

Estrogens and Androgens

Chapter 26

I. Overview

- A. Steroid hormones
 - 1. lipophilic
 - 1) nuclear receptors
 - a. membrane receptors
- B. Physiology
- C. Medicinal uses

II. Estrogens

- A. estradiol
- B. Metabolites
 - 1. estrone
 - 2. estriol
- C. SERMs
 - 1. drugs
 - a. tamoxifin
 - b. raloxofene
 - c. clomiphene
- D. Synthetic
 - 1. **ethynodiol diacetate**
 - 2. mestranol

III. Progestogens

- A. Progesterone

IV. Contraceptives

- 1. adverse reactions
- A. Combination oral
 - 1. desogestrel
 - 2. drospirenone
 - 3. levonorgestrel
 - 4. norethindrone
 - 5. norethindrone acetate
 - 6. norgestimate
- B. Transdermal patch
 - 1. norelgestromin
- C. Vaginal ring
 - 1. etonogestrel
- D. Progestin-only pills
 - 1. norethindrone
- E. Injectable
 - 1. medroxyprogesterone acetate
- F. Progestin implants
 - 1. etonogestrel
- G. Progestin intrauterine device - IUD
 - 1. levonorgestrel

V.Emergency contraception

- A. High dose hormone
 - 1. progestin alone
 - a. **levonorgestrel**
 - 1) Next Choice, Plan B
 - 2) PlanB One-Step
 - 2. progestin + estrogen
 - B. Antiprogestin
 - 1. **mifepristone = RU486**
 - C. Progesterone agonist/antagonist
 - 1. **ulipristal acetate**

VI.Androgens

- A. Physiology
 - a. testosterone
 - 1. other androgens
 - 2. effects
- B. Therapeutic uses
 - 1. **danazol**
- C. Pharmacokinetics
 - 1. derivatives
 - a. **fluoxymesterone**
 - b. **oxandrolone**
- D. Adverse effects
- E. Antiandrogens
 - 1. inhibit production
 - a. **finasteride**
 - b. **dutasteride**
 - 2. block receptors
 - a. **flutamide**
 - b. **bicalutamide**
 - c. **enzalutamide**
 - d. **nilutamide**