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Shaping the future of animal health
We had a brilliant time at the lively VetsSouth congress in Exeter last month. The event was a great success and hundreds of delegates enjoyed the lecture streams, workshops and packed exhibition. Our focus will soon switch to VetsNorth, which is only a few months away. If you missed VetsSouth, you can catch many of the same speakers at the CPD congress in Manchester, which takes place on 20 and 21 June.

In the meantime, it is time for those in the small animal sector to prepare for the BSAVA Congress. The four-day event kicks off on 5 April in Birmingham and to help you plan ahead, we’ve put together a comprehensive guide. Turn to the congress preview for an article detailing BSAVA President John Chitty’s top picks, a full exhibitor list and floor plan (don’t forget to visit us at stand 607!), and an interview with keynote speaker Nigel Owens. There is also a calendar containing all the important details for the social events, which this year include a movie night as well as the famous BSAVA banquet and indoor festival.

Elsewhere in this month’s magazine, John Periam interviews the owner of a practice in Sussex who believes that more practices should do their bit when it comes to treating wildlife – both for the benefit of the animals and the practice. Treating wildlife can be extremely rewarding and, in his experience, is a great way of receiving attention from the local media (so a good reputation and in turn, new clients).

David Grant tackles canine deep pyoderma in his dermatology column and in nutrition, Lee Danks and Cécile Dor look at potential causes and treatment of feline hepatic lipidosis. There is also an interesting case study by iM3 Dentistry, which explores a step-by-step approach to treating a complicated case – a Border Collie presenting with periodontal disease and tooth root in the nasal cavity.

The issue is not all about small animals; in the large animal section, Richard Gard conveys the take-home messages from the Dairy in a Day Conference. In equine, Jon Pycock asks whether vets should accept referrals direct from complementary therapists and paraprofessionals. We have the final instalment of Madeleine Campbell’s reproduction series, this month explaining options for oestrus suppression in mares, as well as an In Focus feature by James Prutton, which offers a useful guide to the treatment and control of equine strangles.

Jennifer Parker
Editor
CONTENTS

IN FOCUS

12 BSAVA Congress 2018
All you need to know about the biggest small animal CPD event of the year, which takes place in Birmingham from 5 to 8 April.

54 Equine strangles
A review of the pathogenesis, diagnosis and treatment of the condition, caused by Streptococcus equi equi.

58 A look through the latest literature
The latest academic publications providing further insight into this month’s In Focus topic.

REGULARS

4 News
A snapshot of the topics currently hitting industry headlines.

9 Events
At VetsSouth, delegates were told they may be able to measure pain in animals objectively, while losing money through failure to keep track of drugs was a topic of discussion at the SPVS/VPMA Congress.

22 Innovation
A look at the portable, convenient technology that helps analyse gait in dogs, and hopefully soon horses.

24 RCVS Knowledge
Examining the use of transdermal nitroglycerin.

26 AWSELVA
How the authorities impact animal welfare and human well-being.

27 Mental health
Self-awareness can help us change and regulate our reactions to encourage more positive behaviours.

28 Wildlife
Working in a wildlife-friendly practice, Richard Edwards describes the benefits of treating a great range of species, from badgers to whales.

31 Advising clients
Four steps to help clients get to grips with pet insurance and choose a policy that will live up to expectations.

32 Dermatology
David Grant provides insight into the management of canine deep pyoderma and Tracey West discusses the differences between hypoallergy and dermatology support diets.

38 Nutrition
Feline hepatic lipidosis can often be successfully treated with aggressive nutritional management.
41 Dentistry
A case report of an elderly dog presenting with stage four periodontal disease and tooth root in the nasal cavity.

46 A new ministry for dairy
At the Dairy in a Day conference, a dairy promotion plan was introduced and updates were provided on antibiotic use and milk prices.

48 Ethical dilemmas in practice
Is guidance available on whether we should accept referrals direct from a complementary therapist/paraprofessional?

50 Oestrus suppression in mares
A review of the indications for oestrus suppression in mares, including the pros and cons of various treatment options.

52 Treating equine gastric ulcers
The strategic role of the vet in devising a treatment plan for equine gastric ulcer syndrome.

60 Disarming an angry client
Listening and taking your time should be the first considerations when dealing with an intimidating client.

64 Finance
What are the benefits of finding the right bank to support your practice?

59 David Williams
“We examined the welfare of the ornamental fish, reptiles and even puppies and kittens sold in the market.”

68 Gareth Cross
“We began with a sixth-former at the start of the series and this month, we hear from a semi-retired vet.”

66 Legal
What are the pitfalls of social media for the practice?

67 Blame and shame
The Veterinary Defence Society gives us its monthly insight into continual training and career progression.

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Applications now open for the Knowledge Awards

RCVS Knowledge has launched the Knowledge Awards for Quality Improvement, encouraging applicants to share their success stories with the profession. The awards are designed to recognise successful implementation of quality improvement (QI), which can reduce avoidable errors, ensure practice is based on the best available evidence and, ultimately, save lives.

Individual winners will get free tickets to an upcoming RCVS Knowledge event and be given a plaque pronouncing them “Knowledge Champion”, while one team will scoop Knowledge’s “Champion Practice” award.

Winners will be able to demonstrate the impact QI methods have had in practice. Impact could be an increase in efficiency, improved clinical or financial effectiveness, the development of a culture of continuous improvement, support in the use of evidence-based approaches, or a general bettering of excellence in care.

All applicants can choose to work with Knowledge to showcase their experience of applying QI. You can opt to be featured on the Knowledge website or blog, be peer-reviewed and published in Veterinary Evidence or present at a relevant conference. With the closing date in November, there is plenty of time for those interested in introducing a QI initiative in practice to do so and apply at a later date.

The full EFRA Committee report "Brexit: Trade in Food" can be accessed from publications.parliament.uk/pa/cm201719/cmselect/cmenvfru/348/34801.htm

Pet-ID will offer free transfer of keepership from breeders to new puppy owners following extensive customer feedback about the registration process.

