Those Hard Cases



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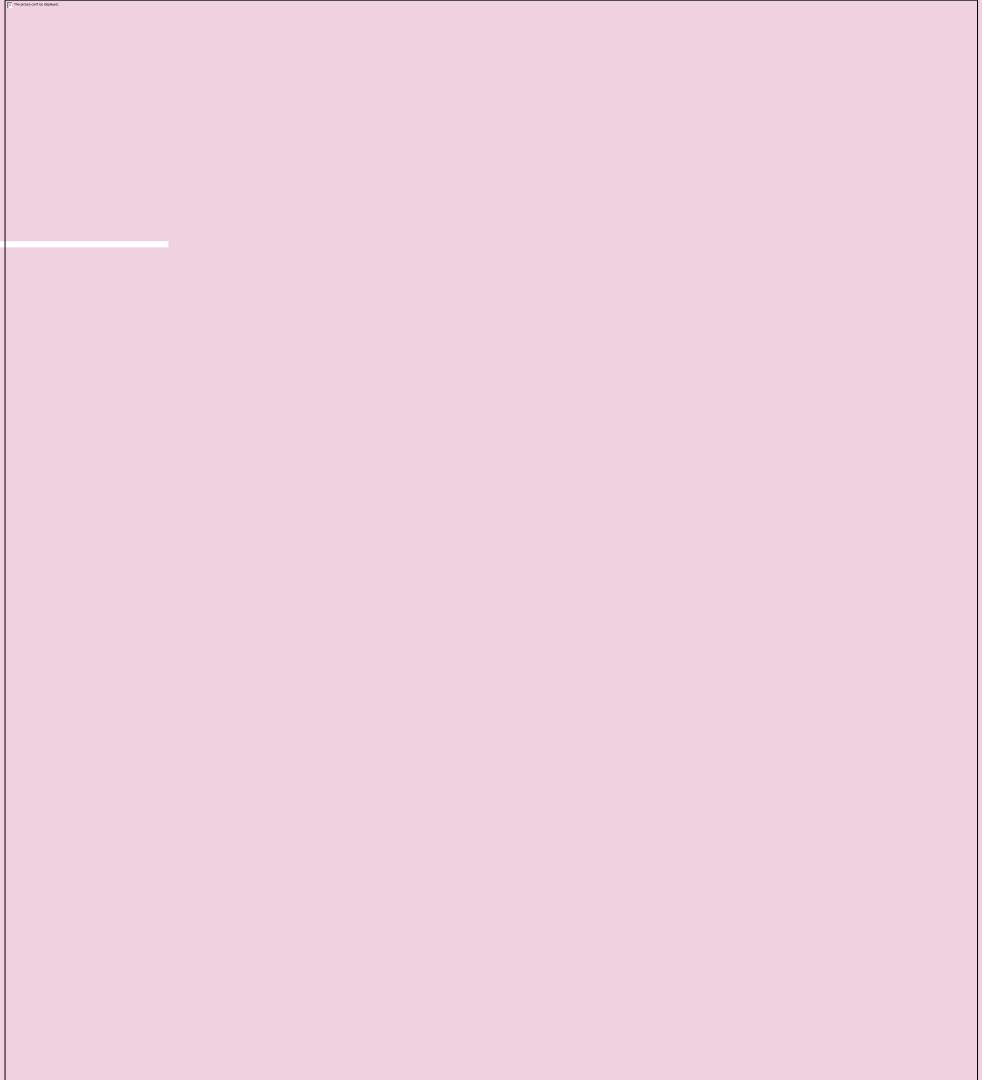
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Objectives

1. The learner will understand causes and treatment for Amenorrhea.
2. The learner will understand causes and treatments of Abnormal uterine bleeding
3. The learner will understand some causes and treatments of sexual dysfunction
4. The learner will practice newly gained knowledge with case studies.


Amenorrhea

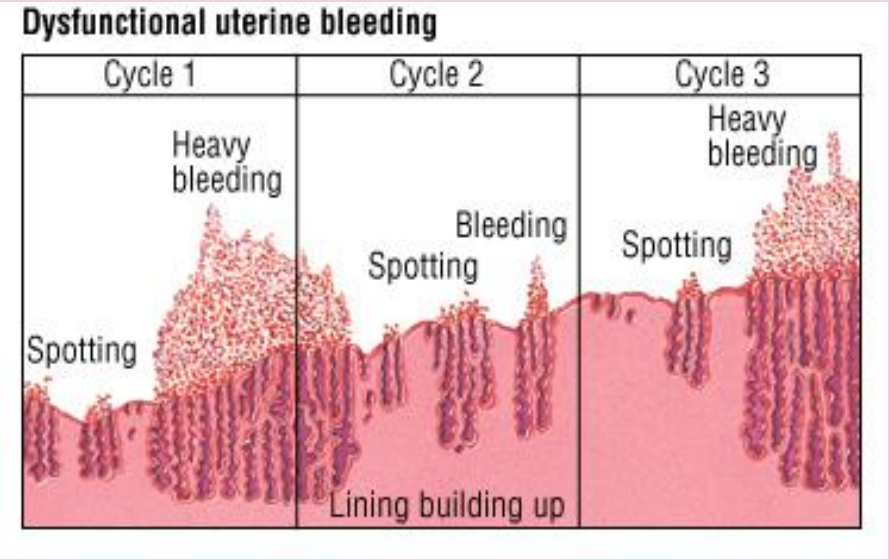
Ovulatory phase[1,2]



Ovulatory: abnormal uterine bleeding[1,2]

- progesterone secretion is prolonged;
- irregular shedding of the endometrium results, probably because estrogen levels remain low, near the threshold for bleeding (as occurs during menses).
- In obese women, ovulatory AUB can occur if estrogen levels are high, resulting in amenorrhea alternating with irregular or prolonged bleeding.

