CONTRACEPTION IN OLDER REPRODUCTIVE AGE

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CONTENT OUTLINE

- Case introduction
  - Poll
- Perimenopause/Menopause
- Why contraception
- Contraceptive options
- Re-discuss case
- Summary

CASE INTRODUCTION

- Mrs. A is a 48y.o G2P2 female with PMH of DVT (on anticoagulation), obesity (BMI 32), and uterine fibroids who presents to your clinic requesting contraception. Has been having hot flashes within the last 1-2years which she has been meaning to bring up at visits. Years prior, she underwent workup of heavy periods and was found to have large uterine fibroids with resultant uterine distortion.
  - Menstrual history: LMP 6 days ago. Previously normal frequency (every 25days) but over the last 1year have been irregular (every 35-40days), last 5-ish days, heavy flow
  - OB History: NSVD x 2. Last pap smear 3mo. Ago – normal. No hx of STDs.

CONTINUED…

- Contraception goals: prevent pregnancy, cycle control, ease of use (given that she works very long hours and doesn't think she'll be able to remember to take medications within a certain time frame)
- Family Hx: No pertinent hx
- Surgical Hx: No pertinent hx
- Allergies: None
- Social Hx: Lives with children and husband. Currently sexually active with husband. No plans to become pregnant within the next year. Currently intermittently using condoms only.

QUESTION

Which of the following is necessary before prescribing hormonal contraceptives?

A. Medical history
B. Pelvic exam/pap smear
C. STI testing
D. Blood pressure
E. A and D

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  A. Given that her LMP was 6 days ago
  B. Because she intermittently uses condoms
  C. Checking urine pregnancy
  D. None of the above

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  B. Because she intermittently uses condoms
  C. Checking urine pregnancy – limitation is that she's had sexual intercourse after her LMP so you might have a false negative

D. None of the above

ACCORDING TO CDC

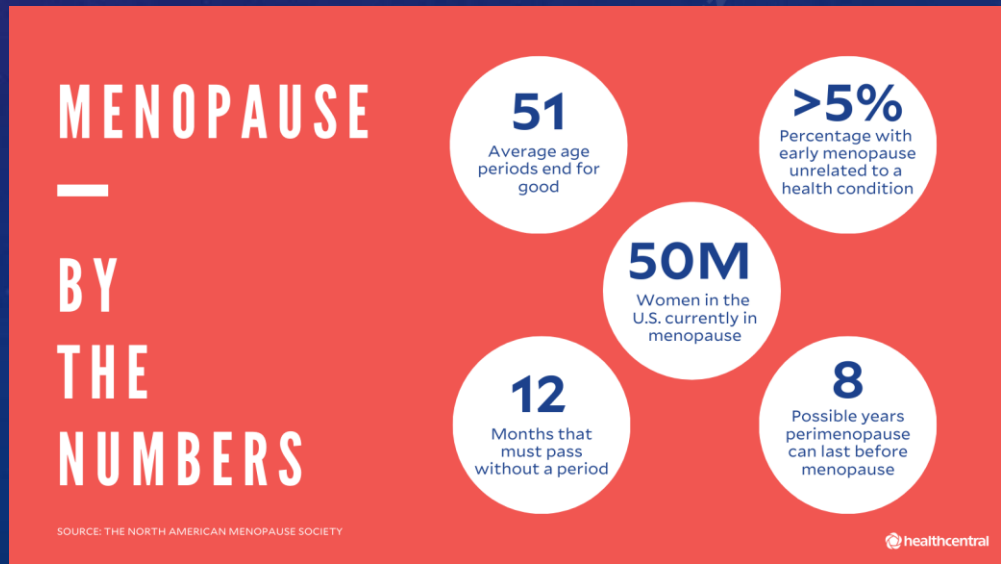
- A health care provider can be reasonably certain that a woman is not pregnant if she has no symptoms or signs of pregnancy and meets any one of the following criteria:
  - is ≤7 days after the start of normal menses
  - has not had sexual intercourse since the start of last normal menses
  - has been correctly and consistently using a reliable method of contraception
  - is ≤7 days after spontaneous or induced abortion
  - is within 4 weeks postpartum
  - is fully or nearly fully breastfeeding (exclusively breastfeeding or the vast majority [≥85%] of feeds are breastfeeds), amenorrheic, and <6 months postpartum