From 23 February 2018, Pet-ID microchips will be registered on the Chipworks database. Chipworks is a UK-based, fully Defra compliant registration and reunification database that Pet-ID has developed in conjunction with the operators of the successful Fido database in Ireland. Chipworks is also an associate of EuroPetNet, which consolidates member databases across Europe to help with the identification and reunification of animals.

This new service will enable Pet-ID to offer free online transfer of keepership from breeders to new owners, so long as puppies are identified as having been registered to the breeder when the microchip is first registered.

Pet-ID will offer the same service if cat breeders choose to register kittens to themselves in the first instance. Alternatively, cat breeders who have their kittens microchipped can continue to register kittens in the name of the new owner.
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Former Shadow Environment Minister to lead welfare discussions at AWF’s annual forum

AWF’s Discussion Forum, held at One Great George Street, London, on Monday 12 June, attracts delegates from a wide range of fields and gives them the chance to discuss and share knowledge on challenging welfare issues.

This year, the morning’s “Big Debate” session, chaired by BVA Honorary Member Angela Smith MP, will ask “Is insurance compromising quality of life?”. This ambitious session will explore ways of assessing quality of life and how such a measurement might be used to balance the needs of client, vet and insurer in favour of better animal welfare. Afternoon sessions will focus on how veterinary professionals can influence client behaviour for best animal welfare and help potential buyers make good pre-purchase decisions.

For a full programme and to buy tickets for the AWF Discussion Forum and House of Commons reception following the event, visit bva-awf.org.uk/2018-discussion-forum

Mind Matters and Alliance Manchester Business School publish guide to enhancing wellbeing in the veterinary workplace

The RCVS Mind Matters Initiative (MMI) has developed a guide on wellbeing in the veterinary workplace in association with Elinor O’Connor, Senior Lecturer in Occupational Psychology at Alliance Manchester Business School, University of Manchester. The College launched MMI to increase the accessibility and acceptance of mental health support, and encourage a culture that better equips individuals to talk about and deal with stress and related issues.

“A Guide to Enhancing Wellbeing and Managing Work Stress in the Veterinary Workplace” was launched at the Society of Practising Veterinary Surgeons/Veterinary Practice Management Association (SPVS/VPMA) Congress in January. Designed for anyone with an interest in the wellbeing of the veterinary team, it provides practical advice to veterinary workplaces on managing stress and promoting wellbeing, alongside examples from winning practices of the 2016 MMI/SPVS Wellbeing Awards.

A digital version of the guide can be downloaded from the Mind Matters website: vetmindmatters.org

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Delegates at this year’s VetsNorth congress will be encouraged to ask for advice on difficult cases during a specialist panel session to be held during the two-day conference; panellists will include experts David Williams and Pip Boydell.

VetsNorth takes place on 20 and 21 June in Manchester, offering convenient access for veterinary professionals working in the north of the UK. It provides dedicated lecture streams for vets, nurses and practice managers, together with a series of small group, focused workshops. An exhibition showcasing the latest veterinary products and services, and featuring demonstrations and workshops from exhibitors, will run alongside the conference.

VetsNorth delegates also benefit from a free six-month subscription to Bitesize CPD, an online educational platform launched by CPD provider Improve International. Using the free trial, delegates will receive additional free CPD (18 hours for veterinary surgeons and nine hours for veterinary nurses).

Matt Colvan, Event Director, explained: “The programme focuses on areas highlighted by previous delegates as priorities for learning and on emerging areas of veterinary practice. With new features like the specialist panel and with the opportunity to gain additional CPD through a free subscription to Bitesize, we urge delegates to take advantage of our time-limited early bird offers.”

For more information, visit vetsnorth.com or call the team on 01793 208065
The question of how best to measure pain in animals was posed at VetsSouth in a fascinating presentation by Jacky Reid from NewMetrica and Glasgow University Vet School.

Acute pain is an important consequence of surgery, trauma or medical illness, and failure to manage it well can lead to consequences such as delayed recovery and poor healing, as well as unnecessary and protracted suffering. Gone are the days when it was considered acceptable for an animal recovering from surgery to be in pain so that they would not move around too much. In human medicine it is considered that pain assessment should be the fifth vital sign measured, after pulse, respiration, temperature and blood pressure.

Animals are all individuals, just like humans, so how can we make sure that each one is given the right amount of analgesia at the right time? And how can we measure what degree of pain any animal is suffering when they cannot tell us what they are feeling verbally?

Jacky explained that we can use behavioural observations to measure the response to pain, and non-verbal communication can be used as a form of self-reporting. All that is needed is an observer (veterinary surgeon or nurse in the case of an animal that is recovering from surgery or hospitalised following trauma or illness) and a composite scale which enables us to measure that animal’s response to pain.

The Glasgow Composite Measure Pain Scales (CMPS-SF for dogs and CMPS-Feline for cats) have been tested for validity, reliability, responsiveness and sensitivity in the target species. They are easy to use and interpret and have an intervention level set, which provides guidance as to whether an animal requires analgesia. Spontaneous behaviours, for example vocalisation and attention to a wound, and evoked behaviours (such as response to touch) are scored, as well as posture, demeanour, mobility in dogs and facial expression in cats.

The incorporation of the latter in a previous version of the cat scale greatly improved its sensitivity.

In practice, for post-operative purposes, the scale is used once the animal has fully recovered from general anaesthesia, then approximately every three to four hours thereafter depending on the individual. If the intervention level is reached, analgesic should be administered and the pain score repeated in one hour to check that the analgesic has reduced the pain level.

Jacky has been highly involved in the development of this tool and her talk highlighted the importance of considering behaviour as a measurable entity, enabling us to manage pain more effectively and humanely.
Delegates at the congress in Newport were warned that farm animal practices in particular are at fault because they don’t make enough effort to stop valuable medicines from going out of date in the boot of their clinicians’ cars.

