The Hidden Agenda
Contraception

Materials for Learners:

Packet should include the following:

- Table 1: Contraceptive Fact Sheet
- Table 2: Side Effects of Various Contraceptive Methods
- Table 3: Summary Chart of U.S. Medical Eligibility Criteria for Contraceptive Use
- Table 4: Information about Emergency Contraception
- Clinical Pearls
- Knowledge questions and answers
- References

Table 1: Contraceptive Methods—Contraception Fact Sheet

Pregnancy rate per 100 women during the first year of typical and perfect use of contraception

Method	**Typical use**	**Perfect use**
No method	85	85
Withdrawal	22	4
Female condom	21	5
Male condom	18	2
Combined pill and progestin-only pill	9	0.3
Evra patch	9	0.3
NuvaRing	9	0.3
Depo-Provera	6	0.2
Paragard (copper containing IUD)	0.8	0.6
Mirena (levenorgestrel releasing IUD)	0.2	0.2
Implant (etonogestrel)	0.05	0.05

Contraceptive Facts, U.S.Selected Practice Recommendations for Contraceptive Use, 2013 Accessed from http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6205a1.htm, 10/30/13

Table 2: Potential Contraceptive Side Effects

Potential Side Effects	
Method	**Side Effecs**
No method	Pregnancy, STIs
Combined hormonal contraceptives (pill, patch, ring)	Irregular vaginal bleeding or spotting, nausea, weight gain, change in appetite, mood change, headache, increased risk of VTE
Progestin-only oral contraceptive	Irregular vaginal bleeding or spotting, change in appetite, mood change, headache
Levonorgestrel releasing IUS (Mirena)	Irregular bleeding, amenorrhea, vaginal discharge, rare infection and uterine perforation
Copper IUD	Increase in cramps, heavier and longer periods with spotting between periods, backache, rare infection and uterine perforation
Depot medroxyprogesterone acetate	Irregular bleeding, increased appetite, weight gain, depression, headaches, hair loss, decreased bone mineral density (black box warning)
Etonogestrel Implant (Implanon)	Depression, emotional lability, acne, weight gain, pain at insertion site, dizziness, nausea, headache, menstrual irregularities
Spermicide	Vaginal irritation, allergies to spermicides, increased risk of urinary tract infections (UTIs), change in vaginal flora
Diaphragm	Allergies to latex or spermicide, increased risk of UTIs Requires more spermicide than cervical cap
Male Condom	Allergies to latex or spermicide; can use polyurethane male or female condom if latex allergies occur
Female Condom	Allergies to latex or spermicide; can use polyurethane male or female condom if latex allergies occur
Withdrawal	Pregnancy, STIs

Table 4: Information about Emergency Contraception
Current options include:

(1) Levonorgestrel emergency contraception: Administered in a single 1.5 mg dosage, Levonorgestrel EC is labeled for use within 72 hours of unprotected sexual activity. A recent systematic review demonstrated that levonorgestrel is more effective than the Yuzpe regimen in preventing pregnancy (RR 0.51, CI 0.31-0.83) and has fewer side effects as well.[4] Although labeled for use within 72 hours, and more effective the earlier it is used, in some instances it can be administered out to 120 hours. Levonorgestrel EC is available over-the-counter with no age restrictions.
(2) Ulipristal emergency contraception: Ulipristal EC is a selective progesterone receptor modulator that acts as an anti-progestin, delaying ovulation, and thereby exerting its emergency contraceptive effect. In contrast to levonorgestrel, ulipristal appears to still work in the late follicular phase, shortly before the mid-cycle LH surge. Also in contrast to levonorgestrel, ulipristal is labeled for use out to 120 hours. Currently, it is less commonly used than levonorgestrel due to its recent introduction, differences in accessibility at pharmacies, and the recommended pregnancy test before use.

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Clinical Pearls:

- Given the sensitive nature of sexual health concerns and the common reluctance of adolescents to spontaneously raise such concerns during visits, it is important to convey a non-judgmental tone in questioning, while highlighting strengths and avoiding a singular focus on problems.

