10:45 – 11:45 am
Beyond the Pill: Long Acting Contraceptives and IUDs
SPEAKER
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The following relationships exist related to this presentation:
► Christine L. Curry, MD, PhD: No financial relationships to disclose.

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Beyond the Pill: Long Acting Contraception
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LEARNING OBJECTIVES
Identify available options for long acting reversible contraception (LARC)
Discuss the indications and contraindications for LARC
Explain the non-contraceptive benefits of each LARC method
Illustrate effective processes for counseling patients on LARC and making appropriate referrals

Unintended Pregnancy is Common in the US
6.6 million pregnancies
Intended 49%
Unintended 51%
Abortion 40%*
Birth 60%* (excluding miscarriages)

Appropriate Patient Counseling
• Effectiveness
  ▪ Failure rate: # of women per 100 who become pregnant after 1 yr. when using a b.c. consistently & correctly
  ▪ Typical use failure rate – takes into account improper or inconsistent use
• Medical Eligibility
• Cost
• Ease of use
• Side effects
• Identifying and correcting misinformation/myths

http://www.guttmacher.org/pubs/FB-Unintended-Pregnancy-US.html#11
Most effective Prevents pregnancy >99% of the time

Male/Female Sterilization IUD/IUS Implants

Very effective Prevents pregnancy ~91-99% of the time

Pills Injectables Patch Ring

Moderately effective Prevents pregnancy ~81-90% of the time

Male/Female Condom Sponge Diaphragm

Effective Prevents pregnancy up to 80% of the time

Fertility awareness Cervical cap Spermicide

Current Contraceptive Methods Available In The US

Hormonal Vs. Non-Hormonal

Hormonal
1. Oral contraceptives (pills)
2. Vaginal ring
3. Transdermal patch
4. Injected hormones
5. Hormonal implant
6. Hormonal IUDs

Non-Hormonal
1. Abstinence
2. Copper IUD
3. Condom
4. Sponge
5. Diaphragm
6. Fertility Awareness

Identify available options for long acting reversible contraception (LARC)

Copper Intrauterine Device
Levonorgestrel Intrauterine Device
Etonogestrel Implant

Guidelines on Use of LARC

“Pediatricians should be able to educate adolescent patients about LARC methods, including the progestin implant and IUDs. Given the efficacy, safety, and ease of use, LARC methods should be considered first-line contraceptive choices for adolescents.”
American Academy of Pediatrics, 2014

Guidelines on Use of LARC

“Long-acting reversibly contraceptive methods have few contraindications, and almost all women are eligible for implants and IUDs.”
American Congress of Obstetricians and Gynecologists, 2011
Guidelines on Use of LARC

“Encouraging appropriate patients to use LARCs may help lower the rate of unintended pregnancies in the United States, especially in high-risk women. There are few contraindications for the use of LARCs, even in nulliparous women and adolescents”

American Academy of Family Physicians, 2012

Intrauterine Contraception

Copper IUD
- Paragard
- Use up to 10 years
- Heavier periods
- No hormonal side effects

Levonorgestrel-releasing IUDs
- Mirena, Skylla and Liletta
- Local progestin effect
- Use up to 5 (Mirena) and 3 (Skylla, Liletta) years
- Lighter menstruation
- Some systemic effects

Intrauterine Devices

Small T shaped device inserted into uterus
Fine plastic threads hang slightly out of cervix into vagina for removal

IUDs: Mechanism of Action

Copper IUD
- Mass effect
- Alters uterine and cervical mucus
- Impairs spermatozoa function/motility
- Inhibits fertilization
- Can be used as emergency contraception
- Inhibits implantation

Levonorgestrel-releasing IUD
- Mass effect
- Releases ~15-20 mcg per day of Levonorgestrel—progestin reduces LH surge
- Thickens cervical mucus
- Impairs spermatozoa motility/function
- Inhibits fertilization
- Atrophy of endometrium
- Impairs tubal motility
- >50% of women are anovulatory

IUDs: Side Effects

Copper IUD
- Increased menstrual flow
- Increased amount and duration
- Usually no change in hemoglobin
- Increased dysmenorrhea
- Management
- Patience and reassurance
- NSAIDS around clock, start 1 day before menses