Victoria Ansell is an inventory management specialist with Centaur Services and offers client practices advice on improving the management of drug ordering, storage and distribution. She estimated that the proportion of products never charged to their clients may be as high as 30 percent in a typical farm practice.

Phil Sketchley, recently retired as head of the animal medicines trade association NOAH and previously a senior executive in the animal health industry, insisted that this was not exaggerating the scale of the problem. He recalled carrying out an audit at one practice some years ago.

“We found that there were 11 vials of amoxycillin in the four vehicles used by the practice and four of those had been broached and were already out of date. We estimated that in just one year, £38,000 of stock was unaccounted for, and with a modest 50 percent mark-up, that meant the practice was losing between £50,000 and £60,000 a year,” he said.

The traditionally chaotic state of the average farm vet’s car is not the only reason for practices losing revenue on medicines sales, Victoria noted. Some products are damaged or stolen, others are charged at the wrong rate or not at all, while some inevitably go out of date even in the best managed practices.

Another regular cause of losses in farm practice is the vet leaving several days between dispensing a product and sending an invoice to the client; this means there is a significant risk that the clinician will underestimate the amount of product used or forget about it completely, she noted.

Victoria said her company is working on providing a remedy for that problem by developing an app to be used on the vet’s mobile phone or tablet to quickly record details of the consult before their next visit. “This will ensure that an invoice can be despatched there and then in any place where the clinician has Wifi access.”

It isn’t necessary to regularly check levels of low value items like surgical gloves; these efforts should concentrate on the low volume, high value products that contribute a disproportionate amount to the practice turnover and will negatively affect the bottom line when stock management is poor.

She acknowledged that like any new management system, her recommendations will not succeed without support from every member of the practice staff. However, she insisted that once established, the new system would provide much more effective control over the products that enter and leave the practice. It would therefore be possible to monitor the activities of individual staff members and offer rewards for those that make the most progress in improving the financial performance of the business.
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Top picks for BSAVA 2018

Congress highlights from BSAVA
President, John Chitty

In 2018, the veterinary profession faces a rapidly changing environment with unique and demanding new challenges. Now more than ever, I feel it is vital for the profession to meet, discuss and learn together. There are so many highlights at Congress it is difficult to name just a few, but here are the focal points I am excited for at Congress 2018.

New non-clinical stream
To meet our changing needs, I am very excited for the brand new CPD stream at Congress on Sunday – “Beyond the Clinics”. Designed to provide holistic support and veterinary specific information beyond clinical skills, the new initiative features experts discussing how to look after your financial, mental and physical health alongside career representation from across the veterinary spectrum at a careers fayre.

First-class CPD
Congress is justly renowned for the myriad of clinical learning opportunities on offer and 2018 is no exception with over 450 lectures delivered by world leaders and pioneers in their disciplines. My particular highlights in April include an expanded practical and wetlab offering, along with a new advanced veterinary practitioner stream for those looking to develop specialised skills and knowledge. There is also a brachycephalic stream showcasing the latest thinking and clinical advice, rounded off with an evidence-based discussion from key opinion leaders.

Industry expertise
The Congress exhibition continues to be the only place to see the latest products, innovations and services all focused on the needs of the small animal vet and veterinary nurse. Having personally bought everything from new products to largescale equipment at Congress over the years, I know it’s a fantastic venue to come to with a shopping list. You can compare products, discover something new and network with the top companies in industry. Plus, if you don’t have time to attend the lectures, we offer free exhibition passes to vets, veterinary nurses and practice staff.

Let us entertain you
Congress would not be complete without our series of stunning social events where delegates unwind after a full day of networking and learning. This year we are introducing a brand new social event – Movie Night. Catch up with your colleagues and then join us for a relaxed showing on Thursday night. BSAVA Banquet on Friday evening is a delight for a real foodie like me, combining amazing food and big entertainment in exquisite surroundings. Saturday night evolves into V18, the new name for our very own indoor festival, packed full of music, entertainment and comedy (and the return of the hugely popular silent disco).

