
Week 5

- **Prevention of osteoporosis with hormone replacement therapy**

HT reduces postmenopausal bone loss and thereby decreases the risk for osteoporosis and related fractures.

The first line of prevention and treatment of osteoporosis is hormone replacement therapy (HRT). All of the approved drugs for the prevention and treatment of osteoporosis act as inhibitors of bone resorption; these drugs include HRT, selective estrogen receptor modulators, calcitonin, and bisphosphonates

- **When and when not to use progestin for hormone replacement therapy and why**

You should not use HRT (Estrogen with or without Progestin) for the prevention or treatment of coronary heart disease or stroke. HRT (Estrogen with or without Progestin) is effective for the control of hot flashes, night sweats and vaginal dryness.

Local vs. systemic estrogen options and why one would be chosen over the other

Prostaglandins

- I. Prostaglandins, a group of lipids, originate from the fatty acids and act as a middleman. The hormone rushes to the work whenever there is an incident of tissue damage. Hence, the primary attribution of these molecules is to clot blood and form new cells on the wounded site. They do the task by inhibiting the aggregation of the platelet.
- II. Aside from that, prostaglandins control the inflammation due to injury, blood pressure, and blood flow. Furthermore, the hormone also contributes to uterine contraction during pregnancy labor.

Leukotrienes

- I. Leukotrienes, the inflammatory chemical group, are responsible for your suffering during an allergy attack. These hormones signal the airway muscles to tighten and release excess mucus as soon as you make any contact with an allergen. The leukotrienes also cause lung swelling in asthma and play an inflammatory role in tissue damage or injury.

Histamine

- I. Histamine fights on your behalf against any potential allergy or alien that invades your immunity system. Your white blood cells secrete these compounds whenever under attack. Such inflammatory responses might trigger an allergic reaction in the body, such as itching or sneezing.
- II. Histamine has some other roles to perform too. The local hormone contributes in
- III. Smooth muscle contraction, Blood pressure regulation, Capillary permeability enhancement by blood vessel dilation, Gastric juice secretion, Serotonin