Contraception Counseling for Primary Care Practitioners

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Presented by: Rebecca Bradley, DO FACOG

LMU
DeBusk College *of* Osteopathic Medicine
LINCOLN MEMORIAL UNIVERSITY

VALUES | EDUCATION | SERVICE

Disclosures

- None

Objectives

- Discuss contraceptive options based on medical history and patient preference.
- Counsel patients regarding risks and benefits of contraceptive options.

Initiating Contraceptive Counseling and Shared Decision Making

- Initiating contraceptive counseling: “Would you like to discuss contraception or pregnancy prevention at your visit today?”.
- Open questions highlight that shared decision making is a priority in the discussion: “Do you have a sense of what is important to you about your contraceptive method?”
- Patients who feel their clinician had a preference or “pushed” a certain method are less likely to be satisfied with their contraception and can contribute to distrust in the medical community.

Medical History

- PMH is important to identify contraindications to certain methods as well as symptoms that could be alleviated by other methods.
  - Obstetric history: Gravida, Para, type of delivery/outcome of the pregnancy, if there were any complications.
  - Gynecologic history:
    - LMP
    - other types of contraceptives used in the past, symptoms they had with that contraceptive method, why they discontinued that method
    - last pap smear (and if it was abnormal)
    - history of STDs
    - are their menses regular or irregular?, how long do they bleed for?, do they have heavy menstrual periods? Do they have painful menses?
    - Other disrupting symptoms associated with their menstrual cycle
  - PSH
  - ALL
  - Medication Hx
  - FH-history of blood clotting disorders?, history of strokes/DVT/PE
  - Social History

General Overview of Different Contraceptive Methods

- Route of administration
- Frequency
- Efficacy
- Effect on menses
- Common side effects
- Non-contraceptive benefits
- Effect on future fertility

Route of Administration

- Barrier contraception
- Oral
- Patch
- Injection
- Per Vagina
- Implant
- Intrauterine
- Surgical

Frequency

- Per episode-Barrier contraception
- Daily-COC, POP (oral)
- Weekly-Patch
- Monthly-NuvaRing (PV)
- Q3 Months-COCs, Depo-Provera
- Q3 years-IUD, Implant
- Q5-8yr-IUD
- Q10yr-Copper IUD
- Permanent-Tubal ligation, vasectomy

Mechanism of Action

- COCs
  - Suppression of ovulation
  - Endometrial effect
  - Thickened cervical mucus
- POP/Depo/implant
- Hormonal IUD
- Copper IUD

Non-contraceptive benefits of COCs

- Improved menstrual cramping and pelvic pain related to endometriosis
- Improved menorrhagia and menstrual regularity
- Decreased risk of ectopic pregnancy
- **Decreased symptoms of PMS/PMDD**
- Reduction in risk of benign breast disease (fibrocystic change)
- Decreased development of new ovarian cysts
- **Reduction in ovarian cancer, including some hereditary forms, such as those associated with mutations in the BRCA1 or BRCA2 gene, presumably due to inhibition of ovarian stimulation**
- Reduction in endometrial cancer
- **Reduction in colorectal cancer in current users**
- **Reduction in moderate acne**
- **Reduction in hirsutism**

Non-Contraceptive Effects of hormonal IUDs/Copper IUD

- **Hormonal IUD**
  - Improved menstrual cramps
  - Improvement in pelvic pain related to endometriosis
  - **Reduction of menorrhagia**
  - **Reduction in endometrial hyperplasia**
  - **Reduction in cervical cancer**
  - **Reduction in PID**
- **Copper IUD**
  - Decrease risk of cervical cancer
  - Continued menses-main reason for discontinuation is menstrual irregularity/increased bleeding
  - **Non-hormonal: can be used in patients that have contraindications to hormones**

Absolute Contraindications to Estrogen Containing Contraception (Cat 4)

- Age>35
- Smoker
- Hypertension
- VTE/history of VTE
- Known ischemic heart disease or valvular heart disease
- Current Breast CA
- Cirrhosis or liver CA
- Migraine with aura
- Complicated or long standing DM
- Patch-weight max 90Kg

Combined Oral Contraception

- Estrogen/progesterone in varying formulations
- Efficacy: 93%
- Can be on 21 day, 28 day, q3 month cycle, or continuous
- Monophasic vs. multiphasic
- Side Effects (as with all combined hormonal contraceptives
  - Headache
  - Breast tenderness
  - Breakthrough bleeding
- Initiation
  - Needs BP prior to start
  - Quick start: Start the pack the same day-backup BC for 7 days
  - Sunday start: Start the pack Sunday after start of menstrual cycle-backup BC for 7 days
  - 1st day of menstrual cycle-No need for backup BC
- Follow up
- What to do after missing a pill:
  - 1 pill-take the missed pill as soon as you remember, even if that means taking 2 pills in 1 day (no backup BC needed)
  - ≥2 pills-take the most recent as soon as you remember. If pills are missed in the first week need backup BC for 7 days and should consider emergency contraception if unprotected intercourse. If pills are missed in the last week, continue taking hormonal pills and skip hormone free period and start a new pack.
- Drug interactions
  - Anti-seizure medications can decrease efficacy of COCs
  - Rifampin is the ONLY antibiotic that decreases effectiveness of COCs
  - St. John's Wort-theoretical decrease, dose dependent