Whether you are a Congress regular like myself, or visiting for the first time, I hope you will be able to join us this April to create enriching and inspiring moments together.
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<table>
<thead>
<tr>
<th>Company Name</th>
<th>Booth Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karl Storz Endoscopy (UK) Ltd</td>
<td>120</td>
</tr>
<tr>
<td>KONG Veterinary Products</td>
<td>419</td>
</tr>
<tr>
<td>Lafeber - Emerald</td>
<td>119</td>
</tr>
<tr>
<td>Lease UK Ltd</td>
<td>527</td>
</tr>
<tr>
<td>Liberty Vets Recruitment</td>
<td>424</td>
</tr>
<tr>
<td>Lintbells</td>
<td>123</td>
</tr>
<tr>
<td>MAI Animal Health</td>
<td>339</td>
</tr>
<tr>
<td>MDC Exports Ltd</td>
<td>423</td>
</tr>
<tr>
<td>Meadow’s Animal Healthcare</td>
<td>111</td>
</tr>
<tr>
<td>Medicine, Technology and You LLC</td>
<td>1000</td>
</tr>
<tr>
<td>Medimark Scientific</td>
<td>1015</td>
</tr>
<tr>
<td>Millpledge</td>
<td>1010</td>
</tr>
<tr>
<td>Mission Rabies</td>
<td>104</td>
</tr>
<tr>
<td>Mount International United Services Ltd</td>
<td>313</td>
</tr>
<tr>
<td>National Veterinary Services</td>
<td>413</td>
</tr>
<tr>
<td>NationWide Laboratories</td>
<td>506</td>
</tr>
<tr>
<td>Natures Menu Ltd</td>
<td>100</td>
</tr>
<tr>
<td>Nestle Purina PetCare</td>
<td>306</td>
</tr>
<tr>
<td>Nupsala Veterinary Services</td>
<td>719a</td>
</tr>
<tr>
<td>Nutravet</td>
<td>1008</td>
</tr>
<tr>
<td>Orchid Valley Pet Caskets</td>
<td>510</td>
</tr>
<tr>
<td>Orthomed UK Ltd</td>
<td>1023</td>
</tr>
<tr>
<td>Oxbow Animal Health</td>
<td>301</td>
</tr>
<tr>
<td>Oxtex</td>
<td>107</td>
</tr>
<tr>
<td>Pet Blood Bank UK</td>
<td>302</td>
</tr>
<tr>
<td>Pet Cremation Services</td>
<td>907</td>
</tr>
<tr>
<td>Pet Medic Recruitment</td>
<td>602</td>
</tr>
<tr>
<td>Pet-ID Microchips</td>
<td>615</td>
</tr>
<tr>
<td>Petlife International Ltd</td>
<td>207</td>
</tr>
<tr>
<td>Petplan</td>
<td>818</td>
</tr>
<tr>
<td>PetSavers</td>
<td>610</td>
</tr>
<tr>
<td>PG Mutual</td>
<td>912</td>
</tr>
<tr>
<td>Photizo Light Therapy</td>
<td>421</td>
</tr>
<tr>
<td>Photon Surgical Systems Ltd</td>
<td>503</td>
</tr>
<tr>
<td>Pioneer Veterinary Products</td>
<td>101</td>
</tr>
<tr>
<td>PLH Medical Ltd</td>
<td>213</td>
</tr>
<tr>
<td>PoochPlay</td>
<td>815</td>
</tr>
<tr>
<td>Pride Veterinary Centre</td>
<td>414</td>
</tr>
<tr>
<td>Professional Practice Services</td>
<td>612</td>
</tr>
<tr>
<td>Protexin Veterinary</td>
<td>304</td>
</tr>
<tr>
<td>Quantum Vet Diagnostics</td>
<td>719</td>
</tr>
<tr>
<td>Royal Canin</td>
<td>816</td>
</tr>
<tr>
<td>Royal College of Veterinary Surgeons (RCVS)</td>
<td>105</td>
</tr>
<tr>
<td>Sainmed Union SRL</td>
<td>936</td>
</tr>
<tr>
<td>Sarah Brown Cards</td>
<td>224</td>
</tr>
<tr>
<td>Scarecrow Inc</td>
<td>510A</td>
</tr>
<tr>
<td>Scil</td>
<td>322</td>
</tr>
<tr>
<td>Securso Surgical</td>
<td>1017</td>
</tr>
<tr>
<td>Shire Insurance Services</td>
<td>829</td>
</tr>
<tr>
<td>Shor-Line</td>
<td>622</td>
</tr>
<tr>
<td>Silver Pet Prints</td>
<td>410</td>
</tr>
<tr>
<td>Simply Locums</td>
<td>206</td>
</tr>
<tr>
<td>St Francis Group</td>
<td>1017</td>
</tr>
<tr>
<td>Summit Veterinary Pharmaceuticals Ltd</td>
<td>614</td>
</tr>
<tr>
<td>Supreme Petfoods</td>
<td>201</td>
</tr>
<tr>
<td>Tails.com</td>
<td>214</td>
</tr>
<tr>
<td>TECHNIK Veterinary</td>
<td>1014</td>
</tr>
<tr>
<td>Telerad Tech Inc.</td>
<td>914</td>
</tr>
<tr>
<td>The Hyperthyroid Cat Centre</td>
<td>826</td>
</tr>
<tr>
<td>The Veterinary Business Agency Ltd</td>
<td>217</td>
</tr>
<tr>
<td>The Veterinary Defence Society Ltd</td>
<td>418</td>
</tr>
<tr>
<td>The Veterinary Pathology Group</td>
<td>334</td>
</tr>
<tr>
<td>TVM UK LTD</td>
<td>806</td>
</tr>
<tr>
<td>UK Vet: The Veterinary Nurse and Companion Animal</td>
<td>1002</td>
</tr>
<tr>
<td>Veenak Veterinary Supplies</td>
<td>311</td>
</tr>
<tr>
<td>VES Custom Optics</td>
<td>811</td>
</tr>
<tr>
<td>132</td>
<td>Vet Direct Services</td>
</tr>
<tr>
<td>601</td>
<td>Vet Inflow</td>
</tr>
<tr>
<td>1017</td>
<td>Vet Space</td>
</tr>
<tr>
<td>102</td>
<td>Vet Speciality Products</td>
</tr>
<tr>
<td>417a</td>
<td>Vet Times Jobs</td>
</tr>
<tr>
<td>402</td>
<td>Vet-One</td>
</tr>
<tr>
<td>1016</td>
<td>Vetark Professional</td>
</tr>
<tr>
<td>500A</td>
<td>Veterinary Design Services Ltd</td>
</tr>
<tr>
<td>513</td>
<td>Veterinary Information Network (VIN)</td>
</tr>
<tr>
<td>336</td>
<td>Veterinary Instrumentation</td>
</tr>
<tr>
<td>305</td>
<td>Veterinary Medicines Directorate (VMD)</td>
</tr>
<tr>
<td>521</td>
<td>Veterinary Orthopaedics</td>
</tr>
<tr>
<td>801</td>
<td>Veterinary Poisons Information Service</td>
</tr>
<tr>
<td>607</td>
<td>Veterinary Practice magazine</td>
</tr>
<tr>
<td>417</td>
<td>Veterinary Times</td>
</tr>
<tr>
<td>124</td>
<td>Vetindex / Vet CPD</td>
</tr>
<tr>
<td>ICC 10</td>
<td>Vetlife</td>
</tr>
<tr>
<td>130</td>
<td>Vetlink Employment Service</td>
</tr>
<tr>
<td>329</td>
<td>VetLinkSQL</td>
</tr>
<tr>
<td>400</td>
<td>Vetpartners</td>
</tr>
<tr>
<td>109</td>
<td>VetPlus</td>
</tr>
<tr>
<td>113</td>
<td>VetPro Recruitment</td>
</tr>
<tr>
<td>729</td>
<td>Vetronic Services Ltd</td>
</tr>
<tr>
<td>715</td>
<td>Vets Now</td>
</tr>
<tr>
<td>820</td>
<td>Vets4Pets</td>
</tr>
<tr>
<td>317</td>
<td>Vetsolutions</td>
</tr>
<tr>
<td>603</td>
<td>Vetspanel</td>
</tr>
<tr>
<td>507</td>
<td>VetSpec</td>
</tr>
<tr>
<td>833</td>
<td>Vetstream</td>
</tr>
<tr>
<td>1017</td>
<td>Vetswest</td>
</tr>
<tr>
<td>704</td>
<td>VetZ Limited</td>
</tr>
<tr>
<td>122</td>
<td>Vision Media</td>
</tr>
<tr>
<td>721</td>
<td>Vygon Vet</td>
</tr>
</tbody>
</table>