CASE CONTINUED

- Vitals: T97.8F, BP 118/60, HR 72 RR 14. 100% on RA. BMI 32.
- Pertinent physical exam
  - General: well appearing, NAD
  - Normal cardiopulmonary, GI exam
  - Full GU exam deferred, however, on inspection of external genitalia, no atrophy/dryness or lesions noted

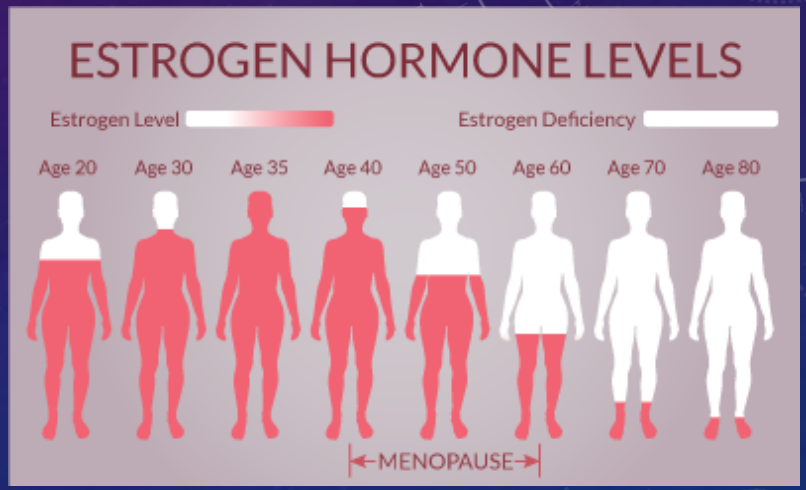
INTRO TO (PERI)MENOPAUSE

- Menopause: retrospective diagnosis – 12 consecutive months after last menses (45-55yrs, median age of 51 in North America)
  - 95% of women would have entered menopause by 55yrs
- Perimenopause: time frame between onset of symptoms of hormonal changes until menopause (39 to 51yrs, on average ~46yrs. Can last 2-8yrs but 5 yrs on average)
  - Fluctuating hormone levels, irregular periods, vasomotor symptoms, vaginal dryness, dyspareunia, night sweats, sleep disturbances, mood swings, headaches, bladder symptoms
  - Menstrual changes: initially shortened follicular phase → decreased cycle length → amenorrhea eventually
    - Other changes: fluctuations in estrogen→ unpredictable bleeding
- Onset of menopause is NOT affected by use of contraception



WHY USE CONTRACEPTION?

- Ovulation seen in 87.9% cycles up to 5yrs before menopause and 22.8% within 1yr before menopause
- Even with longer cycles (50-60days), ovulation happens in ~25%
- With older age, risk of pregnancy declines
  - Chance of natural pregnancy by age (not inclusive of IVF):
    - 20's: 85%
    - 40-44y.o: 30%
    - 45-49y.o: 10%
    - >50y.o: <1%
    - Fun fact: according to Guinness world records, Dawn Brooke (UK) became the oldest mother to naturally conceive and underwent C-section at 59yrs on 20 August 20th 1997



- Important factors: less ovarian reserve, oocyte quality, more anovulatory cycles, coital frequency
- Data showing "percentage of unintended pregnancies during perimenopause are similar to or even higher than found in younger age groups"

