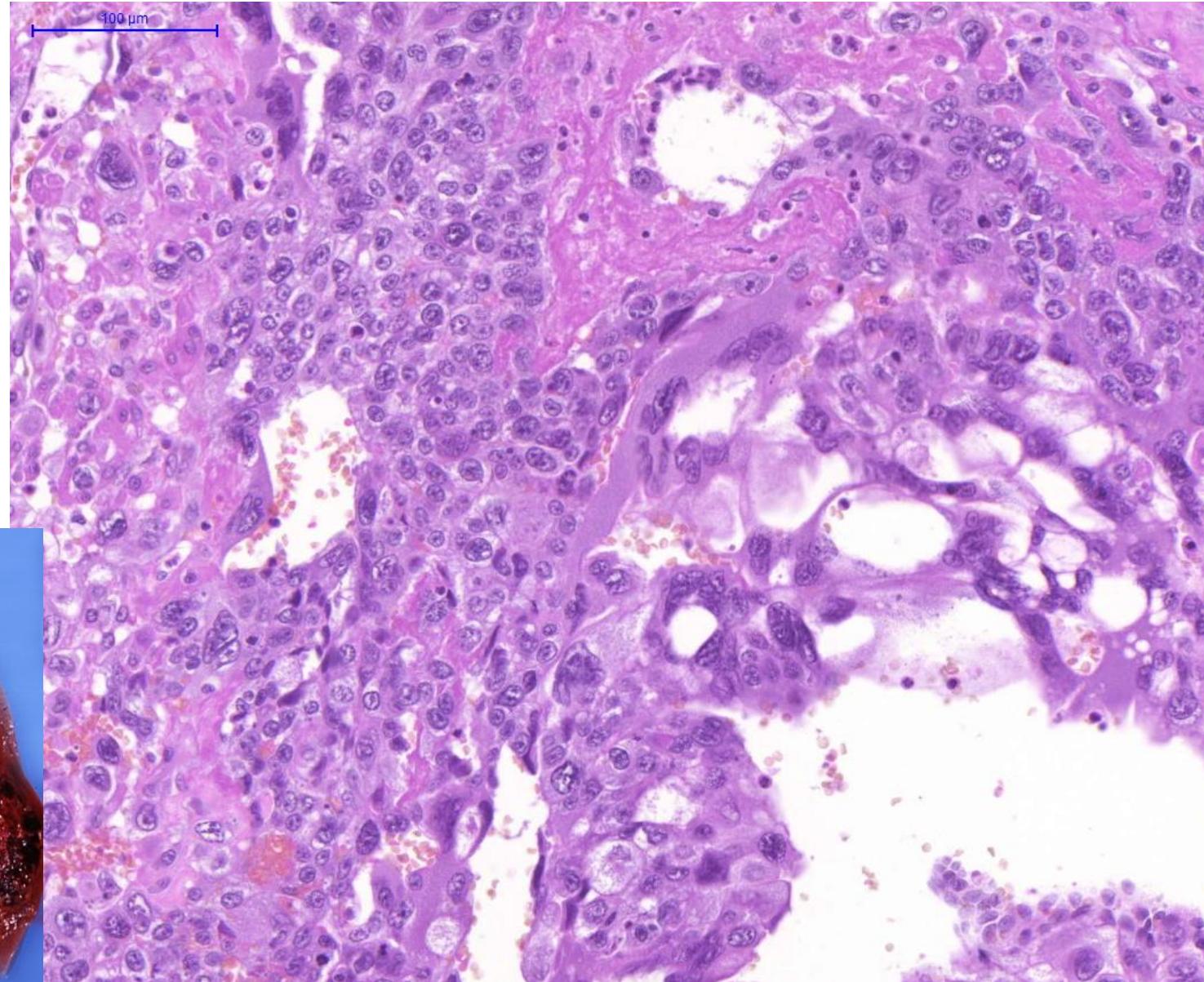
- complete mole (50%)
- abortion (25%)
- normal pregnancy (25%)

more frequent in Asian and African women

responds well to chemotherapy
(NOT ovarian/testicular choriocarcinoma!)



http://peir.path.uab.edu/library/_data/i/upload/2013/08/01/20130801094138-7116b454-me.jpg





***THANK YOU FOR YOUR
ATTENTION!***