Equine Dentistry
An interview with Dr. Jack Easley about his views on equine dentistry in the past, present and future.

How did you start your career as a veterinarian and what factors lead you to become interested in specializing in dentistry?

I was first exposed to equine dentistry even before veterinary school (1972-76) while working with veterinarians at the race track in the Lexington area. During veterinary school we had some exposure to dentistry but it was not a major part of what they taught us, just some basic principles of routine floating. After a one year internship at Oklahoma State University, I entered a surgery residency program at Kansas State University. That is where I got most of my formal exposure but that was mainly from a surgical prospective. At KSU, I was exposed to more advanced dentistry cases that needed surgical intervention such as molar extraction and sinus surgeries.

What really sparked my interest in equine dentistry was the severe cases I saw early in my career, where the lack of proper dental care ended a horse’s career or even their life. I remember a horse with severe oral bleeding, similar in volume to a guttural pouch mycosis case, where two huge caudal hooks lacerated the palatine arteries and the stallion died from the resulting bleeding. Although the teeth of that horse had been floated, the large caudal hooks had not been properly addressed. I realized the problem could have easily been prevented with proper dental care. Probably at that stage, I realized we had to rethink dental care in horses. I started to look into ways to perform routine and preventative dental care for horses – which eventually got me into dentistry.

How did you learn about dentistry? At that time, was there anyone you could consult for advice?

As my mentor at KSU, Dr. Gene Schneider prompted a lot of discussion and taught care of the horses that presented with surgical oral problems. There were some very good resources at other universities, such as Dr. Baker at the University of Illinois, Dr. Pascoe in California and Dr. Orsini in Pennsylvania. There were also a few older practitioners in Kentucky who knew a lot about dentistry. They had speculums and hand floats, but the instruments were decades old, and what they were able to do was very limited with the lack of good instruments and sedation.

What was routinely done with a horse’s teeth at the time you became interested in equine dentistry? Did you notice that certain breeds or age groups of horses were treated differently?

Back in the 60s-70s most of the routine dentistry work at the race track was done on young race horses. The work usually consisted of routine floating with hand tools, often without a speculum and because of the lack of Xylazine, without sedation. The work also included removal of wolf teeth and caps and some shaping of incisor teeth. Typically, the way young veterinarians got started in practice was that they floated a lot of teeth, because that was what the older practitioners let them do. Older horses with dental problems were typically neglected and veterinarians often saw those horses only if they couldn’t eat any more. Show horse people understood that taking off sharp points made the horses ride better, but the poor equipment and the lack of a good oral exam without sedation limited a successful outcome. It was not until the mid 1980’s that I routinely treated caudal hooks in horses, not because they didn’t exist before, but because it was so difficult to diagnose.

What instruments were available for routine treatments? For advanced treatments?

We had some instruments, speculums and hand floats but they dated back to the Second World War. A lot of these instruments came from Europe and the UK. We also used molar chisels and molar cutters to take off elongations or the caudal hooks on cheek teeth. The use of these chisels and cutters are now considered too dangerous to use on the horse. The hand floats only had steel blades like a hoof rasp and were not very efficient. In the 80’s, companies started offering carbide chip disks and later solid carbide blades. Those floats were much more efficient and changed everything about floating teeth.

There were some motorized tools, but they were not very efficient or safe. They often created a lot of heat or caused soft tissue damage, and sometimes even shocked the user. They were not very reliable either and didn’t gain much popularity early on.

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Sedation made the use of speculums and power instruments much safer.

I was made aware of Dr. Becker the famous equine dentist from Germany. He wrote a chapter in a veterinary anatomy book and there were some pictures of his advanced equine dentistry instruments from the 1930’s. I had never seen anyone using such instruments and they were not available in the US. I met a dentist from Slovenia, Luca Krusick, who brought a Swissfloat to the US in the 80’s, but nobody else used it and it was not available in the US until 2000.

It was really the introduction of the alpha 2 agonists (Xylazine and similar drugs) that made it possible to perform dentistry procedures on the standing horse. Before that, horses that needed work because of a severe problem were often put under general anesthesia, because it was too dangerous to treat them standing.