Contraceptive Patch/Vaginal Ring

- Estrogen/progesterone
  - Vaginal ring has highest concentration of estrogen within 1 week of insertion
- Contraindications
  - Patch-Same as other combined hormonal contraceptives, Treatment for hepatitis C, skin hypersensitivity, BMI ≥30
  - Vaginal ring
- Applying the patch/changing the patch
  - Patch can be applied to buttock, abdomen, upper torso
  - Do not use after applying lotions
  - Change patch weekly on the same day for 3 weeks and then 1 patch free week
  - Vaginal ring is placed once a month and removed 3 weeks later for 1 week of hormone free interval. May have intercourse with ring in place.
    - May have increased vaginitis/vaginal discharge
- Expulsion or unintended removal of vaginal ring/broken ring
  - Delayed removal of ring-remove as soon as you remember, back up birth control for 7 days
  - Expulsion-in the first two weeks-clean and reinsert as soon as possible. If unprotected intercourse during this time, consider emergency contraception. Backup BC for 7 days. In the 3rd week-insert new ring and use backup BC for 7 days or leave out and insert new ring in 1 week, use backup BC for the ring-free interval and for the first 7 days after insertion.
- Delayed or detached patch:
  - 1st-apply as soon as you remember, backup BC for 1 week
  - 2nd or 3rd: if <48 hours, apply as soon as you remember, no backup BC needed. >48 hours, apply as soon as you remember, back up BC for 7 days.
  - Detached-<24 hours, reapply in the same area. >24hr new patch applied and this is the new day of application, back up BC for 7 days.
  - https://www.cdc.gov/contraception/media/pdfs/2024/07/recommended-action-late-missed-contraception-508.pdf
- Return of menses-hormones generally return to normal levels by 3 days

DMPA/Implant

- Progestin only, IM or SC route
- Efficacy
  - Injection: 6:100 unintended pregnancy within the 1st year
  - Implant: <1:100
- Contraindications
  - Severe cirrhosis
  - Breast CA
  - Unexplained vaginal bleeding
  - Long-term steroid use or risk for fragility fractures
  - Use of aminoglutethimide
- Effect on menses
  - DMPA-amenorrhea in ~60% of patients by 1 year of use
- Initiation
  - Best time is within 7 days of LMP-no backup BC needed
  - Anytime start-use backup BC for 7 days
  - Can switch from other method and discontinue the other method 7 days after injection
  - If the patient returns late for next injection >2 weeks, pregnancy test and backup BC for 7 days
- Side Effects
  - Controversial-weight gain
  - Headache
  - Unscheduled bleeding
  - Decrease in bone density-greatest in the first 2 years of use
  - Increased risk of DM in patients with elevated baseline risk
- Removal/return of menses and ovulation-Can be up to 18 months after last injection
- Implant can be seen on X-ray, risk for implant breaking or difficulty removing requiring surgical intervention (1.7%)

IUDs

- Copper
  - MOA-Inhibition of sperm migration/viability
  - Efficacy-<1:100
  - Good for patients who desire non-hormonal option or have contraindications for hormonal birth control. Only contraindication is Wilson's disease.
  - Is NOT an abortifacient, but can be used for emergency contraception up to 5 days post unprotected intercourse
  - Longest term of use-10 years
  - Most common reason for discontinuation is abnormal/increased bleeding or pelvic pain
- Progesterone IUD: MOA- thickens cervical mucus which prevents access of sperm to the upper genital tract as impedes implantation by thinning the endometrium
  - 3 year, 5 year, 8 year IUDs available
  - May have unscheduled/prolonged bleeding which usually resolves by 6 months of use
- Contraindications
  - Anatomic distortion of the uterine cavity
  - Active Pelvic infection
  - Pregnant
  - Unexplained AUB
  - Current Breast CA
- Insertion
  - Can be inserted any any time in the menstrual cycle
  - New recommendations for analgesia
  - Backup BC for 7 days
  - String check?
- Risk of expulsion/perforation-2-10% expulsion in the first year, 1.4:1000 risk of perforation

Tubal ligation

- Counseling
  - Should be considered permanent
  - 10 year failure rate 1-2%
  - Rate of ectopic 1:3 of all pregnancies post-tubal ligation (although there are no studies regarding bilateral salpingectomy).
- Regret after tubal ligation
  - 2-26%
  - Risk factors associated with regret
    - Age <30
    - Interval tubal
    - Marital status
  - Risk factors not associated with regret
    - Parity (including nulliparity)
    - Post-abortion
- Logistics
  - Age <21yo
  - Medicaid and informed consent
  - Physician bias/religion
- Side effects

Vasectomy

- Mechanism
  - Interruption/occlusion of the vas deferens
  - >98% effectiveness (1:2000)
- Counseling
  - Should be considered permanent
  - Most common reason for regret or reversal is a new partner
- Contraindications
  - Scrotal granuloma or hematoma
  - GU infection
  - Anatomical variance/abnormality
- Complications
  - Bleeding
  - Postoperative pain
  - Granuloma formation
  - Infection
- Post-procedure and follow up
  - Rest/light activity for 24hr
  - Scrotal support
  - No sexual activity for 1 week
  - Use of alternative form of contraception until azoospermia is confirmed (follow up is recommended at 3 months postop for semen analysis). Need >20 ejaculates prior to semen analysis.
- Reversal
  - 50-70% successful reanastamosis

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