

WARWICK EQUINE VETERINARIANS

185 BRACKER ROAD

WARWICK.

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Newsletter

- **Holidays**
- **Building update**
- **Peritonitis due to *A equuli***
- **Urolithiasis in horses**

April is now upon us and the breeding season is finished. Horse sales are continuing as are many large equestrian competitions and events. One way or another we always seem to be busy. Tias and Chaylee had a week and a half off early in March and spent some of this touring the out-back with John Walmsley and his wife Caroline. John was one of Tias' mentors during his specialist training in surgery and is one of the most highly regarded Equine surgeons in Europe if not the world. Frank has had the last 2 weeks off and has been spending it with his family in Brisbane. Tiana recently attended a Rotary Youth Camp. She did really well and has been invited back next year to be one of the leaders. We should all be back on deck from Monday April 4 and look forward to the challenges your horses will bring.



Chaylee, John and Caroline in the Flinders Ranges SA

The operating complex is about to start construction. We expect it to be finished by about mid year. Even though the building has not yet started, the planning is well underway and the big job of sourcing all the equipment needed is already happening. In the meantime we are seeing increasing numbers of cases at Lona which is great as it is easier to do good work ups and treatments more cost effectively and safely when everything is at hand.

The Hendra issue remains the biggest challenge facing equine vets in Queensland. This month the first equine vet was convicted and fined for failing to adhere to Queensland Health's guidelines. In practice these guidelines are almost impossible to adhere to fully in all circumstances. Therefore

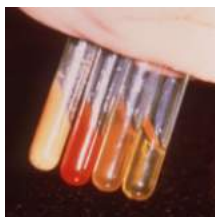
equine vets have the worry of trying their best to ensure the safety of their clients, their staff and themselves, as well as doing their best for the horses. On top of this we face the real risk of prosecution if there is a breach of the guidelines. This conundrum is already having an impact. I am aware of at least 5 equine vets who have decided to leave or not come to work in Queensland in horse practice because of the problems of dealing with these issues. If these issues are not resolved it will become very difficult to attract the best and brightest young vets into horse practice in Queensland.

A case of peritonitis in a mare

We see cases of peritonitis in horses from time to time. Peritonitis is infection of the abdominal cavity. Often these are associated with a physical cause we can identify. For example there may be a foreign body which has perforated the bowel and allowed infection into the peritoneal space. These cases can be very difficult to treat.

Less commonly we see idiopathic cases of peritonitis. Idiopathic means the cause is not easily determined. These horses are often dull and lethargic, may be not eating well, have reduced manure output, sometimes display colic signs and often have an increased temperature.

To diagnose peritonitis requires a sample of fluid from the abdominal cavity. Sometimes the diagnosis is quite clear even without submission of the fluid to a laboratory when the normal clear to slightly amber fluid becomes cloudy.



Four samples of peritoneal fluid. Normal is on the right with increased turbidity and cell count towards the left



Last week we had a mare, fortunately fully vaccinated, with lethargy, fever and low grade pain. A careful clinical examination let me to a tentative diagnosis of peritonitis. Blood taken at the time was suggestive of inflammation in a large body compartment, and its peritoneal fluid looked very like the tube second from the left (above). Laboratory testing of this fluid confirmed a nucleated cell count of $139 \times 10^9/L$. This is something like 20 to 100 times the normal levels of these cells in this fluid.

This suggests there is infection in this area. These cases are not common however we have seen several of these cases in the last year or so. The underlying cause is usually *Actinobacillus equuli*. This is a poorly understood and rare cause of peritonitis in adult horses. Why it occurs is not clear. The current thinking is that this organism, which is quite commonly present within the bowel, might catch a ride with migrating worm larvae and thereby gain access to the abdominal cavity. This would suggest that it would be seen more commonly in areas with high internal parasite problems. My experience is that this is not the case. For example the mare in this case came from an extremely well managed herd and has been regularly dewormed all her life. Perhaps there are other factors involved which we don't fully understand yet.