Levonorgestrel-releasing IUD
- Decreased menstrual bleeding in 80% of users at 1 year
- 10% with amenorrhea
- 40-50% decrease in blood loss
- Rare: Headache, nausea, emesis, breast tenderness
- Management: conservative

IUDs: Insertion

- Pregnancy Test
- Bimanual exam
- Insert speculum and cleanse cervix
- Stabilize cervix with tenaculum
- Measure uterine length
- Prepare the IUD for insertion
- Insert IUD
- Trim strings
- Patient may experience dizziness, pain, cramping and bleeding throughout procedure
Contraindications
- Active cervical or reproductive organ infection
- Undiagnosed abnormal uterine bleeding
- Abnormal uterine anatomy
- Copper IUD
  - May worsen pre-existing dysmenorrhea, pelvic pain, or heavy menstruation

Copper-T IUD
Risks and Contraindications

Levonorgestrel-Releasing IUD
Risks and Contraindications
- Contraindications
  - Active cervical or reproductive organ infection
  - Undiagnosed abnormal uterine bleeding
  - Abnormal uterine anatomy

CDC Medical eligibility criteria

PROS & CONS OF IUDS

Advantages
- Very effective (essentially no “user error”)
- Long-term protection
- No interruption of sexual activity
- Don’t have to remember to use
- Can be used during breast-feeding

Disadvantages
- Irregular bleeding may occur for 3-6 months
- No STI protection
- Risk of PID usually within 1-2 months following insertion
- Expulsion up to 5% in the first year
- 1/1000 risk of perforation of uterine wall at time of insertion
- Rare occurrence of embedding into uterine lining

Common IUD Misinformation
- More than 50% believed IUDs are likely to cause an infection and this will make them less likely to use method
- Almost 50% believed IUDs can move around in a woman’s body
- 40% believed women must undergo surgery for an IUD
- 25% young adults believed that an IUD can’t be stopped early

Intrauterine contraception (IUC)
Busting myths and misconceptions
- Can be used in nulliparous women
- Insertion may be more challenging
- Can be used in adolescents
- Emphasize understanding of changes in menstruation being expected
- May have higher expulsion rates
- Can be placed before you have GC/CT screening results
- Can be kept in place while you treat for PID or other pelvic infections
- Does not increase overall risk of ectopic pregnancy

Intrauterine contraception (IUC)
Busting myths and misconceptions
- Can be used in women with a history of pelvic infections, must be three months from last GC/CT or PID infection
- No antibiotics needed at time of placement
- No association with infertility
Subdermal Implant

- Thin rod placed in subdermal tissue
- Brand name: Nexplanon
- Mechanism: releases ~60 mcg etonogestrel per day, inhibits ovulation and thickens cervical mucus
- Effective for 3 years
- Failure rate is 0.05%

Etonogestrel Implant

- Inserted as outpatient
- Average time 0.5 minutes
- Mandatory training by manufacturer
- Timing of insertion
  - Insert any time in cycle; rule out pregnancy
  - Back up method if not within the 1st 5 days of menses
- Average removal time 3.5 minutes

Subdermal Implant Benefits and Risks

- No maintenance, highly effective, confidential
- Rapidly reversible upon removal
- Menstrual bleeding is highly variable
- Most common reason for discontinuation
- Can manage with oral contraceptives for first few months
- Continuation rate > 75%
- Option for women
  - Cannot tolerate estrogen
  - Are tolerant of unpredictable bleeding
  - Hesitant to use intrauterine contraception

Etonogestrel Implant Bleeding Patterns

Menstrual changes:
- Irregularity and unpredictability
- Spotting (50% declining to 30% after 6 months)
- Amenorrhea (20%)
- Prolonged bleeding (20% declining to 10% after 3 months)
- Frequent irregular bleeding (<10%)

Other:
- Acne (17% reported, 1.3% discontinued)
- Weight gain (12.7% reported, 3.3% discontinued)
- Overall increase in BMI 0.7kg/m² (not a significant increase)

Subdermal Implant Contraindications

- Current breast cancer
- Some antiepileptic drugs
- Inability to manage irregular and unpredictable menses
- SLE with anti-phospholipid antibodies
- Hepatocellular adenoma
- Unexplained vaginal bleeding suspicious for serious condition, before evaluation

Summary

Long acting reversible contraception (LARC) is the first line contraception for most patients
There are many non-contraceptive benefits of each LARC method
Counseling can influence patient selection of LARC