

Newsletter

- **Leave arrangements**
- **Botryomycosis in a mare**
- **Penis amputation in a gelding**
- **Oral Joint Supplements, Frank's perspective**

This month we are sending out our accounts and newsletters a few days early because Chaylee and I are off for a couple of weeks holiday. We will be back at work by Monday, March 13. Skye will be taking calls and messages and Frank and Tiana will be attending to the clinical work. For me this will be the first leave I have taken other than for attending conferences and meetings since starting back in Warwick in August 2012. As said in our last newsletter we are going to do a trip to the far west to show some of our country and its animals to some visitors from the UK.

Once again we have had an interesting and busy month. A lot of my time was spent on lameness and surgery but we also managed to find time to AI a few mares to frozen semen. Frank remains busy dealing with all the problems that spring up in the Warwick and district horse population.

As well as working for WEV my other main job is that of Chief Examiner of the Australian and New Zealand College of Veterinary Scientists. In this capacity I spent 4 days in Brisbane early in February. This involved holding meetings and overseeing a training workshop for this year's examiners. The ANZCVS is the peak body which administers training and examines veterinarians in all disciplines at post graduate level. The ANZCVS holds exams at membership level, which is for general practitioners to demonstrate more in depth knowledge in a special area, and at specialist level. Once a vet has passed an appropriate training program and the fellowship exam they are recognised as a specialist in their discipline. As many of you will know, this work takes up about 1-2 days per week of my time year round, so it is great to have Frank around to take some of the clinical load off my shoulders from time to time.

Botryomycosis in a mare

We had an interesting case during this month. A 17 yo stock horse mare was presented. She had a firm swelling which had intermittently discharged a small amount of pus from a firm

mass over the elbow joint. This had been going on for many years, and other vets had previously biopsied and treated it with various medications. The initial suspicion had been a small foreign body, perhaps a thorn or some wood.



The initial appearance after clipping for surgery. The tissue was very firm and discharged some pus from time to time. It did not cause lameness and did not appear to involve the elbow joint itself.

We decided to cut the whole mass out. We did this under a short general anaesthetic at Lona, and submitted the tissue to a lab. The laboratory came back with a diagnosis of botryomycosis.



Botryomycosis is in my experience most commonly seen in the scrotal area following infected castration wounds. What happens is the body attempts to isolate and control the infection but never quite gets on top of it. Moderate to severe scarring develops with little pockets of pus, which often contain staphylococcus organisms. The usual treatment is excision of the pyogranulomatous mass and a long course of antibiotics.

My thought is this case likely did start with a small foreign body, which had long disappeared but we were left with this chronic smouldering infection and excessive scar tissue. So far this mare is going very well but it there remains a risk the mass will recur.

Penile squamous cell carcinoma and amputation

Another interesting case was a poor gelding which had developed cancer and secondary infection of the glans of his penis. The glans is

the very tip of the penis and problems of this area can be quite common in horses with light pigmentation.



The pre-surgery appearance. A smelly, infected tip of the penis with local areas of cancer.



There are various treatment options. These include chemotherapies, local excision often followed by topical or injectable chemotherapies and amputation of part of the penis. Another alternative is to remove the entire penis and create a new hole for the gelding to urinate through under his tail. This more extensive surgery tends to have the best success rate in more severe cases as it allows the removal of all the effected tissue completely as well as the regional draining lymph nodes.



The initial incisions are made very carefully to ensure there will be a patent urethra to allow urination.



The remainder of the penis with the distal diseased part resected

In this case we felt that amputation of part of his penis should give a good chance of success, at least in the medium term. This was done under general anaesthetic at the Gold Coast and the surgery was quite successful. Unfortunately for this gelding he developed severe colic secondary to gut infection a few weeks after surgery and died, which was very sad as the initial problem was well under control.

Tias

What are oral joint supplements and what do they do?

We train our horses to increase their strength, speed, balance and response to rider. No matter which discipline you are in, your horse needs to be appropriately fit and ready for its purpose. To do this well takes months of repetitive training, whether it is collection and impulsion needed for jumping, engaging the hind limbs to spin around a barrel or finishing off the last 2 furlongs of a race. Horses need to be trained to perform these actions well and this requirement incurs strain on the joints. The result of training is that the horse improves his or her ability, but it can be at detriment to components of joints (this article will focus primarily on joints). There are three main regions that are important to joint function; the joint lining (synovium), cartilage and the subchondral bone supporting the cartilage. When one or all of these structures is damaged, there is a cascade of responses, which lead to inflammation or osteoarthritis (OA).

The subject of equine OA is a massive veterinary research area. The most significant cause of loss of use is due to lameness, of which, OA plays a majority role. So what are some of the treatment options for horse owners? Today we will focus on a few of the oral products and in the coming weeks we can delve further into injectable medication.