**W**

| 404  | Wiley               |
| 605  | Willows Veterinary Centre and Referral Service |
| 814  | Woodley Equipment Company Ltd |
| 104  | Worldwide Veterinary Service |
| ICC-2 | WSAVA             |

**Z**

| 211  | Zoetis UK Ltd       |

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The social calendar

Unwind, catch up and let your hair down after a packed day of networking and learning at BSAVA Congress 2018

Movie Night
Footloose (1984)
Thursday 5 April, Hall 5, The ICC
8:30pm
£7.50 (includes popcorn)

New for Congress 2018 – enjoy a relaxed showing on Thursday evening – perfect preparation to revise some dance moves ready for the banquet and V18!

Banquet
Friday 6 April, Hall 3, The ICC
Drinks reception: 7:30pm, banquet: 8pm
£77

Join the banquet on Friday for an evening of exquisite food in elegant surroundings.

Following the first-class food, there will be live entertainment until the early hours with the Jam Hot Band. This collective of musicians have been astonishing audiences around the world with their ground-breaking live show packed full of immaculate and innovative renditions and sumptuous four-part harmonies.

V18 Festival
Saturday 7 April, Halls 3 and 4, The ICC
7:30pm - 2am
£34 with food, £25 without food

Saturday night at Congress evolves into V18 Festival, and will be packed with music, street theatre and comedy. Expect a wide range of musical acts with truly something for every musical taste along with a side-splitting hour of comedy hosted by The Official Comedy Club.

All this entertainment is available to book with your choice of street food from across the world, including tastes of Mexico, China and Italy (including vegan and gluten free options), and each ticket comes with two complimentary drinks.

Tickets
Tickets for all these events are available to purchase when booking your Congress registration at bsavacongress.com. If you have already registered for Congress and would like to purchase additional tickets, call BSAVA on 01452 726720.

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Rugby referee to deliver keynote

Welsh international and World Cup referee Nigel Owens MBE promises to inspire and entertain at this year's event

Nigel Owens was the referee for the 2015 Rugby World Cup Final between New Zealand and Australia at Twickenham. In June 2016, he was awarded an MBE for services to sport and continues to referee around the world. Ahead of his keynote presentation, Nigel spoke about high-pressure decision making, trusting his judgement and admitting mistakes to an audience of millions.

How did your passion for the sport begin?
Rugby is a big part of growing up in Wales and that was no different for me. Refereeing in particular wasn’t something you started for a profession or a career, it was just something you did as a hobby.

Most people who started 20 to 30 years ago would fall into it by chance either by becoming injured or volunteering if a referee didn’t turn up for a match. My interest started similarly, just by chance, refereeing some games in school when I was 16. I eventually started professionally in 2001.

Do you consider the job to be "high pressure", or do you find when you’re in your element you can bring a calmness to the situation?
There is huge pressure in the profession. The obvious pressure is a match with big decisions and the possibility that any mistake you make could be highlighted in the media.

To referee a test match or professional game of rugby well, you also have to be totally focused for the full 80 minutes. I suppose in a way it’s similar to being a veterinary surgeon performing a major operation; you can’t let your mind wander, worry, or think about something else because it will affect what you’re doing – and that’s the same for refereeing.

You have to trust your judgement in highly stressful environments. How do you deal with a wrong decision in the moment, and with any potential criticism afterwards?
I deal with these situations by learning from those mistakes and reducing the chances of making them again. I couldn’t be doing this job as a referee if I couldn’t take the criticism; that’s the nature of the job. I deal with it by thinking constructively and if there is a valid point being made, I ensure that I don’t make that mistake again, so there isn’t the opportunity to criticise me again. In these situations, I also find it useful to seek advice from someone I trust who has relevant experience.

Equally however, and I do feel strongly about this, there are times when you are criticised even if you have made the correct decision. Everyone is entitled to his or her opinion, but you have to recognise situations when you have more knowledge, proficiency and experience.

If you could leave delegates with one key message to take away from your lecture, what would it be?
Some years ago, I learnt that if you aren’t enjoying what you do then you can’t be totally focused and give it your all, and you won’t get the benefits out of it. To excel at something, you first need to be happy and true to yourself.

Bourgelat Award winner announced
Clarence Rawlings, DVM, MS, PhD, Diplomate ACVS, has been announced as this year’s winner of the Bourgelat Award. The award, in honour of Claude Bourgelat – founder of the world’s first veterinary school in 1761 – is presented annually for outstanding international contributions to the field of small animal practice.

Clarence is a general surgeon who has been active in minimally invasive surgery for 20 years, but spent his first 30 years as a traditional surgeon, promoting the benefits of “stem to stern” laparotomies. He transitioned from Professor to Professor Emeritus in 2004 after spending 30 years at the University of Georgia, during which time he was an author on more than 130 papers. He continues to practice and is passionate about helping more veterinarians to integrate endoscopy into practices to improve patient care.

Clarence said he was overwhelmed to receive the Award and is looking forward to sharing his experience and learnings with Congress delegates. He will deliver the new Bourgelat stream of four 45-minute lectures on Friday 6 April at Congress 2018.

