

What is Equidronate?

Equidronate is composed of Tiludronic acid, a bisphosphonate which inhibits bone resorption in horses. We have used this drug for many years in its previous preparation "TILDREN". It aids in the treatment of lameness associated with arthritis in bone spavin. It works best in cases existing less than 6 months.

It can also be used in other conditions involving areas of abnormal bone remodelling.

Bone regulation:

In a normal horse bone is constantly being remodelled. This allows the skeletal structure to adapt to the mechanical stresses to which we subject them to. There are two types of cells constantly working together to create "new" bone tissue.

1. **Osteoclasts:** "bone nibblers". These cause bone lysis, which involves the digestion of bone at microscopic level. These cells become activated if "new" spaces need to be created so that an adjustment of bone density can occur in response to mechanical stresses on the joints.
2. **Osteoblasts:** "bone synthesisers". These synthesise collagen the basic material used in bone formation. They trigger collagen mineralization and create denser bone. However they work much more slowly than osteoclasts.

When bone undergoes excessive stresses, e.g. in a competition horse, bone remodelling goes into overdrive. This generally leads to either lytic areas where the bone is less dense and washed out or sclerotic areas which are denser and less flexible.

How Equidronate works:

Equidronate works by regulating bone tissue remodelling in cases where there is too much bone resorption. It helps to activate the osteoblasts and reduce the work of the osteoclasts (bone nibblers). It has anti-inflammatory effects on arthritis, by inhibiting the secretion of cartilage resorbing enzymes.

Diagnosis:

A full lameness work up will be carried out and the area of lameness identified. X-rays will also be taken prior to administration of Equidronate.

Equidronate administration:

1. Your horse will be sedated so that s/he stands still whilst being dripped!
2. A catheter will be placed in the vein after being aseptically prepared.
3. The preparation will be mixed according to the weight of your horse into 1 litre of saline.
4. This will be slowly dripped into your horse over about 45 mins.
5. The catheter and drip will then be removed.
6. Your horse may be given an anti-spasmodic drug to help prevent transient colic.
7. Your horse will slowly wake up and must be monitored for any adverse signs over the next two hours without feed.

Possible side effects:

- Sweating, slight muscle tremors and transient colic 1-2 hours post administration.
- A localised reaction over the vein where the catheter was placed
- Excitation, excess salivation and tiredness are also possible temporary reactions.
- Make sure the horse can lie down without restriction.