UNIT 3: GYNECOLOGY
SECTION A: GENERAL GYNECOLOGY

Educational Topic 33: Family Planning

Rationale: An understanding of contraceptive methods and associated risks and benefits is necessary to assist patients seeking to prevent pregnancy.

Intended Learning Outcomes:
A student should be able to:

• Describe the mechanism of action and effectiveness of contraceptive methods
• Counsel the patient regarding the benefits, risks and use for each contraceptive method including emergency contraception
• Describe barriers to effective contraceptive use and to reduction of unintended pregnancy
• Describe the methods of male and female surgical sterilization
• Explain the risks and benefits of female surgical sterilization procedures

TEACHING CASE

CASE: A 17 year old G0 female presents to clinic desiring information about contraceptive methods. She reports that she is sexually active with her boyfriend, using condoms occasionally, when she “needs them.” She has never used any other methods. She has had 2 lifetime partners. She became sexually active at age 15 and had sex with her first partner 3-4 times but didn’t use contraception. She has been sexually active with her current partner for the last year. She came today because she last had unprotected intercourse 3 days ago and is worried she might get pregnant. She has decided it’s time for a more reliable method of contraception. She has never had a pelvic exam. She has history of well controlled seizure disorder and had appendicitis at age 11. She is taking valproic acid. She smokes one-half pack of cigarettes per day, drinks alcohol socially, and uses occasional marijuana. Her blood pressure is 100/60 and pulse is 68.

COMPETENCY-BASED DISCUSSION & KEY TEACHING POINTS:
Competencies addressed:
• Patient Care
• Medical Knowledge
• Practice-Based Learning and Improvement
• Interpersonal and Communication Skills
• Professionalism
1. What pertinent historical information should you obtain from any patient prior to presenting recommendations for appropriate contraception?

- **Sexual history**
  - Onset of sexual activity
  - Number of partners since onset
  - History of STIs
- **Medical history** – contraindications to estrogen-containing hormonal contraceptives
  - Migraines with aura
  - DVT
  - Uncontrolled hypertension
  - Smoking age > 35
- **Menstrual history**
  - LMP (pregnancy)
  - Irregular menses
- **Future fertility plans**

2. What physical exam and studies are required prior to prescribing hormonal contraceptives?

- Pap and pelvic exam have typically been “bundled services,” i.e., these exams are required to prescribe contraceptives. There is no rationale for this bundling.
  - In general, Pap smears should be initiated at the age of 21. So, this patient would not require one at this time.
  - STI screening for a sexually active teenager should include chlamydia and gonorrhea which may be tested from a urine sample. Screening for other STIs should be done based on individual risk assessment.
  - A blood pressure should be obtained in patients who desire estrogen-containing contraceptives to rule out hypertension. Hypertension is rare in this age group, but blood pressure is easy to obtain, non-sensitive and low cost.

3. Which contraceptive agents are most suitable for this patient?

- **Combination hormonal methods:** Pills, patch, ring
  - **Advantages**
    - Very effective
    - Non-contraceptive benefits include cycle control, decreased risk anemia, ovarian cysts
  - **Disadvantages**
    - “Nuisance” side effects – bloating, headache, breast tenderness, nausea
    - No STI protection
    - Need to remember daily, weekly, monthly
    - Seizure medications may decrease effectiveness
    - Small risk of significant complication: DVT, PE, CVA, MI

- **Condoms**
  - **Advantages**
    - STI protection
    - Only use when needed
  - **Disadvantages**
- Need to use every time
- Less effective

- Depo-medroxyprogesterone acetate injection
  - Advantages
    - 4 shots per year
    - Highly effective
  - Disadvantages
    - Irregular bleeding
    - Weight gain
    - No STI protection

- Etonogestrel subdermal implant
  - Advantages
    - Single subdermal insertion of implant lasts for 3 years
    - Highly effective
  - Disadvantages
    - Irregular bleeding
    - Weight gain
    - No STI protection

- Copper IUD
  - Advantages
    - Long-term contraception
    - Highly effective
    - High continuation rate
    - May be used for post-coital contraception
  - Disadvantages
    - No STI protection
    - Possible increased bleeding and/or cramps

- Levonorgestrel IUD
  - Advantages
    - Long-term contraception
    - Many experience diminished bleeding which makes this an option for treatment of menorrhagia
  - Disadvantages
    - Some experience hormone-related side effects
    - Possible irregular bleeding
    - No STI protection

- Plan B
  - Advantages
    - Backs up regular birth control
    - Useful for accidents – condom breaking, discontinued methods
  - Disadvantages
    - Less effective
    - May be difficult to obtain
4. When/how to start the contraceptive method?

- Consider contraception an “emergency”
- Best if patient leaves with a method
- Advance prescriptions of Plan B to all patients (except those with an IUD)
- Best if method begins that day if negative pregnancy test
  - Combination methods – Quick start: First pill on day of visit regardless of cycle, preferably in clinic
  - Depo-provera – Same day shot
  - Subdermal implant – Same day insertion
  - IUD – Same day insertion

REFERENCES