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The keynote presentation is free to all delegates and takes place after the prestigious BSAVA Awards ceremony and the President’s welcome address, which starts at 4pm on Thursday 5 April.
There are two ways to prevent Angiostrongylosis:

- Moxidectin e.g. in Advocate® completely prevents patent infection with lungworm (Angiostrongylus vasorum)

- Milbemycin oxime containing products reduce the level of lungworm burden but some worms can still develop in the heart†
A new way to accurately measure gait

A look at the portable, convenient technology that helps analyse gait in dogs, and hopefully soon horses

GaitKeeper is a portable system for measuring gait. The system has been validated in laboratory conditions and peer-reviewed in international journals. It uses inertial sensing technology and machine learning to make gathering research-grade measurements easy and available to general clinical practice.

What is the key use?
When it comes to measuring disease, dysfunction or recovery, gait is often used as a window into the area of interest. This technology makes measuring gait easy and objective. On its own, it is not a diagnosis tool or magic wand; it still requires clinical knowledge. However, in the hands of a professional, it is a powerful imaging technology that gives very detailed measurements that may otherwise be unobservable.

What problem does it solve?
Measuring gait is not a new technique and a whole body of research points to the clinical relevance and how features like asymmetry in swing and stance phase are important. To date, gait measurement has been expensive and refined to specialist labs with highly calibrated mats, plates or cameras. While GaitKeeper is not a replacement for such equipment (for instance it cannot measure force), it is more convenient.

How does it work?
The GaitKeeper uses sensors that attach to the leg of the subject via Velcro (just below the carpus or hock). Each sensor includes an accelerometer and a gyroscope. Measurements from these components are wirelessly uploaded to the cloud. A machine learning algorithm predicts precise timings of each final and initial contact. Measurement results are instantly available in interactive charts and it is possible to view historical measurements to track regression or improvement.

Where would it be most useful?
A GaitKeeper system would be well placed in any surgery that provides rehabilitation assessments post-surgery or a practice offering services such as physio or hydrotherapy. Used in conjunction with a physical exam it gives a clear measurement that informs next-step decision making. The reports are also ideal tools for talking with owners and discussing available options.

How do you use it?
Sensors are attached to thoracic or pelvic limbs (or both). The patient is then walked in a straight line across a hard surface. An app lets you capture video or notes and has a stopwatch built in. Recordings are then downloaded from the sensors and sent to the cloud for processing (which requires an internet connection). Once it has finished processing, a report is available inside a secure portal where previous recordings are also filed.

What would you say is the best feature of the product?
Spotting asymmetry by eye is one thing but measuring it is another. The system allows automatic calculation of asymmetry (and variability) on several gait parameters such as swing, stance, velocity and jerk. Aside from the measurement capabilities, the product also has features such as secure archiving, raw-data export and owner report sharing, which make it compliant with regulations and a pleasure to use.

Are there any planned future developments of the technology?
There are plans to extend the quantity of features available from the system and encompass settings for measuring horses.

How much does it cost?
Systems start at £1,000 for hardware. Software packages are on a yearly subscription basis.

Learn more about GaitKeeper at VetSens: vetsens.co.uk/products/gaitkeeper/
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Examining the use of transdermal nitroglycerin

Transdermal nitroglycerin should only be used as a supplemental emergency treatment in dogs with left-sided congestive heart failure, evidence suggests

According to the Knowledge Summary in Veterinary Evidence, published in December, states that there is “very weak evidence” that adding transdermal nitroglycerin to other therapies “speeds the resolution of clinical signs” in the condition.

Usage of nitroglycerin varies between practices but this conclusion means those that apply it regularly should be cautious and use other treatments where applicable, especially considering the lack of research into the drug’s potential side effects.

Dr Søren Boysen, from the Department of Veterinary Clinical and Diagnostic Sciences at the University of Calgary, said: “Based on the results of the Knowledge Summary, it is not wrong to use transdermal nitroglycerin in the management of left-sided congestive heart failure, but it should never be the sole agent and should only be used as a supplemental therapy to other proven therapies.”

Not a long-term treatment option

The evidence, which amounts to four studies from 1995 to 2014, demonstrates that nitroglycerin does indeed have a decreasing effect on blood pressure (and associated indicators of cardiac health such as systemic vascular resistance) as expected due to the drug’s vasodilative action.

However, much of the research was carried out on healthy animals, under anaesthetic or induced circumstances, which may mean the clinical signs measured had a different pathophysiology to those of naturally occurring heart disease and, as such, response to the drug could differ in practice cases.

A further obstacle to consider is the tolerance effect exhibited by treatment with nitrates such as nitroglycerin. In humans, long-term use of this class of drug can lead to a reduction in its effectiveness, only reset when it is periodically removed.

Therefore, and taking into account that there are more efficient treatment options for removing fluid from the lungs of dogs with congestive heart failure (like diuretics), nitroglycerin can’t currently be recommended for the management of this condition.

"Although transdermal nitroglycerin has an effect on blood pressure in the research setting, this may not equate to decreased pulmonary oedema or resolution of clinical signs in dogs with left-sided congestive heart failure," said Dr Boysen.

“If the objective is longer-term control, then oral medications would be a more effective approach.”

Emergency use

Nitroglycerin is fast acting and, according to the evidence, causes significant vasodilation in somewhere between under ten minutes and one hour.

To exemplify its effect, application of nitroglycerin tape at 2.5mg/kg in one study caused a 10 to 15 percent decrease in systolic blood pressure, sustained until removal of the tape.

In theory therefore, it is possible that transdermal nitroglycerin could provide a benefit in patients with left-sided congestive heart failure by rapidly lowering hydrostatic pressure (indirectly reflected by blood pressure) through vasodilation, thereby decreasing fluid shifts from the vascular to the pulmonary interstitial/alveolar spaces.

As such, dogs with an urgent need of lower hydrostatic pressures can be treated with transdermal nitroglycerin. However, agents such as intravenous nitroprusside are more effective.

