

Will those joints last the test of time?

The better the conformation of the horse and the better the fitness level the lower the risk to joints. Poor conformation will create compensations throughout the body. Knowing this the rider must be balanced as well so you do not create differences to the horses' body posture while it compensates for carrying you. When purchasing ex race horses it is interesting to note if the horse was raced and trained in the country or city race courses as the camber of the track will have varied the amount of compensation the horse's body has gone through in order to adjust to track surface camber.

Most wear and tear is from repetitive impact and compression to joint capsules. This article will discuss the things you as a rider /owner can consider to give your horses joints a fighting chance.

The other three major types of joints:

1. Synovial (moveable joints), carpus, fetlocks, stifles and hocks.
2. Cartilaginous joints, have limited movement eg. The vertebral (spinal) column.
3. Fibrous or (fixed joints) like the skull, and pelvic all post epithelial closer.

We tend to think Carpus, Fetlock, hocks, when we think at joint mobility and joint longevity of the synovial joints. Synovial joints contain cartilage which covers the ends of the bones within the joint and synovial fluid which feed the cartilage and supply lubrication to the cartilage. This cushion allows absorption of concussive forces. If the synovial fluid is affected through injury, the feeding and repair process to the cartilage is drastically affected a result being joint wear, and trauma.

What will adversely affect synovial joints?

Generally there will be some wear and tear to all joints of the body through the aging process and general movement.

Hard, rocky ground, long kilometres and speed work over hard terrain and rough surfaces will affect the synovial joint. Conditioning of the body to work up to speed and harder going will improve longevity.

Commencement of training on joints which are too young to support weight, you should check epithelial joint closures (logged by age of horse) to see when different joints close, as extensive strain can be caused if ridden to hard to young.

Damage to surrounding tissue and ligaments will affect the synovial joint, so will poor diet and nutrition.

Correct warm up regime will give those joints a fighting chance, stiffness from being stabled overnight, travelling in a float or truck and old age all play a part in affecting the equine joint/s if not warmer correctly. Regular massage to limbs and mobility exercises,

plus correct warm up exercise such as walking for 10 minutes and then gradual increase in activity (and don't forget to also cool the horse down the same way).

As stated above good conformation will go a long way to preventing wear and uneven loading to equine joints, as will poor farrier techniques or infrequent hoof care.

Protection from injury through bandaging, protective wraps and supportive bandages will all add to the longevity of joint provided the protective wear is applied correctly.

So in a nut shell look after your horses' joints, and hooves and this in turn will lengthen performance life. Protect joints from damage with correct warm up, good nutrition, and protective wear.

Drugs and herbs?

Personally I have used both on my equine friends, but I prefer Pentosan for any urgent issues which are showing wearing effects such as thoroughpin, bog spavins and wind galls around joints, Pentosan is available post veterinary assessment, but is a wonder drug to assist with laying down cartilage. I like to use Cosequin as well and have found both excellent in treating traumatised joints.

Traumatised joints are often painful, your vet may prescribe "bute" which is effective short term but long-term can have its own set of side effects. The "pain relief" herbs I have used rather than long term "Bute" for arthritic joints are white willow (there are some contraindications, such as stomach ulcers, so look these herbs up before you talk with a herbalist), and /or devil's claw (both should be prescribed by a qualified herbalist). Guaiacum is another herb worth mentioning in the joint rejuvenation area.

The best medicine is and always will be prevention, alas sometime we have inherited issues we need to cure. And therefore we have the option to take the medical / herbal approach.

Prevention better than cure.

Keeping in mind how a horse performs, checking for evenness of shoe wear, and the level of training and increasing training after good warm up, and terrain check
Next issue we will discuss and have pictures on some range of motion exercises will keep joints free and prepared for workload.

All disciplines on equine training have common factors which need to be considered when you look at equine joints, and fitness training. We aim to:

1. Increasing the horse's exercise capacity
2. Increasing the time to the onset of fatigue
3. Improving overall performance by increasing skill, strength, speed, endurance as relevant
4. Decreasing the risk of injury

This dissection shows the glistening synovial fluid over the cartilage of a healthy synovial joint