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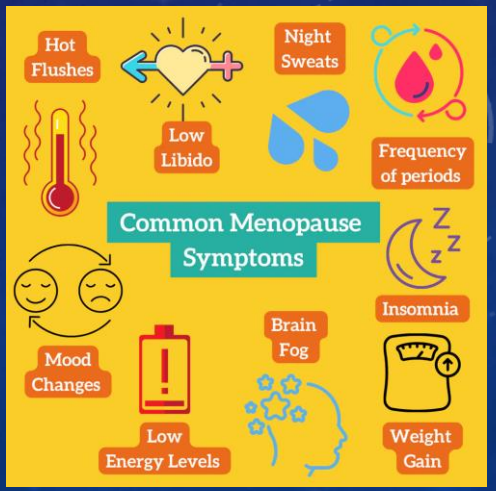
- Increased risk of maternal morbidity and mortality
  - Relative to mothers aged 20-24yrs, odds of morbidity and mortality in 35-39y.o moms 1.2x higher
    - 2.2x higher for 45to 49yrs
    - 5.2x higher in >50yrs
  - Increased maternal complications: GDM, placenta previa, gHTN, severe pre-eclampsia, placental abruption
- Increased risk of spontaneous abortion and fetal aneuploidy (>90% in women over 45yrs)
- Increased chromosomal aneuploidy, ectopic pregnancy, still birth, preterm delivery, IUGR, mortality

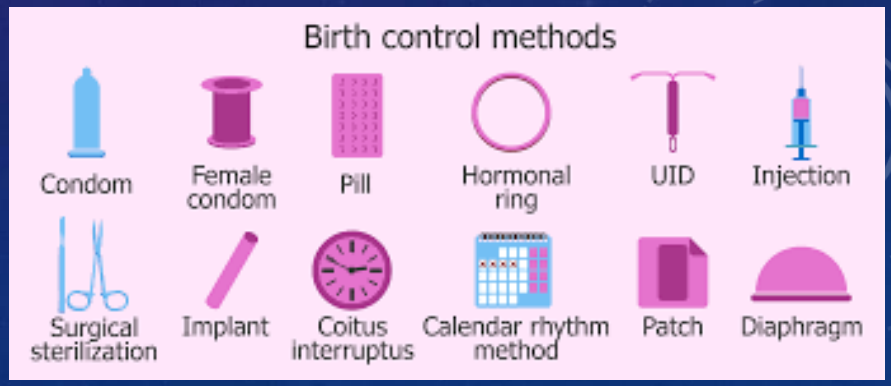
WHEN DO I STOP CONTRACEPTION IN OLDER WOMEN?

- Once menopause is confirmed
  - *Amenorrhea for >1yr after age 50*
  - *Amenorrhea for ≥2yrs if <50*
  - Caveat: patient's on hormonal contraception (may have amenorrhea)
- Hormonal testing (FSH, estradiol) is unreliable in this age group given hormonal swings/shouldn't be used to diagnose menopause



CONTRACEPTIVE OPTIONS IN OLDER REPRO AGE

- Age alone doesn't limit one's contraceptive options
- Should be personalized decision with discussion/consideration of:
  - Weighing risk of pregnancy with risk of adverse events from contraception
  - Patient goals (pregnancy prevention? improvement of quality of life?)
  - Patient's medical conditions
    - Contraindications/things to consider: risk of VTE, diabetes, obesity, tobacco use, migraine, CV disease, malignancy



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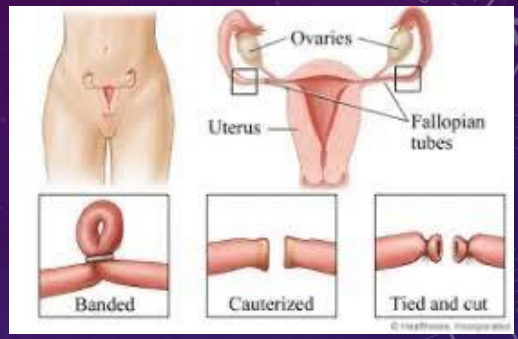

1. Voluntary permanent contraception – if done with child bearing
    - Tubal ligation, salpingectomy, vasectomy
        - Added benefit of salpingectomy – reduced risk of most common ovarian cancer (high grade serous carcinoma that originates in fallopian tubes)

2. Implant/Nexplanon (68mg progestin etonogestrel) - use for up to 5yrs
    - Most effective contraceptive in later repro years
    - Absolute contraindications: current breast cancer
    - Pros: endometrial protection from unopposed estrogen (esp for pts w/ anovulation or BMI>30) or for patients getting estrogen therapy for peri/menopausal symptoms
    - Cons: irregular bleeding, amenorrhea – important to pay attention to timing of these changes –less concern if changes occur soon after Nexplanon placement
        - Need further eval if heavy bleeding/new changes lasting >4-6mo.