Understudied side effects

Nitroglycerin has a number of known side effects in humans, ranging from headache, dizziness and nausea to serious complications like severe hypotension and a low heart rate.

Although no side effects were noted in the evidence, studies investigating adverse reactions in dogs are lacking. Practitioners should be aware of this when using the drug.

Full Knowledge Summary

veterinaryevidence.org/index.php/ve/article/view/115

Authors: Jenefer Stillion and Søren Boysen
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**Use medicines responsibly, www.noah.co.uk/responsible.** For further information and to view the full Summary of Product Characteristics, please contact TVM UK, Crown House, Gloucester Road, Redhill RH1 1FH, tvm-uk.com.
How the authorities impact animal welfare and human well-being

In their first conference of 2018, AWSELVA and the British Veterinary Forensic and Law Association covered the theme “legal implications of veterinary examinations”

A variety of thought-provoking and innovative ideas were covered at the joint AWSELVA and British Veterinary Forensic and Law Association conference in January. Kendal Shepherd’s take-home message was that “behaviour must be considered throughout the case” and not as a snapshot in time; Sarah Wolfensohn presented the Animal Welfare Assessment Grid, which graphically records animal welfare on scales relating to physical assessment, psychological well-being, environmental standards and external events, providing a more rounded picture of an animal’s welfare and a measure that can be used over time.

Shortcomings of authorities in the UK

Elizabeth Ormerod described her long career battling against the shortcomings of authorities. Her valiant efforts to set up schemes promoting human well-being alongside animal health and linking social, legal and community agencies together with veterinary services were inspiring. Elizabeth’s approach is that practice does not just happen in the practice building, but that a bond-centred practice involving all staff benefits the community and the practice, through community engagement and reputation enhancement.

This highlighted two egregious injustices that still exist in the UK concerning pet ownership. Firstly, that elderly people entering the care system are frequently not permitted to take their pets with them, and secondly, that for sufferers of domestic violence seeking places in refuge shelters, the choice is often to leave the pet in the “care” of the abuser at home or to remain in the abusive situation.

Despite the International Association of Human-Animal Interaction Organizations calling for governments to legislate for older people’s rights to keep their pets as they move into a care home as far back as 1995 (for which the US, Spain, Greece, France and Norway took action), the UK makes no such provision. In France, where pets are acknowledged as “living beings” rather than property, it is a recognised human right to retain the companionship of an animal, with pets allowed into restaurants, refuges and care homes; even holiday homes must by law accommodate the pet with its owner. In the UK, the Society for Companion Animal Studies found that only 29 percent of care homes routinely allow pets to remain with owners.

There have been efforts to do something about the issue of women fearing to leave pets behind in dangerous domestic situations, but these have come from charities, professional organisations and academia, not from the government. The Dogs Trust Freedom Project has been running for more than a decade and has placed more than 1,000 dogs in foster care while their owners manage their home situation. The RSPCA operates a PetRetreat service for animals and people in danger, though it is currently not able to offer any places.

The Links Group continues to do both research and practical work in this area and in 2018, in collaboration with the BSAVA, will be running free courses for members in recognising and dealing with abuse cases. The shelters themselves are at breaking point for managing their human cases alone, having to refer women and children to shelters hundreds of miles away or turning them away altogether.

Funding for refuges across England has dropped from £31.2 million in 2010/2011 to just £23.9 million in 2016/17, and three quarters of local councils have reduced funding for refuges since 2010, despite government pledges to boost spending in this area.

Keeping pets united with safe owners in cases of domestic violence and protecting animals from abusers of people and animals currently falls to charities and organisations struggling to cope with demand alongside the other challenges to animal welfare they manage, with little financial or legal backing from government and local authorities.

Should this be higher up the political agenda?
Developing self-awareness

The first competency of emotional intelligence can help us change and regulate our reactions to encourage more positive behaviours.

Described by Daniel Goleman as the foundation of emotional intelligence, self-awareness is the ability to be introspective to such a degree as to recognise the emotions within us at the present time. These emotions may be recognised from the past or anticipated in the future. The process involves being aware of our strengths and limitations, and of past behaviours which have followed on from certain emotions.

Being non-judgemental is an essential, but difficult, aspect of self-awareness. If we see certain emotions as good or bad, then observing them can become uncomfortable for us. To have disturbing emotions is human. To err is also human. However, to err repeatedly in the same way in reaction to these emotions is entirely within our control. This is self-regulation.

Left ignored, behaviours and reactions to feelings generally repeat themselves. We can become conditioned to react in a certain way each time we feel a particular emotion if unchecked and unregulated.

To spend our lives in denial and ignorance of our deeper selves will inevitably result in repetition of those behaviours, which may have led to our distress in the first place. For example, fear of failure may lead to anxiety, anger may lead to shouting and alienation of loved ones or colleagues, grief may lead to depression. However, we cannot begin to self-regulate if we lack true self-awareness.

Try not to judge yourself for feeling a feeling, but do judge your reactions. Self-regulation is our moral compass and the second competency of emotional intelligence.

How do I become more self-aware?

Daniel Kahneman, the Nobel Prize winner for his contribution to behavioural science, has described the difference between the experiencing self and the remembering self, and how it can affect our decision making.

Daniel explains that how we feel about the experience in the moment and how we remember that experience can be very different, sharing only 50 percent correlation. And this difference can have a significant impact on the story we are telling ourselves, the way we relate to self and others and the decisions we make, even though we may not notice the difference most of the time.

To be aware of your present self, be mindful. Pay attention to your inner state all day and try to make observing it the new normal for you. In the last issue, we discussed how to practice mindfulness. If done daily, we are observing our thoughts as they happen, rather than trying to remember them days or weeks later.

When overwhelmed, take time to look inwards at the gamut of emotions you may be feeling at times when your head is spinning. Write them down one by one. Simply by recognising each emotion, acknowledging it and giving it a name, you can take more charge of your emotions and thus more control of your ensuing reactions. It puts you in charge of your feelings, rather than allowing your feelings to be the master.