Anovulatory Cycles[1,2]



The corpus luteum does not form.

Thus, the normal cyclical secretion of progesterone does not occur,

Estrogen stimulates the endometrium unopposed.

Without progesterone, the endometrium continues to proliferate,

Eventually outgrowing its blood supply; it then sloughs incompletely and bleeds irregularly and sometimes profusely or for a long time.

When this abnormal process occurs repeatedly, the endometrium can become hyperplastic, sometimes with atypical or cancerous cells.

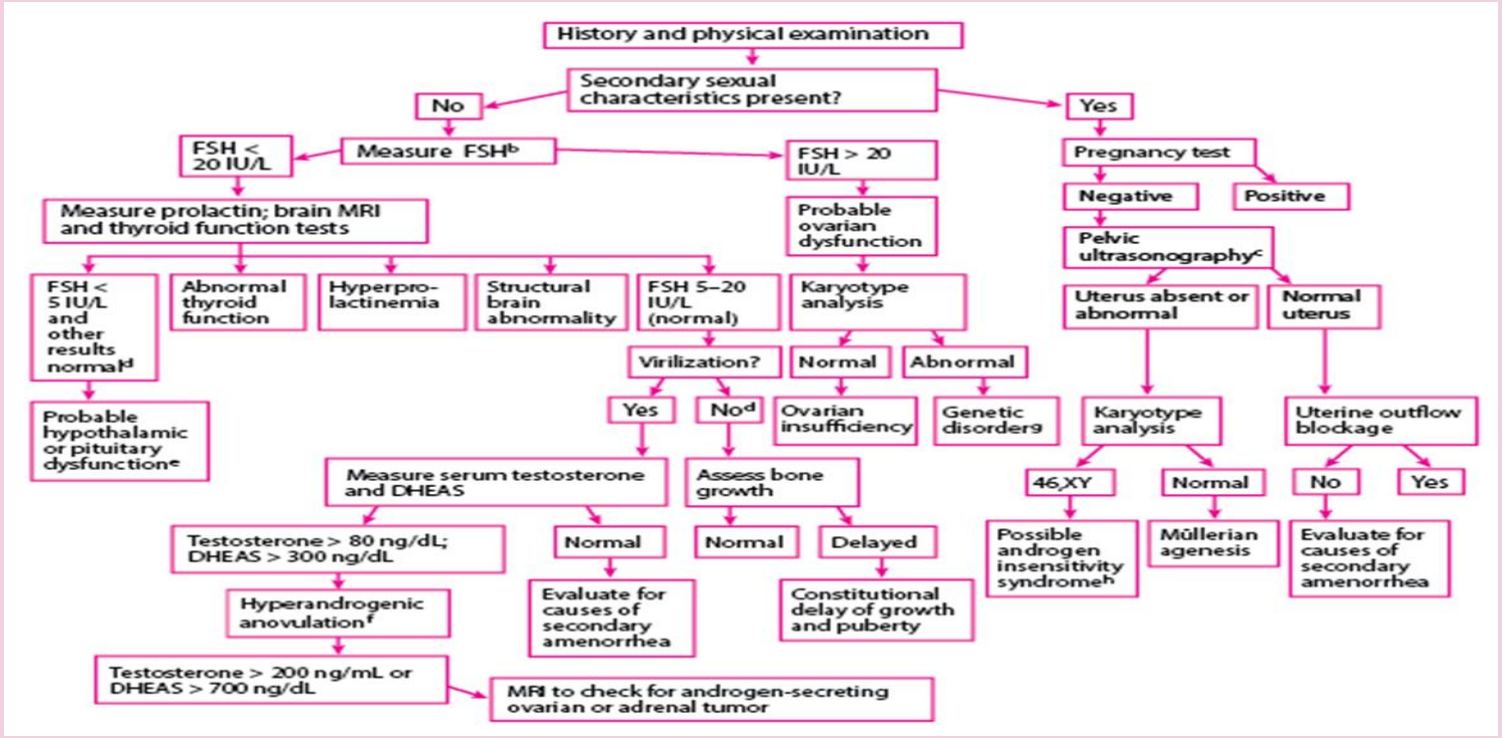
Amenorrhea: Causes[1]

1. Pregnancy (the most common cause in women of reproductive age)
2. Constitutional delay of puberty
3. Functional hypothalamic anovulation (eg, due to excessive exercise, eating disorders, or stress)
4. Use or abuse of drugs (eg, oral contraceptives, depo progesterone, antidepressants, antipsychotics)
5. Breastfeeding
6. **Polycystic ovary syndrome**
7. Antidepressants and antipsychotics can elevate prolactin, which stimulates the breasts to produce milk and can cause amenorrhea.