CONTINUED…

3. 52mg Levonorgestrel IUD (Mirena/Liletta) – use up to 8yrs
    - Low dose LNG (Kyleena 19.5mg and Skyla 13.5mg) bleeding pattern in older women is not well studied
    - Contraindicated in pts w/ distorted uterine cavity
    - Shouldn't be initiated in pts w/ unexplained vaginal bleeding, current breast cancer, cervical cancer, endometrial cancer, gestational trophoblastic disease (w/ elevated HCG levels/malignant disease), current cervicitis/pelvic inflammatory disease, immediate postseptic abortion, postpartum sepsis, Pelvic/genital Tuberculosis
    - Pros: most effective rx for heavy menstrual bleeding (i.e 2/2 adenomyosis, fibroids—If not distorting uterine cavity, anovulatory cycles), endometrial hyperplasia

CONTINUED…

4. Copper IUD (Paraguard) – 10yr use
    - Contraindications: pts w/ heavy bleeding + those for levonorgestrel IUD (except not contraindicated for pts w/ current breast cancer)
        - Associated with reduced risk of cervical and endometrial cancer BUT wouldn't want to insert in pts w/ untreated cervical/endometrial cancer d/t risk for infection, perforation and bleeding at time of insertion and possible need for removal
    - Pros: Can be used for emergency contraception if inserted w/in 5 days after unprotected sex

CONTINUED…

5. Injectables (DMPA aka Depo - 150mg IM) – q3mo use
    - High amenorrhea rates = good for use in heavy menstrual bleeding (not as effective as IUDs though)
    - Pros: reduced risk of endometrial hyperplasia, endometrial cancer, can help reduce vasomotor symptoms in postmenopausal women (low progesterone 2/2 menopause contributes to hot flashes)
    - Cons: unscheduled bleeding (especially early on), weight gain (although BMI >30 is not contraindication), q3month clinic visits
        - Historically, concern for bone density loss which the literature doesn't support BUT in >50yr. Olds, important to consider if pt has risk factors for osteoporosis!!!

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6. Combined Hormonal Contraceptives
    - Pros: cycle control (+possible amenorrhea), decreased blood loss, vasomotor symptomatic treatment, partial protection against bone loss, reduced risk of endometrial cancer, possibly ovarian cancer
    - Cons: risk of thrombotic strokes, MI increase with older age (especially if using high dose estrogen), drug-drug interactions (antiretrovirals, anticonvulsants, rifampin/rifabutin
        - Weaker estrogens may have lower risk of thrombosis but overall not enough evidence available that low dose is safer
    - Contraindications: HTN/vascular disease, ischemic or valvular heart disease, Migraine w/ aura, smokers >35y.o who smoke >15cigarettes daily, hx of strokes, known thrombogenic mutations, Lupus w/ positive antiphospholipid antibody, liver tumors, post partum. Can’t initiate in pts w/ current breast cancer

CONTINUED…

7. Progestin only Pills – only active pills (no placebos)
    - Thickens cervical mucus/prevent sperm from ascending into upper genital tract
    - Contraindication: current breast cancer only
    - Pro: Not shown to increase VTE or ATE risk, no impact to bone mineral density. Good method to transition pts to if previously on methods causing amenorrhea (depo, LNG-IUD)
        - If unsure about menopausal status of pt, Can discontinue Progestin pills and watch if bleeding occurs in next 12mo.
    - Cons: inconvenience (pt needs to remember to take daily, within 2-3 hour period – if missed, need backup method for next 2 days), amenorrhea, unscheduled bleeding

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8. Emergency Contraception
   - Copper IUD: most effective
   - Ulipristal or ella 30mg (prescription) > Plan B 1.5mg levonorgestrel (OTC)
     - Can cause nausea/vomiting

BACK TO MRS. A…

- Mrs. A is a 48y.o G2P2 female with **PMH of recent DVT** (on anticoagulation), **obesity (BMI 32**), and uterine **fibroids** who presents to your clinic requesting contraception. Has been having **hot flashes** within the last 1-2years which she has been meaning to bring up at visits. Years prior, she underwent workup of heavy periods and was found to have large **uterine fibroids with resultant uterine distortion**.
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Good option for her:

