Pioneering research in practice

Practitioner Richard Hepburn recently completed a Masters in gastric ulceration in horses, during which he identified what he believes is a new gastric condition. He is in his first year of a PhD to continue his studies.

MY study of gastric ulceration in horses began in February 2012, and I presented the initial findings of my work at the American College of Veterinary Internal Medicine’s annual forum in New Orleans in June last year.

I now want to raise awareness and understanding of what I believe is a separate, and poorly understood, condition, which I have called ‘Equine glandular gastritis-erosion syndrome’ (EGGeS). In order to study this condition I am about to embark on a PhD with the Institute of Translational Medicine, University of Liverpool. The aim is to achieve a baseline description of what EGGeS actually is, what might cause it and how we can avoid it!

Collaboration
I chose Liverpool because of its exceptional record of research in equine gastroenterology, and its interest in clinical research. Large clinical population-based studies such as this give a great opportunity for collaboration between private practice and academia, but are still unusual in equine medicine. The Institute of Translational Medicine is especially exciting as I am part of a group that includes basic scientists, microbiologists and pathologists, as well as specialists from both human and veterinary medicine.

There are two parts to the study – the first is a retrospective analysis of over 500 cases of glandular disease, looking at endoscopic appearance, clinical signs and initial epidemiology. The next part is prospective investigation into the pathophysiology and epidemiology of the condition. This involves histological description of lesion types, metagenomic investigation into the role of bacteria, assessment of the role of mucus dysfunction and identification of risk factors for lesion development. In both parts we are using clinical cases.

Current knowledge
There is an increasing awareness that glandular disease is different – it involves a different population, shows different clinical signs and requires different treatment and management techniques. In general it appears more common in older sport and leisure horses, so it is general equine practitioners rather than those in racetrack practice who see these cases.

EGGeS is not just an acid injury, it is a combination of mucosal inflammation and erosion. Acid suppression is a vital component of treatment, in addition to mucosal protectants, cellular restitution promoters and potentially antibiotics.

Identification of suitably suggestive clinical signs in a particular population will help to identify appropriate cases for endoscopy. Appreciation of the cause of particular lesion types will help to focus therapy and improve healing rates.

Identifying cases
I hope to complete the study within the next four years, although we plan to publish parts of the data as we go.

Clearly the more cases, the better the data. I plan to produce an information sheet to give to referring vets in order to identify appropriate cases for endoscopy. If anyone would like to get involved, please contact me, e-mail: richard.hepburn@liverpool.ac.uk

InnerVision national gastroscopy event
Richard is organising the UK’s first national gastroscopy survey, the aim of which is to better understand the prevalence of equine gastric ulcer syndrome (EGUS) in performance horses. Gastroscopies will take place during May. He is inviting equine vets to apply to scope approximately 10 horses per practice (ideally during one day). The horses must be British Showjumping, British Dressage or British Eventing registered and must have been in work for four weeks before the scoping day. To get involved with the survey e-mail: richard.hepburn@liverpool.ac.uk
Ten-minute chat

Colin Burrows qualified from London in 1969 and moved to the USA to take up an internship. He is vice-president of the WSAVA, an organisation he has been involved with since the early 1990s. He takes over as president in Cape Town in September 2014.

What made you move to the USA?
During my first two years studying at the Royal Veterinary College (RVC) I had every intention of becoming a mixed animal practitioner in the UK; I liked everything about mixed practice. Then, in my third year, I began to see practice with Ken and Olive Evans in Hampstead, and became intrigued with the intellectual challenges of small animal practice. After qualifying, I was appointed house physician at the RVC’s Beaumont Hospital and then applied for an internship and was accepted at the University of Pennsylvania and the University of California, Davis – the choice was a challenge, but that’s another story. I planned to go to the States for a year, but at the end of my internship, Penn offered me the job of developing its new ICU. I accepted the challenge and then met an American girl, got married and the years just flew by.

How did you get to where you are today?
I actually wanted to be a surgeon (I can sense those who know me laughing) but, back then, few American veterinary schools offered residencies to ‘aliens’, which is what they called us. At Penn, I ran the ICU for four years. It was the first ICU at a veterinary school in the USA and we made up the rules as we went along. I enjoyed the challenges of the critical patient; renal, cardiac, nutritional respiratory, etc, but I could not be master of them all. In 1975, I became one of the first group to sit and pass the American College of Veterinary Internal Medicine examination, so my route as an internist was charted. I needed to specialise and Penn needed a gastroenterologist, so I did a Phd in gastrointestinal physiology. In 1976, one of my Penn colleagues, Richard Halliwell, became department chair at the new veterinary college in Florida; he recruited my PhD mentor and then me. All I really knew about Florida was that it was hot, that the Kennedy Space Center was there, and that it is where people retired to. Of course, it is much more than that and it has been a great place for the rest of my career.

What got you interested in the WSAVA?
I had always been interested in organised international veterinary medicine; in fact, it goes back to my mentor, Ken Evans, who had been president of the BSAVA and WSAVA treasurer. My first exposure to WSAVA congress was as a speaker. I was asked to serve on the programme committees of several congresses, beginning with the marvellous meeting in Vienna in 1981. I have also had a long-time interest in international veterinary postgraduate education and have given CE presentations in 60 countries. It was still an honour for me, however, to be asked to stand for election to the board.

What activities does being vice-president involve?
The WSAVA is a complex organisation. It is an association of associations with 93 member associations and more than 180,000 individual members. I don’t know how many languages our members speak, but it is a lot. There is a similar spectrum in the standards of practice between countries and regions, different economic challenges and societal needs. I am in my second year on the board and am still on a steep learning curve. We have so many commitments at so many levels, and I am determined to get my arms around them all. My specific responsibilities at the moment are to act as liaison to several of our committees and to help the WSAVA president, Jolle Kirpensteijn, with sponsor solicitation. I am also interested in our commitment to One Health and to our rabies elimination projects.

What advice would you give to someone considering a similar career?
Every career is unique; I started off with mixed practice intentions, segued into small animal practice, then became a board certified internist and a gastroenterologist. I also became a department chair at the University of Florida and Chief of Staff of the Veterinary Hospital. At the same time I was a meeting planner and am now involved in international veterinary medicine.

In 2006, I was challenged to give a presentation to accompany my receipt of the WSAVA Service Award and to give an overview of my career and lessons learned. This was the most difficult presentation I have ever put together. I called it ‘Forks in the Road’ and the message was that when you come to forks in the road of life, you make a decision based on all available evidence (or sometimes just get lucky) and take that road doing the best you can and not looking back. That, I think, is the best advice I can give. Seize the opportunities, work hard, but make time for family friends and hobbies.

What was your proudest moment?
This is tough. Maybe getting an honorary FRCVS, because I had been out of the UK for so long it meant a lot to be recognised by the RCVS. Maybe the oldest one is the proudest, and that was going to Buckingham Palace to collect my Duke of Edinburgh Gold Award. My Mum was there and she always said it was the proudest day of her life and, I think, mine.

Tell us something not many people know about you.
Well I just became a first time grandparent – that is pretty cool; our granddaughter was born last October, and we just wish she was closer.

Folks who read NAVC Clinician’s Brief know that I love to fish as I post pictures of some of my fish in the editorial. Not so many know that I love to garden. It has to be my British heritage and the fact that my Dad was a professional gardener – it is in my genes. My son is the same way. Gardening in Florida, however, is very different as we have two growing seasons, and I am still learning. I always plant my first row of peas on New Year’s Day. They will be in flower soon.
Ten minute chat

Colin Burrows

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