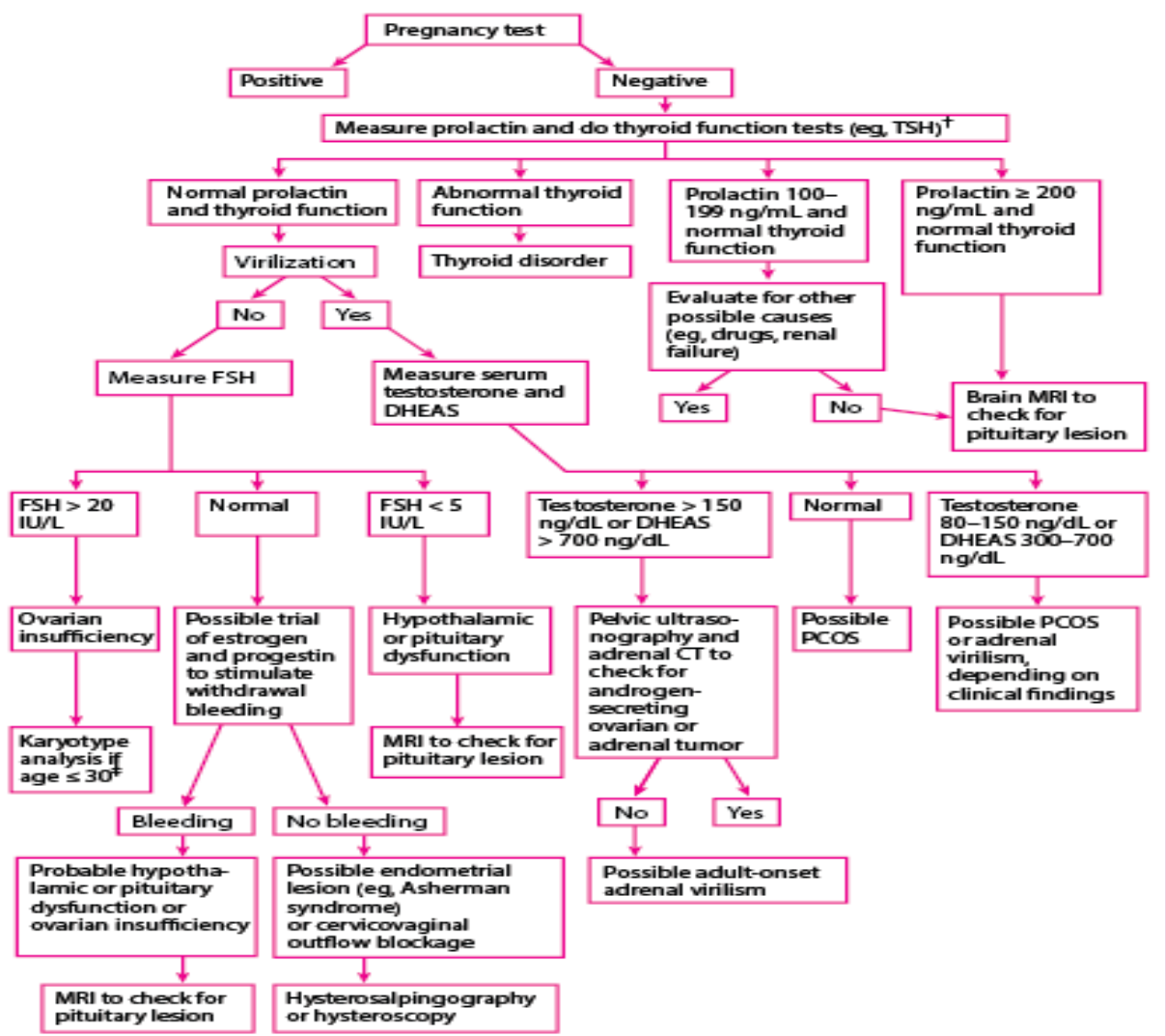
Review of systems[1]

1. Galactorrhea, headaches, and visual field defects: Pituitary disorders
2. Fatigue, weight gain, and cold intolerance: Hypothyroidism
3. Palpitations, nervousness, tremor, and heat intolerance: Hyperthyroidism
4. Palpitations: Anorexia nervosa with electrolyte abnormalities (eg, hypokalemia, hypomagnesemia)
5. Acne, hirsutism, and deepening of the voice: Androgen excess
6. For patients with secondary amenorrhea, hot flushes, vaginal dryness, sleep disturbance, fragility fractures, and decreased libido: Estrogen deficiency/menopause

Primary Amenorrhea[1]



Failure of menses to occur by age 15 years in patients with normal growth and secondary sexual characteristics. However if patients have had no menstrual periods by age 13 and have no signs of puberty (eg, any type of breast development), they should be evaluated for primary amenorrhea



Secondary Amenorrhea[1]

is the absence of menses for ≥ 6 months or the length of 3 cycles after the establishment of regular menstrual cycles. However, patients with previously regular cycles are evaluated for secondary amenorrhea if menses have been absent for ≥ 3 months, and patients with previously irregular cycles are evaluated for secondary amenorrhea if menses have been absent for ≥ 6 months.

