August 2012 Osteoporosis

1. Q:What are the two classes of drug treatment for osteoporosis? Anti-catabolic agents, Anabolic agents.
2. Q: What are the anti-catabolic agents used for osteoporosis?

A: 1. Bisphosphonates 2. RANK Ligand Inhibitors 3. Selective Estrogen Receptor Modulators

1. Q: What are the Bisphonphonates? A: 1. Cyclical Etidronate 2. Alendronate

3. Risedronate 4. Zoledronic acid

1. Q: What is the dosing schedule for cyclical Etidronate? A: Two weeks out of every three months.
2. Q: What is known to interfere with Alendronate efficacy for preventing bone

fractures? A: Proton Pump Inhibitor medications.

1. Q: Which of the bisphosphonate medications are first line for treating osteoporosis?

A: 1. Alendronate 2. Risedronate

1. Q: What are the dosing instructions for the Bisphosphonate medications?

A: Take on an empty stomach with a glass of water.

1. Q: Zoledronic Acid is an injectable Bishosphonate medication, how effective is it?

A: Absolute risk reduction of death decreased 4.7%

1. Q: What are the risks of bisphosphonate medications?

A: 1. Osteonecrosis of the jaw. 2. Esophageal ulceration.

1. Q: What are the dosing limits of Bisphosphonate medications? A Use for only three years then stop.
2. Q: What is the RANK Ligand Inhibitor medication? A: Denosumab
3. Q: What is the mode of action of Denosumab?

A: It is a biological agent that reduces osteoclast formation, function, and survival.

1. Q: What are the Selective Estrogen Receptor Modulators?

A: 1. Estrogen 2. Progesterone 3. Calcitonin 4. Raloxifene

1. Q: What are the benefits of using Raloxifene?

A: 1. Bone density increases 3%

2. New vertebral fractures are reduced 30 to 40 %

1. Q: What are the drug risks associated with Raloxifene?

A: 1. Deep vein thrombosis 2. Pulmonary embolism

1. Q: What are the health risks associated with Estrogen and Progesterone use?

A: 1. Increased cancer risk 2. Increased heart disease risk

1. Q: What is the order of use for Calcitonin in the treatment of Osteoporosis?

A: It is a second line drug due to weaker clinical trial data.

1. Q: What are the anabolic agents used to treat osteoporosis?

A: Parathyroid Hormone and Analogues

1. Q: What are the parathyroid hormone drugs used for treating osteoporosis?

A: 1. Teriparatide 2. Recombinant Human PTH

1. Q: How does Teriparatide work? A: It is an anabolic agent.
2. Q: How effective is Teriparatide? A: It produces a 50% reduction in osteoporotic fractures.
3. Q: What is the health risk associated with Teriparatide use? A: Osteogenic sarcoma.
4. Q: What dosing limits address the health risks associated with Teriparatide use?

A: The limit of only 24 months of lifetime exposure.