- Numerous contraceptive options, including LARCs, are appropriate for use in adolescents, giving patients and clinicians alike suitable options even in the context of complex medical or psychosocial issues. Adolescents should be educated about the various options available to them, with particular emphasis given to LARCs which while considered first-line for adolescents may not be their initial choice.

- Although genuine risks such as VTE are present while using COCs, the absolute risk of severe adverse events among teenagers is generally very small, and typically less than the risks associated with unintended pregnancy.

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Knowledge Questions:

1. *Which is not an indication for a first pelvic examination?*
a. Concern for intra-vaginal foreign body such as a lost tampon.
b. Pain during sexual intercourse.
c. Vaginal discharge.
d. Desire for contraception.
e. Abnormal vaginal bleeding.

2. *Which is not a key element of a comprehensive sexual history?*
a. Sexual orientation.
b. Condom use.
c. Contraceptive use.
d. Victimization.
e. Political views on abortion.

3. *Which is an absolute indication for progestin-only contraception rather than combined hormonal contraception?*
a. Personal history of prior thrombus while on combined hormonal contraception.
b. Family history of thrombosis.
c. Migraines without aura.
d. Prehypertension.
e. Severe obesity.

4. *Which situation is not an indication for emergency contraception?*
a. Condom slips upon withdrawal.
b. Condom breaks during sex.
c. Unprotected intercourse 75 hours ago.
d. Unprotected intercourse one week ago.
e. Unprotected sex but partner withdrew prior to ejaculation.

5. *Which is not an adverse effect of combined hormonal contraceptives?*
a. Significant long-term weight gain.
b. Lipid abnormality.
c. Hypertension.
d. Nausea.
e. Spotting.

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Answers to Knowledge Questions

1. ***Which is not an indication for a first pelvic examination?***
Preferred response: d. Desire for contraception
Although a pelvic examination may be indicated in particular situations, it may not be indicated for patients who are virginal but seeking contraception or have had a recent pelvic examination and are returning to begin contraception. There should be no obstacles to contraceptive care for patients who seek it, and for some young women, a pelvic examination may represent such an obstacle.

Concern for intra-vaginal foreign body such as a lost tampon is an indication for a pelvic examination as any foreign body may lead to pelvic symptoms, infection, or other sequelae. Typically foreign bodies will present with malodorous discharge or other notable symptoms.

Pain during intercourse, or dyspareunia, may signify a pelvic or genitourinary infection, traumatic injury, or other issue such as endometriosis and should also be evaluated through pelvic examination.

Vaginal discharge in a sexually active girl may signify a wide variety of different issues which are difficult to distinguish without detailed examination. Vaginitis may be difficult to distinguish from cervicitis or further ascended pelvic inflammatory disease, and infection may be difficult to distinguish from a retained foreign body or structural abnormality without a pelvic examination.

Finally, abnormal bleeding, with few exceptions, is an indication for pelvic examination to rule out abnormal vaginal or cervical lesions, pelvic pain, or other clarifying symptoms or signs. Abnormal bleeding at menarche or in the first 1-2 years after menarche may be followed clinically unless there is concern for an atypical cause of the bleeding. Evaluation of the sexually active girl with abnormal bleeding typically requires a pelvic examination for assessment.

2. ***Which is not a key element of a comprehensive sexual history?***
Preferred response: e. Political views on abortion
While a patient's personal views may influence her decision-making regarding her own health and body, asking about her views is not a part of a routine sexual history. The clinician's role is to help the patient arrive at decisions regarding her sexual health that are in her best interest and consistent with her personal values and goals. Whether the patient shares her political views with the clinician is up to her.

Starting in early adolescence, teens may begin to have questions about sexual orientation and may not have sources of information and support other than their health care providers. Inquiring about sexual orientation in a non-judgmental way can be very helpful for many teens.