Diagnostic Test[1]

- Pregnancy test
- Coagulation tests if women have risk factors for coagulation disorders, bruising, or hemorrhage
- Liver function tests if a liver disorder is suspected
- Testosterone and dehydroepiandrosterone sulfate (DHEAS) levels if polycystic ovary syndrome is suspected
- Serum glucose and lipid levels, blood pressure, and body mass index if polycystic ovary syndrome is suspected
- Follicle-stimulating hormone (FSH) and estradiol levels if primary ovarian insufficiency is possible
- Electrolytes (particularly potassium and magnesium) if anorexia nervosa is suspected
- **Provera Challenge:** 5 to 10 mg po once a day for 7 to 10 days.

Normal Lab Values[1]

DHEAS: 250–300 ng/dL (0.7–0.8 mcmol/L)

FSH: 5–20 IU/L

LH: 5–40 IU/L

Karyotype (female): 46,XX

Prolactin: 50 ng/mL is usually due to a drug adverse effect

(> 100 ng/mL is considered elevated and is more likely to be due to a tumor.)

Testosterone: 20–80 ng/dL (0.7–2.8 nmol/L)

Treatment[1]

- is directed at the underlying disorder; with such treatment, menses sometimes resume.
  If a Y chromosome is present, bilateral oophorectomy is recommended because risk of ovarian germ cell cancer.
- Inducing ovulation if pregnancy is desired
- Treating symptoms and long-term effects of estrogen deficiency (eg, osteoporosis, cardiovascular disorders, vaginal atrophy) with OCPs until age 51
- Treating symptoms and managing long-term effects of estrogen excess (eg, prolonged bleeding, persistent or marked breast tenderness, risk of endometrial hyperplasia and cancer) with progesterone
- Minimizing hirsutism and long-term effects of androgen excess (eg,metabolic syndrome, cardiovascular disorders, hypertension) with OCPs, Aldactrone


Abnormal Uterine
Bleeding

Abnormal Uterine Bleeding[2]

1. Formerly known as dysfunctional bleeding
2. Also called anovulatory bleeding, is any bleeding from the vagina that varies from a woman's normal menstrual cycle.
3. Occurs when the cycle's hormonal signals get thrown off and can include alternating periods that are heavy and light, spotting or unpredictable shorter and longer cycles.
4. If ovulation does not occur, periods can be delayed, which allows the lining to grow thicker. For this reason, delayed periods are often heavy ones.
5. Lighter periods, or spotting between periods, may represent an endometrial lining that is unstable and leaking, either because hormonal levels don't adequately support it or because the lining may be too thick.

Diagnosis: PALM-COEIN. [3]

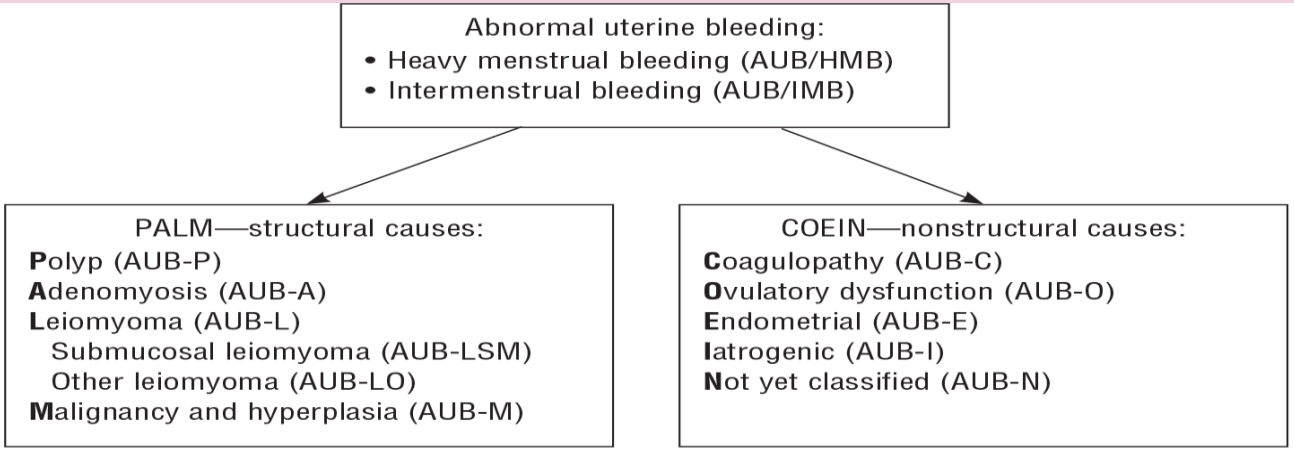
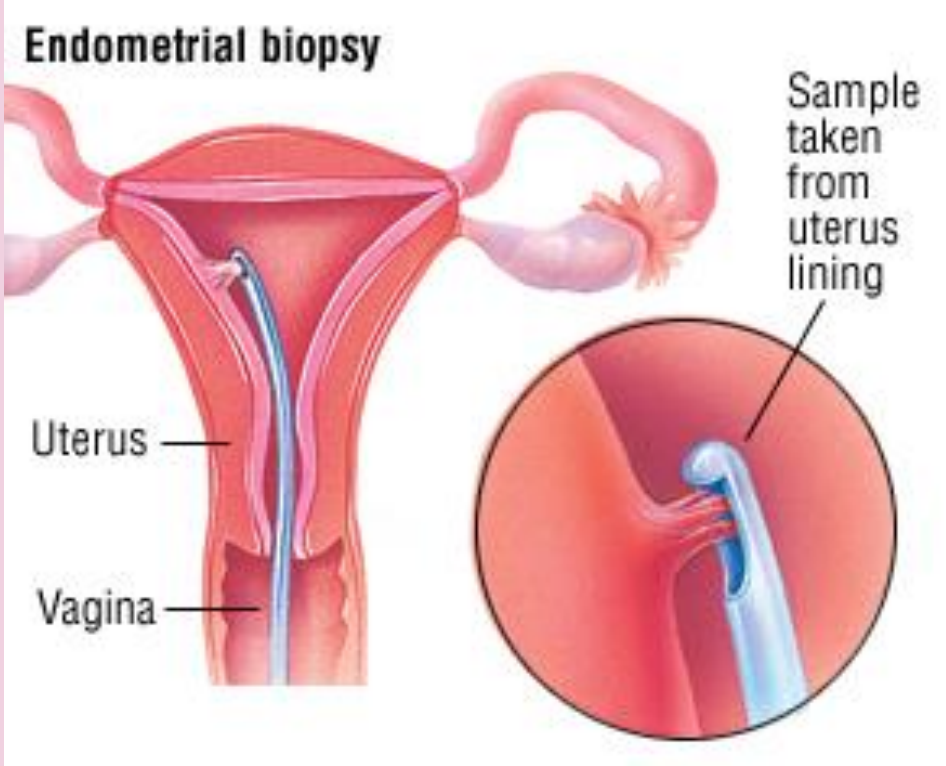