Implant/Nexplanon: Can have in place for up to 5years, offers endometrial protection from unopposed estrogen, can result in amenorrhea. OR

Depo (q3mo.) - can treat vasomotor symptoms as well. Can cause weight gain though

- Other considerations: can't have combined contraceptives given hx of DVT, IUD not preferred given uterine distortion from fibroids

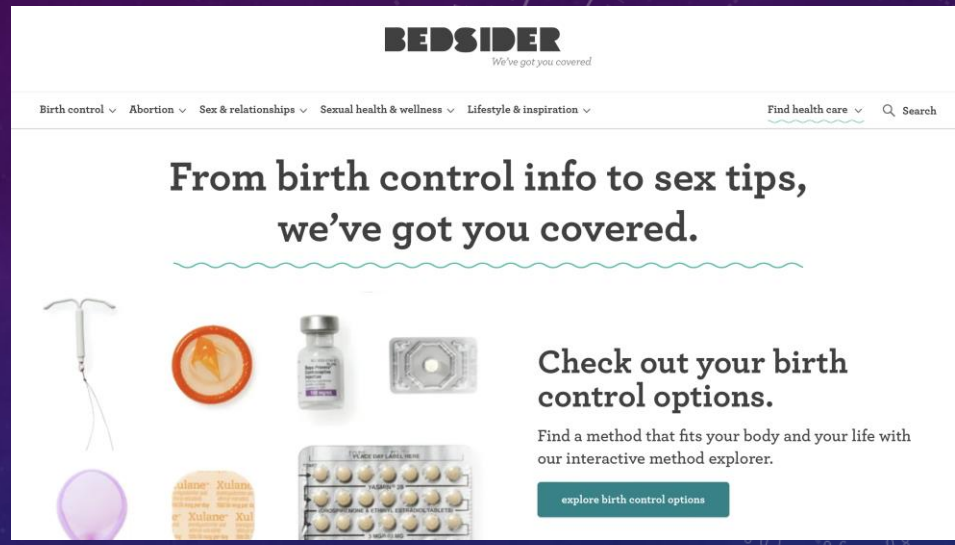
SUMMARY

- Importance of contraception until patient is confidently in menopause (>12mo. w/o periods)
- Although pregnancy is rare in >50y.o, providers should continue to discuss contraception options w/ patient's needs/goals/medical conditions in mind
- If done w/ child bearing→ permanent voluntary contraception
- Implant and progestin only pills – fewest contraindications
- Mirena/Liletta – decrease menstrual bleeding in perimenopause
- Important to discuss contraception regularly and offer emergency contraception as well

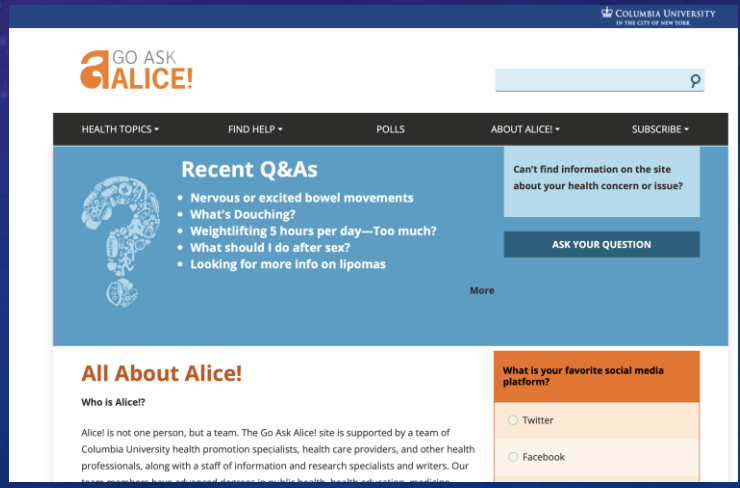
FREE USEFUL RESOURCES

US MEC
US SPR
CDC

"Contraception" App by the CDC



Bedsider.org (available as an app on iphones)



Goaskalice.Columbia.edu (Especially for adolescents)

RESOURCES

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