

## *Orthopaedic Connection*

### **Osteoporosis Drug Treatment**

By Thomas J. Haverbush, M.D.  
Orthopaedic Surgeon

*Transforming patient information into patient understanding.*

Thank you class for returning this week for the conclusion of treatment of dreaded Osteoporosis.

I finished last week introducing you to the twins, osteoclasts and osteoblasts. Osteoclasts break down bone so it can be replaced. Osteoblasts are cells belonging to the hard working bone formation crew. Their job is to form hard concrete like bone structure.

#### **Cycle of Bone Life**

There is a change in the balance of bone formation and remodeling as we age.

- In children and young adults into their 20's more bone is built than is removed.
- It is hard to give exact ages but in our 30's and beyond the amount of bone breakdown catches up with and overtakes bone building.
- Thus begins the slow process of bone loss.
- In older adults (50's) the process increases.
- In women in the years just after menopause bone loss increases dramatically.

#### **The Cast of Players**

The Food and Drug Administration (FDA) has approved several medications to treat osteoporosis. They slow bone resorption. Remember how I said those little osteoclasts cause bone breakdown? The cast of players (drugs) that treat Osteoporosis does so by preventing osteoclast development.

#### **Key Point! Please Note.**

There is only one drug at this time that truly builds new bone. Its name is Teriparatide.

- Trade name is Forteo.
- It is a form of human parathyroid hormone.
- Only used for severe Osteoporosis.
- Use is limited to 2 years.
- After 2 years the other type of Osteoporosis medication is used.

#### **Anti-resorptive Osteoporosis Drugs**

All the other drugs to treat Osteoporosis (besides Forteo) are in a class called Anti-resorptive drugs.

This means they preserve the bone you have. They don't restore bone structure already lost. They slow bone resorption. Many are in a class called bisphosphonates. Here are the names of several.

- Fosamax
- Boniva
- Actonel
- Reclast

#### **Others include:**

- Evista
- Fortical

- Miacalcin
- Prolia

To repeat, these drugs simply maintain current bone density. There are also many new drugs which are being studied that will be available in the future. Your doctor will know what is best for you. These two articles I hope will make you aware of the names of many of the drugs and what they can do in treating Osteoporosis.

**Gratiot County Herald Archive and Office Website**

I hope what you have read has raised questions. No problem!

Please log onto [www.orthopodsurgeon.com](http://www.orthopodsurgeon.com). It has a huge amount of musculoskeletal information in the Website and the Archive of all previous GCH articles.

Check it out and be amazed what you can learn.

Good health. Good life. All the best to you. Be well.

Dr. Haverbush