Fig. 1. Basic PALM–COEIN classification system for the causes of abnormal uterine bleeding in nonpregnant reproductive-aged women. This system, approved by the International Federation of Gynecology and Obstetrics, uses the term "abnormal uterine bleeding" paired with terms that describe associated bleeding patterns ("heavy menstrual bleeding" or "intermenstrual bleeding"), a qualifying letter (or letters) to indicate its etiology (or etiologies), or both. Abbreviation: AUB indicates abnormal uterine bleeding. (Data from Munro MG, Critchley HO, Broder MS, Fraser IS. FIGO classification system [PALM-COEIN] for causes of abnormal uterine bleeding in nongravid women of reproductive age. FIGO Working Group on Menstrual Disorders. Int J Gynaecol Obstet 2011;113:3–13. [PubMed] [Full Text]) ⇦

Laboratory test[2]

- Coagulation tests if women have risk factors for coagulation disorders, bruising, or hemorrhage
- Liver function tests if a liver disorder is suspected
- Testosterone and dehydroepiandrosterone sulfate (DHEAS) levels if polycystic ovary syndrome is suspected
- Serum glucose and lipid levels, blood pressure, and body mass index if polycystic ovary syndrome is suspected
- Follicle-stimulating hormone (FSH) and estradiol levels if primary ovarian insufficiency is possible
- A cervical cancer screening test [Pap] human papillomavirus [HPV] test) if results are out-of-date
- Testing for *Neisseria gonorrhea* and *Chlamydia* species if PID or cervicitis is suspected
- Electrolytes (particularly potassium and magnesium) if anorexia nervosa is suspected

Endometrial Biopsy[2]



- Age > 35 years with one or more risk factors for endometrial cancer
- Age < 35 years with multiple risk factors for endometrial cancer
- Bleeding that is persistent, irregular, or heavy
- Irregular cycles that suggest chronic anovulatory bleeding
- Post Menopausal endometrial thickness that is > 4 mm, focal, or irregular, detected during transvaginal ultrasound
- Inconclusive ultrasound findings

Treatment[2,4]

Nonhormonal treatments

NSAIDs, which reduce bleeding by 25 - 35% and relieve dysmenorrhea by reducing prostaglandin levels

Tranexamic acid, (Lysteda: 1.3 g TID for up to 5 days during period) which inhibits plasminogen activator, reducing menstrual blood loss by 40 - 60%

Hormonal Treatments

Conjugated estrogen 25mg/IV q4-6/24hr

Oral contraceptives (OCs) monophasic at least 35 mcg EE, TID x 7

- **progestogen**: Estrogen is contraindicated (eg, for patients with cardiovascular risk factors or prior deep vein thrombosis), declined by the patient. Combination OCs are ineffective after about 3 months of use.
- For a more predictable bleed, cyclic progestin therapy (medroxyprogesterone acetate 10 mg/day orally or norethindrone acetate 2.5 to 5 mg/day orally) given for 21 days a month than with a combination OC. Cyclic natural (micronized) progesterone 200 mg/day for 21 days a month may be used, particularly if pregnancy is possible/desired

Levonorgestrel-releasing IUD is effective in up to 97% by 6 months, provides contraception, and relieves dysmenorrhea.