The treatment of these cases is to control pain, provide fluid if needed and appropriate antibiotics. Most cases of *A equuli* peritonitis respond well to antibiotics and recovery is uneventful. This mare is now a week into her treatment and is progressing very well.

Tias



At the turnoff into the desert

Urolithiasis (stone in the urinary tract) in geldings.

Urolithiasis is seen in all species. It occurs when minerals present in the urine build up around a small nidus. Over time these stones can become quite large, or in some cases the animals can pass them before they become too large. These stones can be seen in dogs and cats, cattle and also horses. Over the last few years we have seen several of these cases in our practice.

Often the presenting signs are dribbling urine, frequent urination or sometime blood being passed along with urine. If the stones become large blockage can occur and this can result in severe pain which resembles many of the other causes of colic.

Frank was on duty one day and a local vet rang to ask for some help with a gelding which was straining to urinate. When the referring vet performed a rectal exam he could feel the bladder was very large and painful, about the size of a watermelon. This is a classic presentation where a urolith develops and passes down into the urethra and blocks it. If left untreated the urine will keep building up causing severe pain and eventually bladder rupture and death.

This horse had previously had a urolith removed from his bladder and he must have formed another which is not that uncommon. When Frank scoped his urethra he was able to see a stone lodged reasonably close to the end. This is a less common area for the stones to lodge.

Fortunately this allowed access to the stone and it was able to be removed using long forceps with the animal standing under sedation and local anaesthetic. The stone was firmly adhered in place so it needed to be broken down slightly to enable it to be pulled through. Once the stone was removed he was able pee freely again.



Endoscopic view of the stone firmly lodged in the urethra being probed by a biopsy forceps

As this was a recurrence, Frank recommended extra efforts to help prevent new stones forming again. He recommended to reduce his total protein and calcium intake and also decided to try him on ascorbic acid (Vitamin C) to try and acidify his urine to make it less easy for new stones to form in his urinary tract.



This is the stone from the above image once removed and cleaned up. It is an example of the rough surfaced stones commonly seen in horses.

Another case we had a little while ago was another gelding with a different presentation. He had been suffering from dribbling and some pain on urination. He did not have the large bladder because he was able to pass urine around the stone. The referring vets in this case could palpate and ultrasound a stone further up where the urethra wraps around the pelvis. This is a much more common place for these stones to lodge in geldings.



This is an image taken through the endoscope showing a larger, smooth surfaced stone lodged much further up the urethra.

As you can see when we scoped this gelding the stone is larger and smoother than the one seen in the previous case. This meant that there was no chance to pull the stone out through the urethra so we chose to do a standing perineal surgery under epidural anaesthesia. These too have good outcomes and it is much less invasive than having to remove them from the bladder.



Cutting down onto the stone from an incision under the tail, known as a perineal urethrotomy. As in this case these can often be done standing using sedation and an epidural anaesthetic. This avoids the costs and risks of general anaesthetic but is not suitable for cases where the stone is in the bladder.



This is the stone removed from the above horse. These stones are often quite hard and cannot be broken down easily in contrast to the rough surfaced stone in the previous case.

Again trying to prevent recurrence is important as the most significant problem after these surgeries is having a new blockage from a newly developed stone.

If the stones are larger and cannot be removed like the previous two cases there are other choices. Laparoscopic surgery can be an option, but is difficult to do in horses because many stones by the time they are detected are large and adhered to the bladder wall.



Performing standing laparoscopic surgery, in this case at the University of Melbourne. These too can be sometimes be done standing but is much more technically demanding, and expensive.

Laparotomy under general anaesthetic is often the method of choice but is a big surgery. Currently Tias takes these cases to one of the hospitals where he does surgery but with the completion of the new surgery in Warwick we will be able to do both laparoscopic and open surgical management of these cases "in house".



The team at GCEC assisting Tias performing open laparotomy with the horse on its back under general anaesthetic. This remains the method we have to use for many of the more difficult urolithiasis cases where the stone is in the bladder and can't be broken down and removed by other means. Even though these are big undertakings in horses the outcomes can still be very good.

Warwick Equine Veterinarians

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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

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