osteoporosis treatment options

1. Fall Prevention (handout available upon request)
   - Avoid icy, slippery or wet surfaces
   - Be careful on the stairs. Make sure areas are free of clutter, use handrails and be able to see the steps in front of you.
   - Be careful around dogs/cats/small children
   - Use caution in bathroom because some of the hardest surfaces like the tub, toilet and vanity are in bathroom.
     Install handrails and slip-resistant mats
   - Use proper footwear
   - Keep a flashlight in bedroom and turn on lights when moving from room to room
   - Be careful of throw rugs, extension cords and oxygen tubing
• Be careful in unfamiliar homes, parking lots, restaurants. Often hazards including loose rocks, curbs and potholes that are unfamiliar.

2. Vitamin D and Calcium
   • Recommendations to be made based upon lab results
   • Vitamin D is very well tolerated
   • Calcium may cause some GI upset, if so we will discontinue. Luckily, most patients do not need calcium supplements

3. Prescription Medications
   • VERY EFFECTIVE to prevent fractures. We will try to tailor to your other medical conditions and personal preferences

• BISPHOSPHONATES ORAL (FOSAMAX, ACTONEL, BONIVA)
  a. Work by decreasing osteoclasts (bone cells that break down or “chew up” bone)
  b. Cannot use in patients with chronic kidney disease or those with severe reflux or inability to swallow pills
  c. Once a week is the typical dose on an empty stomach waiting at least 30 mins prior to eating anything
  d. Most common side effects include:
     i. Heartburn/reflux in between 1 - 4 % of people (Very low). If occurs will switch to another medication
     ii. Fever, muscle or joint pain in between 5 – 20% of people. Reduced with Tylenol. If
occurs and intolerable will switch medication.

iii. Very, very rare Osteonecrosis of the jaw. Most often in patients after dental extraction who have never been on bisphosphonates or those without dental care and occurs especially in patients with current dental issues, smokers and chemotherapy. See your dentist regularly.

• BISPHOSPHONATES IV (RECLAST, ZOLEDRONIC ACID)
  a. Work by decreasing osteoclasts (bone cells that break down or “chew up” bone)
  b. Cannot use in patients with chronic kidney disease
  c. Once a year IV is the typical dose. Takes only about 15 to 30 mins to infuse.
  d. Most common side effects include:
     i. Fever, muscle or joint pain in between 5 – 20% of people. Only lasts for a few days to up to a week. Reduced with Tylenol, especially if you take prior to the infusion. If occurs and intolerable will switch medication.
     ii. Very, very rare Osteonecrosis of the jaw. Most often in patients after dental extraction who have never been on bisphosphonates or those without dental care and occurs especially in patients with...
current dental issues, smokers and chemotherapy. See your dentist regularly.

**DENOSUMAB (PROLIA)**

a. Works by preventing osteoclast formation (osteoclasts are bone cells that break down or “chew up” bone)

b. Cannot use in patients with severe kidney disease, those with recurrent cellulitis and cannot administer during an active infection

c. It is an injection, right under the skin, once every six months at the doctor’s office

d. Most common side effects include:
   
   i. Muscle or joint pain for a few days in between 2 - 10% of patients. Reduced with Tylenol
   
   ii. Rare skin rash in less than 2.5%
   
   iii. Very low chance of dental issues but see the dentist regularly

**TERIPARATIDE (FORTEO) OR ABALOPARATIDE (TYMLOS)**

a. Work by directly stimulating osteoblasts (bone cells that form new bone)

b. Cannot use in patients with prior skeletal radiation for cancer, bone tumors or in patients with rare bone diseases like Paget’s disease
c. Once a day injection (pre-filled) pen with a tiny needle. Treatment for up to two years

d. Most common side effects include:
   i. Dizziness when standing up too quickly in 5 – 8 %. We recommend dosing right before bed to avoid this.
   ii. Rare joint pain in less than 5 %

• Treatments are used for approximately two years and then we reevaluate with a DEXA scan and talk about your other medical conditions.