MPDA 20mg po TIDx7

Danazol: It reduces menstrual blood loss (by causing endometrial atrophy) but has many androgenic adverse effects

Gonadotropin-releasing hormone (GnRH) agonists: These drugs suppress ovarian hormone production and cause amenorrhea; they are used to shrink fibroids or the endometrium preoperatively

Sexual Dysfunction

Premature Ejaculation

most frequently encountered sexual dysfunction worldwide.
Approximately 30% of adult men aged 18 - 59 years old, may really be as high at 78%
30% of men with premature ejaculation also report experiencing erectile dysfunction
Success rates after treatment vary from 30 - 70%, but relapses are common.

Ejaculation occurs during partnered sexual activity within approximately 1 minute following vaginal penetration and before the individual wishes it, during all or almost all sexual activity

Premature Ejacultion

Physiological

Abnormal levels of the brain neurotransmitter serotonin- low serotonin levels are thought to shorten the time to ejaculation

Abnormal hormonal levels, e.g., LH, prolactin, and TSH

Inflammation and/or infection of the prostate or urethra

Psychological

Depression Anxiety

Stress

Guilt

Sexual abuse

History of sexual repression

Overall lack of confidence/poor body image

Unrealistic expectations about sexual performance

Relationship problems

Treatment: SSRI

- fluoxetine 20 to 40mg/day
- paroxetine 10 to 40mg/day
- escitalopram 10-20mg/day.
- sertraline 50 to 200mg/day
- citalopram 20 to 40mg/day,

SSRI developed just for premature ejaculation is dapoxetine, and it is effective when taken 1 to -3 hours prior to the sexual activity.

Peyronie's Disease/ Penile Fibrosis

- Is a noncancerous condition resulting from fibrous scar tissue that develops on the penis and causes curved, painful erections..
- generally results from repeated injury to the penis; damaged during sex, athletic activity or as the result of an accident.
- However, most often, no specific trauma to the penis is recalled.

Complications of Peyronie's disease

Inability to have sexual intercourse
Difficulty achieving or maintaining an erection (erectile dysfunction)
Anxiety or stress about sexual abilities or the appearance of your penis
Stress on your relationship with your sexual partner
Difficulty fathering a child, because intercourse is difficult or impossible
Reduced penis length
Penile pain

Treatment

Collagenase. The only FDA-approved medication for Peyronie's disease is collagenase clostridium histolyticum (Xiaflex). Inject 0.58 mg into the target plaque once on each of two days, 1 to 3 days apart, up to four treatment cycles may be administered. Each treatment cycle may be repeated at approximately six-week intervals.

Verapamil. This is a drug normally used to treat high blood pressure. It appears to disrupt the production of collagen, a protein that might be a key factor in the formation of Peyronie's disease scar tissue. The drug is well tolerated and may reduce pain, too.

Interferon. This is a type of protein that appears to disrupt the production of fibrous tissue and help break it down. One placebo-controlled trial showed improvement using this therapy over placebo. Interferon also has been shown to reduce penile pain in men with Peyronie's disease.

Traction Therapy: involves stretching the penis with a self-applied mechanical device for a period of time to improve penile length, curvature and deformity. may need to be worn for as little as 30 minutes to as much as three to eight hours a day to achieve benefits. The effectiveness of treatment may also depend on the specific device used.



Case Studies

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Cases Studies

01 Annual exams: Moodiness women

02 Annual Exam: ED male

03 Vaginal Discharge

04 Abnormal Pap Smears

05 Contraceptives

Case 1: Hormones therapy



A 47 year-old female presents for annual exam. She states she is feeling great, but she is hot all the time. She admits tearfully she thinks she is going crazy because she is forgetful and always short tempered. Oh, she cannot sleep well. You ask about sex. States she does not have any more because of no desire and it hurts.

Look at the big picture, not just the symptoms

Hot Flashes, moodiness, cannot sleep,
Cannot remember stuff,
No energy
Cries a lot

Body aches, dry skin, “bones just hurt”

Vaginal dryness, No sensation, bladder leaks, no sex drive

Treatment


Brain
Anti-depressants, anti-anxiety, thyroid, insomnia meds, hormones therapy
Pain meds narc/non-narc,
OAB meds,

DISCUSSION SUMMARY: RX

01 Systemic Hormone therapy; ET/EPT, Pills, patches, ring, injections

02 Vaginal estrogen: creams, suppositories, sexual dysfunction
Also: lubricants, adult toys,





Case Study 2

58 yea-old male presents for his annual exam. He smokes. And has a diagnosis of HTN, DM and hyperlipidemia. He is on HCTZ, metformin, and statin. He is stable but complains of not being able to maintain an erection. This has become a problem for him. He wants to know if this is permanent. What advice do you give?

TREATMENT



Stop smoking

Medication

Medication changes

HTN: ARB, Calcium channel blockers
DM: sulfonylurea
Statin:

Other options

Testosterone injections
Medications
Lifestyles changes
Depression

Case Study 3: vaginal discharge

24-year female presents for vaginal discharge, pain and some spotting for 3 weeks. Just had a contraceptive implant put into her left arm about 3 months. Went to the ED, they told her she had an ovarian cyst and to follow up with PCP.



