



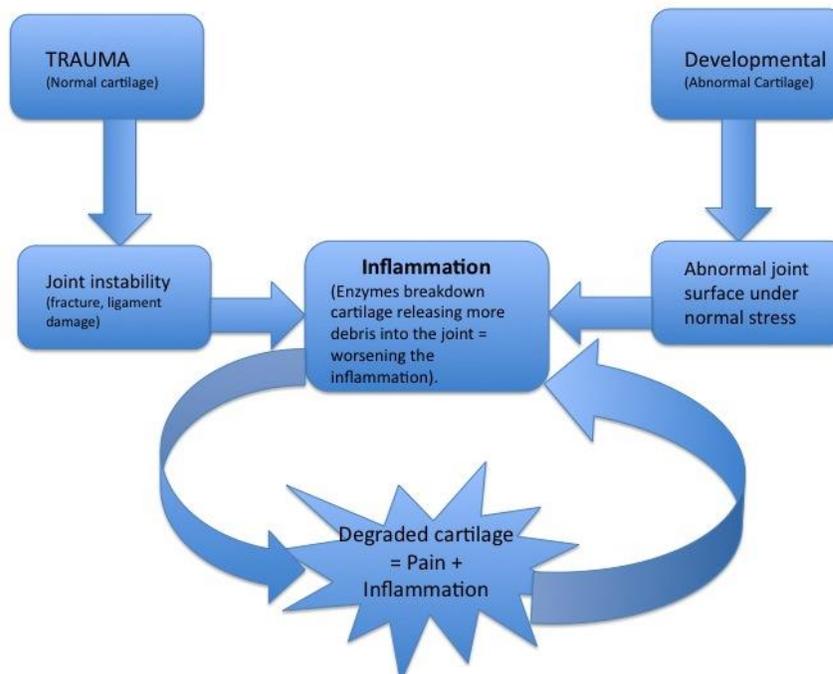
Preventing Arthritis



What is Arthritis?

Many horses suffer from secondary or degenerative arthritis. The causes are related to trauma or developmental conditions that when placed under the stress of work, set up an inflammatory cycle. The enzymes and cell signals involved in this inflammatory cycle degrade the cartilage of the joint resulting in (1) further inflammation (2) pain. Ultimately, if not treated the cartilage will be destroyed resulting in a non-functional joint.

- Regardless of whether the original problem is traumatic or developmental (i.e. osteochondrosis) the resultant debris (“joint floaties”) and inflammation is what sets up the damaging cycle inside the joint.
- While joint injections will temporarily quiet the inflammation, the joint floaters (or debris) remain in the joint to perpetuate the cycle of inflammation and cartilage degradation.
- To stop the cycle we must remove the debris and stabilize the joint. This is done with arthroscopic surgery where the abnormal cartilage and bone can be removed (or fracture stabilized) and the joint flushed.
- Once the damage of arthritis has begun in the joint it cannot be undone and so for developmental causes (osteochondrosis, angular limb deformities), early intervention is KEY!





Preventing Arthritis



Long Term Maintenance:

- Joint Injections
 - o Steroid and hyaluronic acid are injected (aseptically) into the affected joint in order to quiet the inflammation and replace the natural joint lubricant of healthy joint fluid.
 - o Expected duration of effect is 3-6 months depending on the severity of the disease inside the joint.
- Biologics (Stem cells, PRP)
 - o Over the last decade the use of “biologics” for helping maintain joint health have become more main stream. Blood or bone marrow are harvested from the horse and processed to produce either Platelet rich plasma (PRP is derived from blood) or stem cells (from bone marrow or other source) which can then be injected into the affected joint or ligament to enhance healing.
- Oral supplements:
 - o There are so many “oral joint supplements” available on the shelves of tack stores that choosing the right one can be baffling.
 - o Discuss options with your veterinarian so you choose a good quality, bio-available supplement.

References:

Bramlage, AAEP Milne 2009, Part 1 Fetlock

Keep learning about joint health.
Take a tour through a healthy and arthritic joint with
Equine Guelph’s healthcare tool:
[Journey through the Joints](#), kindly sponsored by Zoetis.

