CONTRACEPTION

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Introductory Case
A 36-year-old G3P2012 presents for contraception counseling. She has two children, ages 6 and 8, and she states she is unsure about her future plans for more children.

Milestone-Based Focused Questions

LEVEL 1: DEMONSTRATES BASIC KNOWLEDGE ABOUT COMMON AMBULATORY OB/GYN CONDITIONS.

HOW DOES ONE INITIATE INITIAL COUNSELING ABOUT CONTRACEPTION?

A good place to start is by exploring the patient's goals. The American College of Obstetricians and Gynecologists (ACOG)'s One Key Question© recommends asking, "Would you like to become pregnant in the next year?" to jumpstart this conversation. Additional questions could include "When you think about your future, do you imagine wanting to become pregnant and when?" and "Do you have an idea of what you may want to use to prevent pregnancy?" Responses to these questions can help guide further counseling and management.

It is helpful to think of a contraception visit as involving four important parts:

1. Options Counseling
2. Relevant Medical Screening
3. Initiating the Method
4. Patient Education

LEVEL 2: FOR COMMON GYN CONDITIONS, PERFORMS INITIAL ASSESSMENT. DEMONSTRATES KNOWLEDGE OF APPROPRIATE SCREENING GUIDELINES FOR WOMEN'S HEALTH. IDENTIFIES RESOURCES TO ANSWER QUESTIONS ABOUT PATIENT CARE.

HOW DO YOU DETERMINE WHICH RELEVANT MEDICAL SCREENING IS INDICATED?

The following screenings are relevant to this patient**:**

- STI screening:
    - Based on the Centers for Disease Control and Prevention (CDC) Guidelines, sexually active women $\geq$ 25 should be offered sexually transmitted infection (STI) based on risk factors. All adults and adolescents from ages 13 to 64 should be tested at least once for HIV. While this patient does not meet criteria for annual STI testing, she does warrant a risk assessment. (See STI Chapter.)
- Cervical cancer screening:
    - Based on the American Society for Colposcopy and Cervical Pathology (ASCCP) Guidelines, this patient is over 30, so routine pap smear screening involves cytology every 3 years or co-testing (cytology with HPV testing) every 5 years. (See Cervical Cancer Screening Chapter.)

LEVEL 3: APPLIES EVIDENCE-BASED INFORMATION AND GUIDELINES TO PATIENT CARE. DEVELOPS PATIENT-CENTERED PREVENTATIVE MANAGEMENT PLANS. UTILIZES NATIONAL STANDARDS OR GUIDELINES.

This patient recently had negative STI testing and a pap smear which showed normal cytology, negative HPV. She states that she doesn't want to become pregnant in the next year and she is interested in hearing about all her options.

The following table is helpful in engaging patients in shared decision making:

CONTRACEPTIVE	LENGTH OF EFFECIVENESS	RISK OF PREGNANCY
Contraceptive Implant	Up to 5 years	Less than 1 in 100 women
Progestin IUDs	Up to 7 years	Less than 1 in 100 women
Copper IUDs	Up to 12 years	Less than 1 in 100 women
Sterilization	Forever	Less than 1 in 100 women
CONTRACEPTIVE	**MOST EFFECTIVE WHEN USED**	**RISK OF PREGNANCY**
Oral Contraceptive Pills	Daily	6-9 in 100 women, depending on method
Contraceptive Patch	Weekly	6-9 in 100 women, depending on method
Contraceptive Ring	Monthly	6-9 in 100 women, depending on method
Injectable Contraceptive	Every 3 months	6-9 in 100 women, depending on method
CONTRACEPTIVE	**MOST EFFECTIVE WHEN USED**	**RISK OF PREGNANCY**
Withdrawal	At every sexual encounter	12-24 in 100 women, depending on method
Fertility Awareness	At every sexual encounter	12-24 in 100 women, depending on method
Condom	At every sexual encounter	12-24 in 100 women, depending on method

LEVEL 4: TAILORS EVIDENCE-BASED PRACTICE BASED ON THE VALUES AND PREFERENCES OF EACH PATIENT. CARES FOR PATIENTS WITH COMPLEX PRESENTATIONS.

After counseling this patient on the relative efficacy and pros/cons about each method, she decides on the contraceptive patch. It is important to take a thorough medical history and cross-reference any medical problems with the CDC Medical Eligibility Criteria (MEC).

She reports smoking half a pack of cigarettes a day.

The absolute and relative contraindications to estrogen-containing contraception include the following:

- Migraine headaches with aura
- Hypertension
- Venous thromboembolism
- Coronary artery disease / History of myocardial infarction
- Breast cancer
- Liver impairment
- Smoker of ≥15 cigarettes/day in patient who is ≥35 years old
- Certain anti-epileptic drugs

This patient is not a candidate for a patch (or other estrogen containing contraception).

