

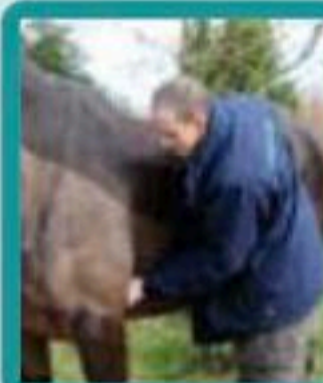
Pulling teeth

Vet Mark Tabachnik performs some challenging dental work to remove a fractured, rotten tooth



THE PATIENT

Vinnie is an eight-year-old, 16.2hh part-Thoroughbred, owned by Natalie Bampton from Stockport. The pair compete in all disciplines at local level.



THE VET

Mark Tabachnik is a partner at Wright & Morten Veterinary Surgeons. He is also a qualified equine dental technician.

Suspecting he was suffering from a dental problem, Natalie Bampton asked me to have a look at her horse, Vinnie.

He had been finding it hard to keep a good contact when ridden, and his head carriage had changed for the worse.

His teeth had been attended to regularly, though, so Natalie was sure the issue wasn't as simple as a few sharp enamel points. In fact, she suspected he'd broken a tooth.

I sedated Vinnie to lower his head and allow a thorough examination of his mouth.

This task required a bright light from a head torch, and a full mouth speculum – or gag – which is designed to keep a horse's mouth open while I peer inside.

A head stand was useful, too. This is a device which you rest the patient's chin on, which keeps his head at a height that's good for the dentist or vet to work with, and comfortable for the horse.

As soon as I looked into Vinnie's mouth, I could see that Natalie was correct – one of his teeth was indeed fractured.

The problem tooth was the fourth molar back, on the upper right-hand side.

There was no tooth at all above the gum line, but fracture fragments were poking through.

On further examination, I deduced that the tooth was rotten. This is unusual for such a young horse, but the infection had worked its way right



Vinnie is now fully recovered and back in work

“Five years ago we were removing teeth by opening the sinus and hitting them out with a mallet and chisel”

up the centre of the tooth and caused it to weaken to the point it had sheared off.

Assessing the options

When faced with such a rotten tooth, there's little choice but to extract. This prevents the infection from moving up the roots and then setting up in

the sinus (an air-filled cavity in the face), causing a troublesome nasal discharge.

However, extraction is easier said than done. Removing equine teeth is technically difficult – the teeth are long, embedded in the skull bone and rooted into the sinus.

In fairness, the procedure has come a long way. Up until five years ago, we were routinely performing general anaesthesia, and removing teeth by opening the sinus and then hitting them out with a mallet and chisel. We call this technique 'repulsion'.

Thankfully, times have moved on, and these days many teeth are amenable for extraction with the horse sedated and on a continuous sedative drip.

The tooth in question can then be wiggled and wobbled until it is loose enough to extract. The advantage is there is no need for a general anaesthetic and post-operative complications are much reduced, so it's better for the patient.

However, the technique only really works for teeth with intact crowns, where there is something to attach our extractors to.

Unfortunately this wasn't an option for Vinnie, as there was literally no tooth for me to get my hands on. For this extraction I needed to try a different approach.



Vinnie was allowed home the day after the extraction but needed regular visits from the vet

A tricky extraction

A new technique has been devised called the 'minimally invasive transbuccal extraction'.

This involves drilling a hole into the fractured tooth and screwing a pin into its centre. The tooth can then be pulled out using pressure on the pin.

I decided this was the way forward for Vinnie, who was booked in for a visit to our practice.

After sedating him, we drilled a long hole deep into Vinnie's tooth, before securing a screw.

However, I realised it was not going to work as every time we put the screw in, it pulled back out

with a minimum of pressure. It just couldn't get a proper grip.

It occurred to me that the inside of the tooth was so rotten there wasn't any hard tissue for the pin to screw into.

I was fairly sure we'd managed to loosen Vinnie's tooth nicely, but it was time for plan B. This involved coming at the tooth from a different angle.

I drilled a small hole into the sinus, right above the tooth. Once this was done, I could then position a thin metal pin on top of the root.



Vet Mark had to drill into the sinus



Vinnie's tooth was rotten

Tooth facts

- Horses have as many as 44 adult teeth. We describe them by dividing the head into four quadrants – upper right (quadrant 1), upper left (2), lower left (3) and lower right (4).
- There are three incisors in each quadrant, which are designed for shearing grass.
- Then comes a canine, or tush. This is used as a fighting tooth in stallions, but is sometimes present in mares too.
- Following this, the wolf teeth sit roughly in line with where the bit goes. They are often absent, having been previously removed.
- Then the horse has a row of six cheek teeth. Each cheek tooth sits tightly alongside its neighbour – giving the impression of one long tooth instead of six individuals.



Adult horses have up to 44 teeth

Then, as I gently tapped the pin, it pushed the loosened tooth down and out into Vinnie's mouth. Both the horse and I both breathed a sigh of relief.

Healing process

Poor old Vinnie now had two holes in his head – one where I had drilled into his sinus, and another where I had needed to push through the sinus onto the tooth.

I wasn't worried though, as horses heal quickly. But it was important to prevent any food getting through the small hole from the tooth socket into his mouth. If this happened, it could cause a sinus infection.

I placed a plastic plug into the socket, which acted as a barrier to any food getting through.

Vinnie was delighted to go home the next day and his sinus hole soon healed up.

However the hole in his mouth took a lot longer, and Vinnie had to put up with me paying him regular visits to check his progress and replace the plug.

Eventually he got there, and I was delighted to be able to remove the plug for the final time and see the tooth socket so well healed.

I'm pleased to report that Vinnie is back in work. I know he's hoping I don't darken his door again any time soon!