

Kidney stones

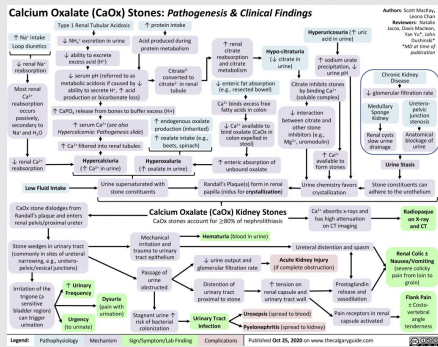
Definition: Hard deposits of minerals & salts forming within the urinary tract

Signs & symptoms:

- Severe, sharp pain in the side & back, below the ribs
 - Pain that radiates to the lower abdomen & groin
 - Pain that comes in waves & fluctuates in intensity (due to stones moving)
 - Pain or burning sensation while urinating
 - Pink, red or brown urine
 - Cloudy or foul-smelling urine
 - Persistent need to urinate, urinating more often than usual or urinating in small amounts
 - Nausea & vomiting
 - Fever & chills if an infection is present
- => Pain may change [e.g. shifting to a different location or increasing in intensity - as the stone moves through the urinary tract]

Pathophysiology & mechanism: Diet, excessive body weight, medical conditions, supplements, medications (& genetics) = urine becomes concentrated, forming stones (in any part of the urinary tract)

Kidney stones



Benign Prostatic Hyperplasia (males)

Definition:

- Enlarged prostate gland due to ↑ in cell number (noncancerous)
- More frequent in West
- More common in black people

Signs & symptoms:

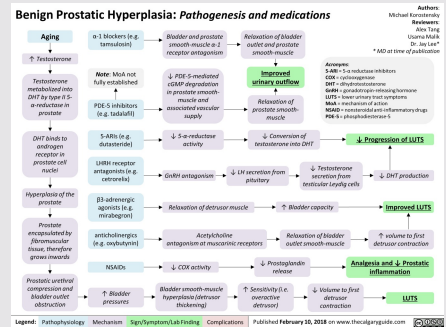
- Frequent/urgent urination
- ↑ urination at night
- Trouble starting to pee
- Weak urine stream (or stop-starts)
- Dripping at end of urination
- Not able to empty bladder fully
- Less common: UTI, not able to urinate, blood in urine

Pathophysiology & mechanism: Aging, various hormonal, bladder/kidney stones, problem with nerves that control bladder, prostate/bladder cancer

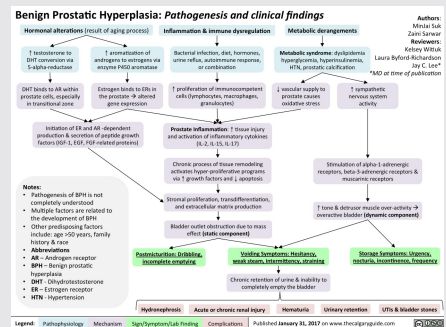
Risk factors: Aging, family Hx, diabetes, heart disease, lifestyle

Treatment: Medication, therapy, surgery

Benign Prostatic Hyperplasia



Benign Prostatic Hyperplasia (contnd)



Female Reproductive Disorders

Pelvic Inflammatory Disease	Endometriosis	Abnormal Uterine Bleeding	Female Infertility
Definition: Infection of the female upper genital tract, including the womb, fallopian tubes & ovaries	Definition: Endometrium (womb lining tissue) implants & grows in places other than the uterine cavity (ovaries, fallopian tubes); women of any age; long term condition	Definition: Bleeding between monthly periods, prolonged bleeding, extremely heavy periods Umbrella term for 2 different conditions (★)	Definition: Couple cannot conceive (both can be the issue)

Female Reproductive Disorders (cont)

Signs & symptoms:	Signs & symptoms:	Signs & symptoms:	Causes:
- May be asymptomatic - Pain around pelvis or lower abdomen - Discomfort or pain during sex that is felt deep inside the pelvis (+/- bleeding) - Bleeding between periods or after sex - Unusual vaginal discharge - Fever & vomiting - Pain in the rectum	- Sharp, deep pain during ovulation, sex, bowel movements, &/or urination - Heavy, painful periods or bleeding in between periods - Indigestion, diarrhoea, constipation, & nausea - Fatigue - Sciatica during menstruation	- Heavy periods - Irregular bleeding - Prolonged periods - Inconsistent menstrual cycles - Spotting	- Infection - Fibroids - Polyps - Septations (congenital malformations) - Polycystic ovaries (produce eggs not ready to be fertilised) - Uterine tube blockage (eggs don't reach uterine cavity) - Adhesions (due to past bleedings)



Female Reproductive Disorders (cont)

Pathophysiology & mechanism:	Pathophysiology & mechanism:	Pathophysiology & mechanism:	Pathophysiology & mechanism:
Infection (sexually transmitted bacteria) in the vagina or the neck of the cervix => spreads higher up into the reproductive organs	Retrograde flow endometrial cells => flow through reproductive organs = growth of endometrium in wrong places	<i>Local causes:</i> Polyp, Adenomyosis, Leiomyoma, Malignancy <i>Systemic causes:</i> Coagulopathy, Ovulatory, Endometrial, Iatrogenic, Not otherwise classified (Ishmocele) => Changes in prostaglandin concentration, increased endometrial responsiveness to vasodilating prostaglandins, and changes in endometrial vascular structure	Any of above causes => oocyte not released due to ↓ release of oestrogen by ovaries/↓ follicles available to ovulate/gentic damage/↓ transport of oocyte through fallopian tubes/ ↓ egg/sperm mobility due to local inflammation/inability of cervix to produce normal mucus, &/or sperm unable to enter the cervix/uterine lining disruption/↓ vascularisation & endometrial regrowth

Female Reproductive Disorders (cont)

Complications:	Complications:	Treatment:	Risk factors:
- Can result in infertility or an ectopic pregnancy - Chronic pelvic pain (⚡) => Especially when asymptomatic as it's left untreated	- Subfertility or infertility - Significant physical, emotional & social impact	Medication, hormonal contraception & surgery	Age; smoking; weight; Hx of STIs (chlamydia & gonorrhea); alcohol
Treatment: Antibiotics & in worst cases surgery	Treatment: Hormone therapy; hormonal contraception; conservative surgery; hysterectomy (last resort)	★ Menorrhagia: excessive &/or prolonged menstruation Metrorrhagia: excessive, prolonged &/or irregular bleeding unrelated to menstruation	Treatment: Fertility drugs

⚡ **Chronic Pelvic Pain:** Any pain in the lower abdomen or pelvis lasting longer than 6 months; common (1/6 women); often without obvious cause (multiple conditions can cause it); physical, psychological & social factors