The most common veterinary medication used would be the class of drugs known as nonsteroidal anti-inflammatory drugs (NSAID). Examples of this include aspirin, bute and metacam®. One of the most commonly used medication for inflammation in horses is phenylbutazone, aka bute. Bute is a very effective anti-inflammatory and it is a cost effective treatment for mild cases of OA. Side effects of bute use in horses are well reported. Fortunately, these side effects occur rarely when used at appropriate levels. Metacam®, is another NSAID which is widely used. It is reported to have less side effects, however it is significantly more expensive than bute. Neither bute or metacam®, can change the progression of OA, but they help alleviate some of the clinical signs associated with OA.

Now on to the tricky area of oral joint supplements. There are so many different supplements on the market, I will discuss the most commonly used oral supplements for joint support in horses.

Glucosamine is a molecule found in many parts of the body. It is also found in the joints and cartilage of horses. With this in mind, the thought is that, if you give oral glucosamine to a horse it might protect its joints from OA. Although research supporting this fact on equine cartilage is reported, the levels of glucosamine needed to provide this protection probably does not occur when oral supplements are given. This is because oral absorption tests have shown that only 2-5% of glucosamine is absorbed when given orally. Therefore, at current recommended doses for glucosamine (20mg/KG), there is questionable evidence that oral glucosamine has a significant beneficial effect to protect equine joints.

Chondroitin is a supplement that is commonly combined with glucosamine. There is reported synergistic effects with glucosamine in different animal species (ie. rats and guinea pigs). However in horses, there is little science to base any significant weight behind the use of chondroitin. There is evidence that chondroitin is absorbed orally in horses, but there is little research to confirm that chondroitin has an effect on reducing the development of OA.

Recently a research group in the UK used a 95% pure glucosamine/

chondroitin supplement on 25 aged horses (average 20 years plus). It was a double blind study where owners and researchers were kept blinded to which horses had glucosamine/chondroitin and those that had a placebo. Using kinematics (gait analysis with cameras), they found that after 8 weeks there was an increase in the stride length and range of joint motion from oral use of the high quality glucosamine/chondroitin. Despite the lack of scientific agreement to prove or disprove the use of glucosamine/chondroitin in horses, it is still widely used by owners worldwide.



4cyte® is a relatively new joint supplement containing 4 main ingredients; Epiitalis® (plant extract), Abalone, New Zealand Green-Lipped mussel and Marine cartilage. Research into 4cyte® on horses was performed by injecting a joint with an inflammatory agent (interleukin). The horses were given either 4cyte® or a placebo and researchers then compared the level of inflammation between the groups. They found that there was a significant measurable anti-inflammatory effect in joints of horses fed 4cyte® compared to a placebo. Further research done in Canada also found that the 4cyte® combination was able to reduce degradation of experimental cartilage explants and had no deleterious effects on the cartilage itself.

Interestingly, the company making 4cyte® have produced an oral gel containing Epiitalis® on its own (Epiitalis Forte®). It has the anti-inflammatory effect on joints, but is less costly, being without all of the 4cyte ingredients®. Although this product has been out only a few months the results and feedback have been very encouraging.



So what are my current thoughts in oral joint medications? Until there are large scale clinical trials (like those in humans), there is not enough scientific research to conclude that oral joint supplements will actually change the progression of OA in horses. Although there is evidence that the above oral supplements can reduce the symptoms of joint inflammation. There is significant debate as to the cost benefit of these products compared to NSAID's such as bute. However, if your horse is competing in medication controlled competitions or has a history of problems using NSAID's, then there is good reasoning for the use of these types of oral joint supplements. Next month, we will discuss some of the benefits of injectable medications such as Pentosan.

All the best to you and your horses.

Frank



Warwick Equine Veterinarians

STAFF

Tias Muurlink BVSc (Hons) FANZCVS Registered Specialist in Equine Surgery
Frank Low BSc (Hons) BVSc(Hons) MANZCVS Veterinary Surgeon
Chaylee Joe Kong Vet Nurse Cert IV
Skye Ripphausen Vet Nurse Cert III
Tiana Bowyer Vet Nurse
Rita Gangemi Administration

Our goal is to provide excellence in clinical service to all our equine patients.

A professional, compassionate and caring approach with good communication, and up to date services.

Excellence in Equine Veterinary Care

OUR CONTACT DETAILS

Business office and postal address: 185 Bracker Road, Warwick, Q 4370

Email address: office@warwickequinevets.com.au

Website: warwickequinevets.com.au

Facebook: Warwick Equine Vets

Tias Mobile: 0438 791 804

Frank Mobile: 0487 791 885

Office and Chaylee (BH): 0400 977 564