TREATMENT



Rule out STD, vaginitis

Chlamydia, gonorrhea, BV, Trich, yeast, Azithromycin, Cefoxin , partner treatment

Bleeding with Nexplanon

Check placement, Estradiol pills, OCP, Ring NSAIDs

Ovarian cyst

No shaving, douche, cleaning, discuss ovulation

Other considerations

- Normal flora, dehydrated sperm,
- IBS
- IC
- Urine STD screen/ UA

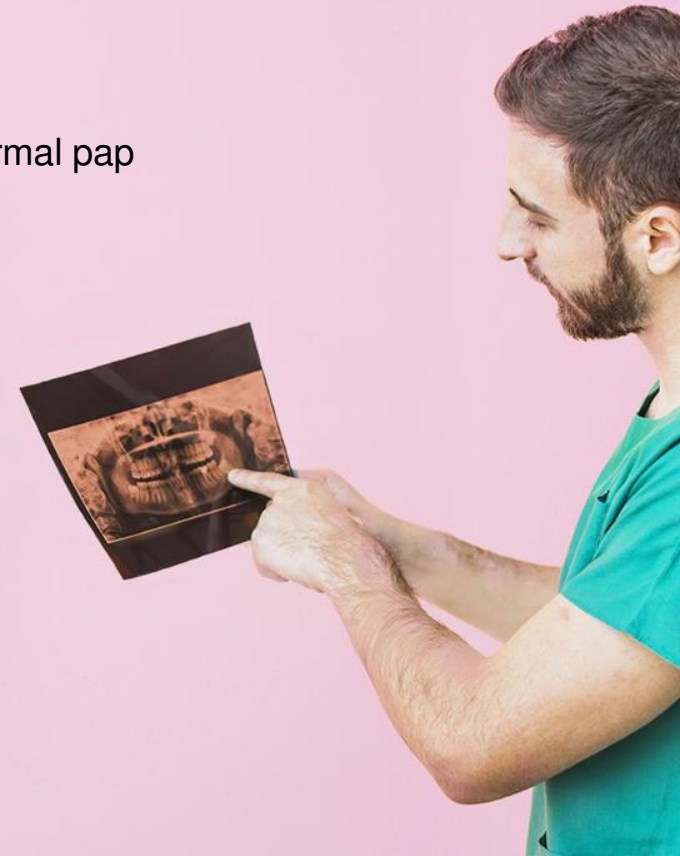
Case Study 4: Pap

36 year-old female comes for a annual exam. She has had a BTL, regular periods. She has a history of abnormal pap 5 years ago but did not follow up. No history of HPV vaccine. In a monogamous relationship but has noticed a lack in sex drive, dryness.