WHICH PATIENTS ARE APPROPRIATE CANDIDATES FOR AN INTRA-UTERINE DEVICE (IUD)?

There are very few contraindications to either the non-hormonal (Copper, also known as Paragard) IUD or a levonorgesterol (LNG) IUD (e.g. Mirena, Liletta, Kyleena, Skyla).

This patient reports having no contraindications to either the LNG or Copper IUD; and based on her menstrual history, either one is appropriate for her.

HOW LONG CAN THE IUD STAY IN PLACE AND REMAIN EFFECTIVE?

Long Acting Reversible Contraception (LARC) devices, such as IUDs and contraceptive arm implants, have Federal Drug Administration (FDA)-approved durations (based on the duration of efficacy at time of FDA approval) and evidence-based durations (based on evolving, ongoing scientific study). These are different, and in general, patients can be counselled based on evidence-based extended durations.

Brand Name	Description	FDA Recommended Duration of Use	Evidence-based Duration of Use	Typical Use Failure Rate
Kyleena	19.5mg LNG IUD	5 years	N/A	0.20%
Liletta	52mg LNG IUD	6 years	N/A	0.20%
Mirena	52mg LNG IUD	5 years	7 years	0.20%
Nexplanon	68mg ENG Implant	3 years	5 years	0.05%
Paragard	Copper IUD	10 years	12 years	0.80%
Skyla	13.5mg LNG IUD	3 years	N/A	0.20%

Long Active Reversible Contraceptive Options (LNG=levonorgestrel, ENG=etonogestrel)

WHAT ARE IMPORTANT CONSIDERATIONS FOR SAME-DAY IUD INSERTIONS?

In determining whether it is safe to initiate a new form of birth control, a pregnancy risk assessment should be performed.

Information needed for pregnancy risk assessment prior to contraception initiation (adapted from CDC Selected Practice Recommendations):
Last menstrual period (LMP)
Breastfeeding status
Current contraception
Office urine pregnancy test (UPT)
Last unprotected sex

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:

1. Has a negative UPT and has not had unprotected heterosexual intercourse in the past 14 days
2. Is ≤ 7 days after the start of normal menses
3. Has not had heterosexual intercourse since the start of last normal menses
4. Has been correctly and consistently using a reliable method of contraception
5. Is ≤ 7 days after a spontaneous or induced abortion
6. Is ≤ 28 days postpartum
7. Is exclusively breastfeeding or the vast majority (≥85%) of feeds are breastfeeds, amenorrheic, and <6 months postpartum (all 3 criteria must be met)

This patient states that her LMP was about two weeks ago, and in the last 14 days, she had unprotected intercourse one time 5 days ago. Given this information, what are her options?

- First, given her recent unprotected intercourse, Emergency Contraception (EC) should be considered.

She's out of the window for levonorgestrel emergency contraception (must be taken ≤72 hours after unprotected intercourse), but she is a candidate for ulipristal or for a copper IUD (must be taken ≤5 days after unprotected intercourse).

EMERGENCY CONTRACEPTION

Table 1. Available Methods of Emergency Contraception

Regimen	Formulation	Timing of Use After Unprotected Sexual Intercourse*	Access	FDA Labeled for Use as Emergency Contraception
Selective progesterone receptor modulator	1 tablet, containing 30 mg of ulipristal acetate	Up to 5 days	Requires a prescription	Yes
Progestin only	1 tablet, containing 1.5 mg of levonorgestrel	Up to 3 days	Available over the counter without age restriction	Yes
	2 tablets, each containing 0.75 mg of levonorgestrel	Up to 3 days	Available over the counter to those 17 years and older with photo identification	Yes
Combined progestin–estrogen pills	A variety of formulations can be used†	Up to 5 days	Requires a prescription	No‡
Copper IUD§	N/A	Up to 5 days	Requires office visit and insertion by a clinician	No‡

Abbreviations: FDA, U.S. Food and Drug Administration; IUD, intrauterine device; N/A, not applicable.

*Emergency contraception is best used as soon as possible after unprotected sex.

†A variety of formulations of combined oral contraceptives can be used for emergency contraception. For a list of appropriate formulations, see http://ec.princeton.edu/questions/dose.html#dose.

‡Although these methods are not FDA labeled for use as emergency contraception, they have been found to be safe and effective when used for emergency contraception and can be used off-label for this indication.

§The copper IUD is the most effective method of emergency contraception.

Source: ACOG Practice Bulletin No 152, 2018

- Your patient decides on a copper IUD for both emergency and continuing contraception. She asks, "Will this be effective immediately?"

The CDC Select Practice Recommendations states that no additional contraceptive protection is needed after copper IUD insertion.

REFERENCES

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