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a thorough examination and were able to view and recognize dental problems better. As more and more veterinarians started doing dentistry, more companies developed or imported better products. Initially, they were not very efficient but gradually over a period of 25 years, they became better and improved to the standard we have today.

In the 1970’s, how was the concept of equine dentistry received by owners and trainers? Most people were receptive to have dentistry done but it usually required a severe case to prompt work and thus impress clients of its value. Many horse owners/trainers were not aware of the importance of dentistry but they eventually came to appreciate the value of preventative dental care. Even if they wanted to have a horse’s teeth floated, they often didn’t know who would provide the care. The problem was veterinarians did not promote dentistry very well. It is interesting to notice that lay persons who floated teeth did a much better job promoting themselves. The veterinarians didn’t seem to like doing dentistry and felt it didn’t provide much income. We charged around $15.00 to float a horse, which at the time, likely was overpayment for the poor job we did. You made more money with tube worming a horse, so dentistry was not promoted by veterinarians. For lay people who did nothing but dentals, it was much different.

How did we get into the situation of having lay persons performing dentistry, and what do you think about the issue?

The issue with non-veterinarians floating teeth was a spin-off from what happened at the race track. Quite often, helpers from the race track assisted young veterinarians and floated teeth. Soon, those assistants figured that they could do it themselves and pick up a few extra dollars. They bought a set of hand floats and gradually started their own business. Quite often, they had a strong background in tincture occurs—but not from lay persons, since they don’t have a license to work. These lay “tooth floaters” have a limited background in general medicine and as a rule, I feel they cannot do a good job. There are exceptions of course and those seem to represent the rest of the lay people. They are often better in selling their services than doing a good job for the horse. They think of teeth as a piece of rock in a horse’s mouth, have a concept of how the shape of a tooth should look and proceed to file it into that best. We know that a large percentage of big horse barns prefer the services of lay tooth floaters whereas, smaller barns use their veterinarian with whom they have a true client — veterinarian relationship. I think that equine veterinarians need to work advertising equine dentistry as part of their overall services. If they promote the advantages of good and professional horse care to the owner or trainer, they will have a successful dentistry business as well as improve equine care overall.

In your opinion what factors were responsible for the fact that veterinarians did little of the dental work in the past? What made veterinarians more aware of the importance of equine dentistry today?

It is a combination of several things: more awareness and demand on one side, and better equipment, and medication on the other. Results from research helped the understanding in what we are doing in dentistry and why. Today, with good drugs for adequate and safe sedation, great equipment and increased demand from horse owners, we have more veterinarians involved in dentistry. Dentistry is now more emphasized in veterinary school. There are more avenues for training and many organizations such as the AAEP are doing an excellent job in promoting equine dentistry. It also has become evident that revenue can be created with equine dentistry.

Do you believe that a veterinarian should learn the proper use of manual instruments before going into motorized dentistry? Not necessarily, but I think they have to understand the fundamentals of what they are trying to do. You have to understand what you are trying to accomplish and how to get there. You can achieve the same results with hand tools or power tools. I believe that the learning curve for hard tools is longer than with power tools. If I had little time to teach somebody, I would rather do it with power tools. Actually, I think that some people quit doing dentistry because they became frustrated before they learned how to float properly with hand tools. This seems to be less of a problem with power instruments.
What are the advantages and disadvantages of hand instruments versus motorized instruments?

Hand tools need more manual dexterity skills than power tools. There are only a few lesions you cannot address with hand tools, one being advanced treatments on interdental spaces. There are great sets of hand tools available and in those sets you will find the right instrument required to reach a certain area. There is not just one universal instrument and this is true for hand tools as well as for power tools.

With power instruments, the work is less strenuous. Of course, you can very easily overdo it and cause significant damage to the horse. Unfortunately, this happened a lot when power instruments first became available. You need the right instruments, and you need to know how to use them.

Are you happy with the way equine dentistry has evolved over the last 25 years?

From the instrument side I am very happy, as it has been a gradual improvement and we have a much better quality and variety of equipment today. As far as dental care is concerned, it has been a positive development. Treatment techniques that have been developed and the quality of care now provided for horses, is better than ever.

