




Week 6 Case Study: Reproductive System Required Resources

Read/review the following resources for this activity:

-  Textbook
-  Weekly Concepts
-  Minimum of 1 scholarly source

Scenario/Summary

History:

A 26 yr old woman has not had menses for the past 3 months. She is not using contraception.

Physical:

BMI is 28 (overweight). She has moderate acne on her face. She has an increased amount of dark hair above her lips and on her chest.

Labs: pregnancy test is negative, prolactin, FSH and thyroid tests are normal, LH and testosterone are mildly elevated

Assessment: Polycystic Ovarian Syndrome causing hirsutism (increase in hair growth over body), anovulation (not ovulating), and infrequent menses

Deliverables

Answer the following questions based on the scenario and article above and save your responses in a Microsoft Word document. Provide a scholarly resource in APA format to support your answers.

1. Describe 3 effects of estrogen on the body.

In addition to regulating the menstrual cycle, estrogen affects the reproductive tract, the urinary tract, the heart and blood vessels, bones, skin, hair, mucous membranes, pelvic muscles, and the brain. In the ovaries, estrogen helps stimulate the growth of the egg follicle. In the uterus, estrogen enhances and maintains the mucous membrane that line the uterus. It also regulates the flow and thinness of uterine mucus secretions. The body also uses estrogen in the formation of breast tissue. This hormone helps to stop the flow of milk after weaning.

2. Describe 3 effects of testosterone on the body.

Testosterone sustains the male reproductive tract, sperm production, and libido. Testosterone promotes muscle development by promoting protein synthesis and preventing protein degradation (anabolic and anti-catabolic effects); when these effects are combined, testosterone promotes muscular hypertrophy. By activating EPO and recalibrating EPO's set point in relation to hemoglobin, testosterone enhances iron use for erythropoiesis. The pituitary gland produces luteinizing hormone (LH) and follicle stimulating hormone (FSH) (LH). LH stimulates the production of testosterone in the testes. When the hormones testosterone and follicle stimulating hormone (FSH) are in balance, they aid in the production of sperm.