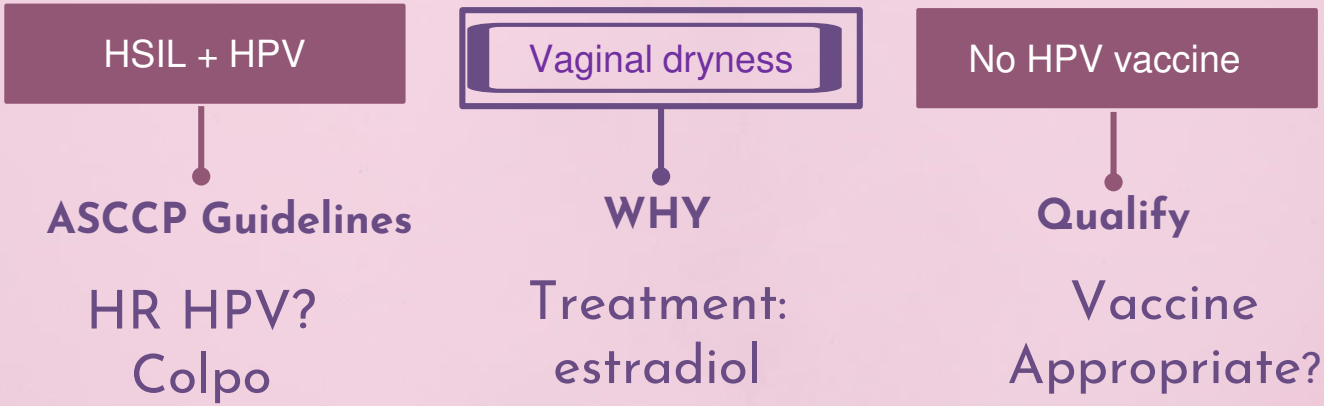


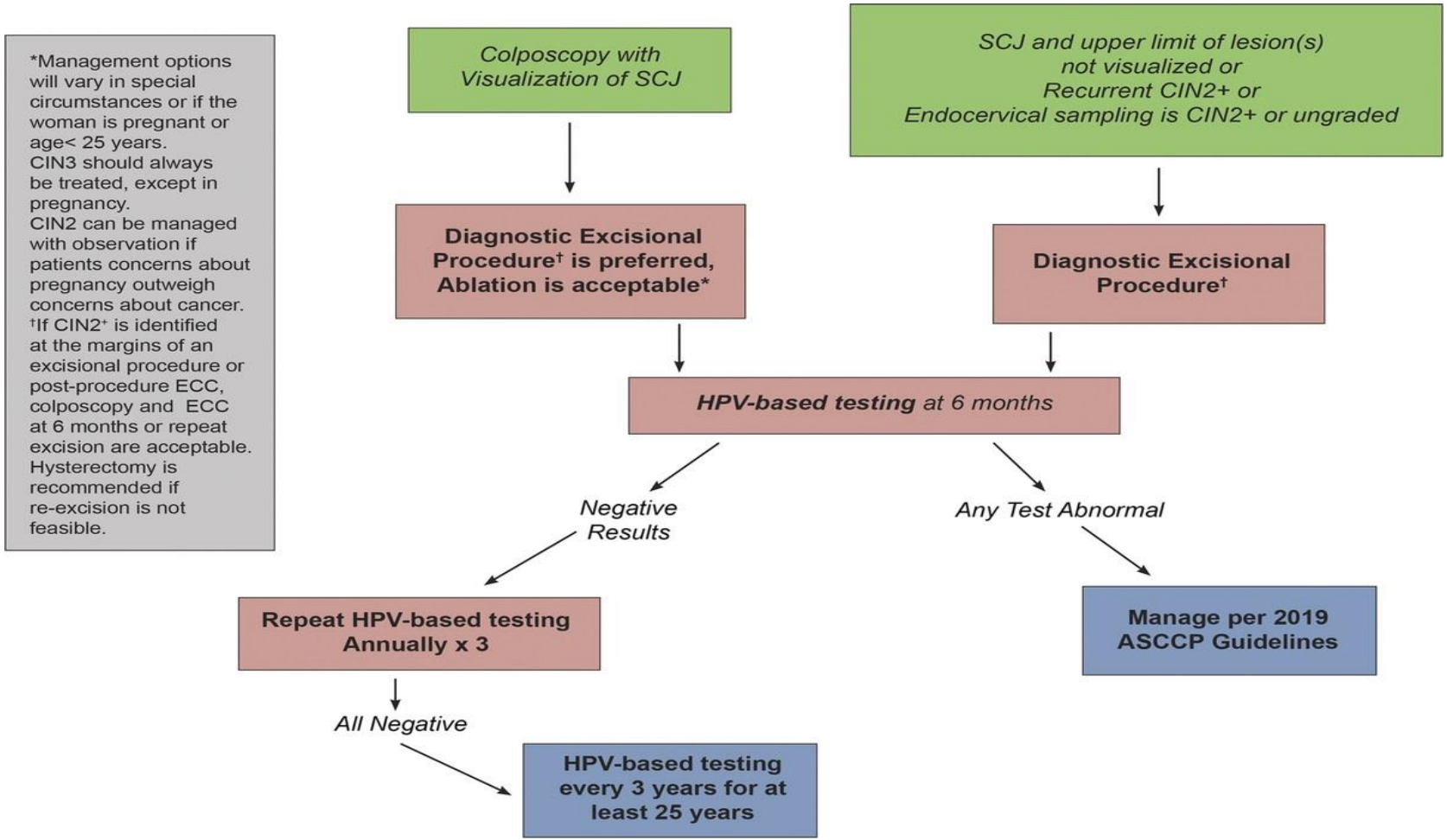
DIAGNOSIS

- HSIL, HR HPV
- History of abnormal pap
- Atrophy on exam,
- Low Libido



Plan


HSIL + HPV
Vaginal dryness
No HPV vaccine
ASCCP Guidelines
HR HPV?
Colpo
Follow up?
WHY
Treatment:
estradiol
Qualify
Vaccine
Appropriate?


*Management options will vary in special circumstances or if the woman is pregnant or age< 25 years.
CIN3 should always be treated, except in pregnancy.
CIN2 can be managed with observation if patients concerns about pregnancy outweigh concerns about cancer.
†If CIN2+ is identified at the margins of an excisional procedure or post-procedure ECC, colposcopy and ECC at 6 months or repeat excision are acceptable.
Hysterectomy is recommended if re-excision is not feasible.
Colposcopy with Visualization of SCJ
SCJ and upper limit of lesion(s) not visualized or Recurrent CIN2+ or Endocervical sampling is CIN2+ or ungraded
Diagnostic Excisional Procedure† is preferred, Ablation is acceptable*
Diagnostic Excisional Procedure†
HPV-based testing at 6 months
Negative Results
Any Test Abnormal
Repeat HPV-based testing Annually x 3
Manage per 2019 ASCCP Guidelines
All Negative
HPV-based testing every 3 years for at least 25 years

Case 5a

A 30 year-old female has a history of migraine headaches with light sensitivity. She does not experience any visual warning signs for a coming headache. She is interested in starting contraception

A. Combined hormonal methods (pill, patch, ring)
B. Progestin implant
C. Intrauterine device



Condition	Cu-IUD	LNG IUD	Implants	DMPA	POP	CHCs
Non-migraine	1	1	1	1	1	1*
Migraine						
Without aura (including menstrual migraine)	1	1	1	1	1	2*
With aura	1	1	1	1	1	4*

* These recommendations rely upon accurate diagnosis of headache as migraine with or without aura. They are intended for women without other risk factors for stroke. Consult full guidance for additional clarification.

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THANKS

Does anyone have any questions?

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