Condom use is a critical method of protection against sexually-transmitted infections and unintended pregnancy and should be discussed with all patients regardless of their sexual histories. Similar to condom use, contraceptives are crucial means of avoiding unintended pregnancies and should be discussed during comprehensive sexual histories.

Victimization is an issue plagued by secrecy and shame. As such, it is important for clinicians to raise the issue during routine screening and counseling. As such it is a crucial part of the routine sexual history.

3. ***Which is an absolute indication for progestin-only contraception rather than combined hormonal contraception?***
Preferred response: a. Personal history of prior thrombus while on combined hormonal contraception.

A personal history of thrombosis while on a combined hormonal contraceptive is an absolute contraindication to further combined hormonal contraceptive use. While thrombosis related to a time-limited risk factor such as an intravascular catheter may not be a contraindication, thrombosis related to prior estrogen administration is. A progestin-only or non-hormonal method should be used.

A family history of thrombosis, however, is not an absolute contraindication to combined hormonal contraceptive use. If a familial thrombophilia such as factor V leiden is documented, evaluation of the patient may be warranted. However, in the presence of idiopathic or otherwise unclear family history of thrombosis, a combined hormonal contraceptive may still be used if the benefits outweigh the risks.

Migraines with aura are a risk factor for stroke in the setting of combined hormonal contraception. For those with migraines without aura <35 years old, the risk and benefits yield a level 3 and thus combined hormonal contraception can be provided in this setting. A careful history to confirm the absence of aura is important prior to prescribing combined methods.

Although estrogen may increase blood pressure and is contraindicated in the setting of untreated hypertension, COCs may be prescribed in teens with prehypertension if the overall benefits outweigh the risks and close follow-up is assured.

While obesity does convey some increased risk of thrombosis, for the vast majority of adolescent girls, the benefits of combined hormonal methods, outweigh this risk. Also, although some patients may experience weight gain, others may experience weight loss and overall, the long-term weight trajectory is largely unchanged compared to non-users.

4. ***Which situation is not an indication for emergency contraception?***
Preferred response: d. Unprotected intercourse one week ago.
EC use beyond 120 hours is unlikely to be beneficial and is not recommended. A pregnancy test should be offered immediately and two weeks later to screen for

pregnancy. Contraceptives ("Plan A") should be reviewed and offered immediately to avoid further instances of unprotected intercourse.

Condom slippage is under-protected intercourse and within the appropriate time frame is an appropriate indication for EC use. Similar to condom slippage, breakage during intercourse is a significant risk factor for unplanned pregnancy and infection. If within an appropriate time frame, EC use would be appropriate. Withdrawal is not a reliable method of contraception and should be approached clinically similarly to other forms of unprotected intercourse. A pregnancy test should be offered, contraception should be discussed, barrier protection should be discussed, and follow-up in two weeks should be offered.

Although Plan B is labeled for use within 72 hours, Ulipristal is labeled for use out to 120 hours. Even for Plan B, use out to 120 hours may be appropriate given the continued albeit waning efficacy on day 5.

5. ***Which is not an adverse effect of combined hormonal contraceptives?***
Preferred response: a. Significant long-term weight gain.
Although there may be transient weight gain early in the course of using combined hormonal contraceptives, particularly in the setting of unhealthy dietary intake and sedentary behaviors at baseline, the long-term weight trajectory has been shown to be unchanged from non-users with similar weight and lifestyle profiles.

Depending on the composition of particular pills, COCs can cause an increase in total cholesterol and triglycerides in particular. The estrogen component can increase blood pressure and should be considered particularly in the setting of elevated baseline blood pressure or other cardiovascular risk factors.

Nausea is a common side effect of estrogen therapy and may be prohibitive for some patients who are particularly sensitive to its effects. Taking the pill with food or at bedtime and lowering the dose to 20ug EE may mitigate the nausea. Breakthrough vaginal spotting is also common with combined hormonal contraceptives and is a key reason for early discontinuation of combined hormonal pills by adolescents. Anticipatory guidance regarding this issue is critical to minimize premature discontinuation.

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