Despite these improvements, we need to continuously educate veterinarians in providing excellent care for horses.

With the changes we’ve seen in equine dentistry over the last 25 years, do you think that horses today show less dental pathology and that the increased attention to dental work has been beneficial for horses?

Young horses in training have similar lesions today than they had in the past. The big difference I notice is that I don’t see as many severe abnormal wear problems. I still work on the same group of middle aged horses, and there I do not see many severe cases. I do see many more geriatric horses. They have become a bigger part of our patient population. There are many reasons—dental being one. The overall care of horses has improved. There is better nutrition for older horses and better preventative medicine through deworming or control of metabolic disease and management of chronic musculoskeletal disease. Many geriatric horses have a second or third career and these aged equine have become entities needing dental care. This group presents a varied health care demand from younger, more athletic horses.

If I compare the condition of teeth in older horses today, I see that their teeth are usually in better shape. This does depend a lot on the care they have received. If somebody continued to grind 1/2 inch of a horse's tooth every year, then nothing is left and they are in bad shape. With proper care, they are in better shape.

What do you think equine dentistry will look like 25 years from now?

I would hope that dental work will be in the hands of well trained veterinarians or licensed dental technicians. Dentistry work might be seasonal and in order to better respond to an owner's or trainer's request, we may need to use the help of dental technicians. These technicians have to be certified licensed veterinary technicians who receive formal equine dental training and work under the direct supervision of a veterinarian. Ideally, as a veterinarian you would go to a stable and have a technician work with you. We have a similar situation today in companion animal medicine, where technicians perform routine dental work in small animal clinics.

Presently, we have a movement where some states allow certified dental technicians to work on their own if the regular veterinarian who has the client – veterinarian relationship provides the drugs for the procedure. I don’t think this arrangement is a good idea as I don’t want to be responsible for the work of dental technicians unless I am directly supervising them. Lay people need somebody to provide the controlled drugs and want someone to take responsibility for their work, but they don’t want to be supervised. In the future, we need somewhat different people do the dental work – those who are willing to work under the supervision of a veterinarian. Lay persons performing dentistry today do not want such management. I was hoping 15 yrs ago, as we started to train more and more veterinarians that they would perform dentistry with their technicians, but that didn’t happen. The lay people started doing dentistry on their own. But things usually go in cycles. Today we have a political cycle of deregulation. I hope in fifteen years we will have a cycle where dentistry is regulated in a way that the work is done by a team of veterinary professionals and licensed veterinary technicians. This will require they show they have been trained and have passed an exam that proves their skills in equine dentistry. The special training however, is the responsibility of the veterinarian. There is only so much time available during veterinary school and they cannot make a specialist out of everybody in every field. This future regulation will not come from the veterinary profession but from the horse community because of problems encountered with people performing equine dentistry who market themselves as dentists despite not having formal training. Currently, horses are treated by anybody who proclaims to be an “equine dentist”.

Do you have any recommendations for someone interested in becoming an equine dentistry specialist today?

What I recommend is first, one should try to become a good veterinarian and spend a few years developing good veterinary skills. Then, if dentistry is their interest, they should become specialized by reading, joining list groups online, spending time with colleagues and attending educational meetings, seminars, and wet labs.

The other thing to learn is to work well with colleagues. In the past, many large animal veterinarians were very territorial. This is something we have to let go of. In those areas where enough veterinarians are present, we need a variety of different specialists. We should not be afraid of this development but rather, take advantage of it and work together so the horse gets the best care possible. In a rural setting this is not always possible, as a single practitioner is responsible for everything. I am thoroughly convinced that every veterinarian who works on horses can provide adequate routine dental care through a thorough examination and by using the right instruments. More advanced cases should be in the hands of specialists. It is important everyone knows their limitations and that they consult a specialist if they run into a problem.

If the veterinary profession provides excellent dentistry care for horses on every level and has the manpower to satisfy the horse owner’s or trainer’s requests at any time, we will have reached our goal for the good of the horse. —

This interview has been conducted by Dr. Ruedi Steiger from Swissvet Veterinary Products via telephone.