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Once you have written the emotions down, arrange them in order of importance – a triage list.

Once “sorted”, you may feel less overwhelmed and in a better place to observe whether you have any conditioned behaviours related to these emotions that you would like to change.

When we are focused, we truly have the power to change our reactions to given situations. Simply being aware of our previous conditioned reactions gives us the option to continue with that behaviour or to reject it in favour of a more productive behaviour. It’s our choice and entirely under our control.
Should practices accept more wildlife cases?

Working in a wildlife-friendly practice, Richard Edwards describes the benefits of treating a great range of species, from badgers to whales.

Richard Edwards qualified in 1989 at Cambridge after fulfilling his childhood dream. "It was a bit of a struggle getting there – but in the end, I made it," he said with a smile. "From the start I wanted to be a practice owner so I could forge my own interests. In the early days I made a concerted effort to gain as much experience as possible in what was involved in running a practice by working for several small practices in Kent and Sussex."

Richard, together with Sandra Leatherdale (VN and wife-to-be) and fellow vet Katie Rook, came across a closed video shop in Bognor Regis in a small out of town shopping mall, along with another property in Birdham, near Chichester. After securing financial support from several sources including family and locum work, both practices opened in September 1993. "It was also a learning curve in 'do it yourself' – we did everything from painting to building extensions and fitting out the surgeries. Passers-by were interested and little did we know at the time it was free advertising as there was a nice park next door where dog walkers came every day. We had a queue of new clients at our opening day event!"

Twenty-five years later as writer of this feature I am sitting with Richard in his practice office at AlphaPet Veterinary Hospital (it achieved accreditation as a Small Animal Veterinary Hospital from the RCVS in 2016). There are 13 vets in all at the three practices, plus a dedicated nursing, reception and admin team. The Birdham and Chichester surgeries are rural and have two vets working in each. They like to make sure there is regular continuity, so clients see the same vets each time. The practice also encourages new graduates in training, and several have returned to join the team.

“There is a current trend in the profession for corporate development of practices. We set this practice up from day one, and we want to retain it as our own – it’s all about staff loyalty – their future and, most important of all, the way we want to run our practice. Since I qualified I have had an interest in wildlife, and it is something I want to encourage a lot more in the veterinary profession. Having my own practice has given me this wonderful opportunity to turn my interest into reality.”

It all started with the RSPCA bringing two badgers to them in the 1990s and asking if they could do a post-mortem to see what caused their deaths – it was an horrific baiting issue, which Richard still remembers to this day!

"After that I decided the practice would take in more wildlife cases. I was my own boss so there were no issues. I’ve proved that it does not use a lot of practice resources or funds. Yes, it will take up some of our time but the results are well worth it. I refer to a case where a fox had been rescued from a hunt and was brought to me one Saturday afternoon, when I was on duty. For some reason the media got hold of the story and we got the most amazing amount of publicity as a result. I try to steer away from personal publicity, but this really helped the practice and changed my views on foxhunting.

“We can see anything, from birds caught by cats, bats, feral cats, urban foxes, hedgehogs, deer right up to stranded seals and..."
dolphins.” Richard recalls a situation where a deer was taken to another rural practice. “They were not interested and contacted a local wildlife trust who, knowing us, brought it over – a journey of some 50 miles, all told. We did an X-ray and sadly it had a broken back so little could be done. Had the other practice shown more interest – time, money and, dare I say it, unnecessary stress for the animal would have been saved. There is still this perception by many that wildlife is somehow a different veterinary discipline. That’s not really the case – most that we deal with are simply smaller versions of small animals that we see on a daily basis – and our assessments and treatments would run along the same lines.”

Richard went on to say, “The practice works closely with the local Brent Lodge Wildlife Hospital, and we call to see them on a weekly basis. Reciprocal arrangements are made and they send us clinical cases which are charged at cost. They then take recuperating cases back so we are not overburdened with wildlife patients. We also have links to other wildlife organisations including the RSPCA, which often involves us with injured swans.”

The practice is closely associated with the British Divers Marine Life Rescue (BDMLR). “We have helped rescue stranded seals, porpoises, dolphins and even whales. A few years ago, I was involved with a northern bottlenose whale that had stranded on dangerous mud flats in Langstone...
Harbour in Hampshire. One of my most memorable personal achievements was that I was able to get a blood sample from its dorsal fin. The sample was whisked back to our surgery in Bognor Regis where it was run on our in-house blood machines. Sadly, it showed that the whale had renal failure and it had to be euthanised.

“The next day we had a tiny pipistrelle bat in for treatment weighing less than 7 grams! Such can be the diversity of patients for practices that decide to deal with wildlife.”

For Richard and his team at AlphaPet it is professionally rewarding to be able to look after wildlife, despite the fact that only around 35 percent of casualties are suitable to be returned to the wild. However, they will have prevented a huge amount of unnecessary suffering. As I found out today, there is something very special for a nurse to be able to treat a pair of baby hedgehogs that would not have survived if Richard had not taken them in. “Having them did not interfere with our daily routines and certainly did not cause us any financial issues.”

The practice is one of only two local independent practices continuing to offer a genuine 24/7 out of hours service as part of their Veterinary Hospital Accreditation. This of course means many referrals come their way, which include wildlife cases.

Richard truly believes that wildlife work pays for itself. He went on to say, “PR value alone for a profession that is all too often seen as being ‘only interested in money’ helps to show us more in our true light and the reasons why we really became vets and nurses in the first place – to treat animals, paying or not. Perhaps that is also the reason why, at one point, my wife and I had 18 cats and six dogs – all originally waifs and strays that did not deserve to be euthanised simply because they didn’t have owners who could pay for the treatments they needed.”

This was proven to me again on my visit when I met Woody, a stray cat, who had been run over. His pelvis was badly damaged but Richard felt it could heal naturally, given time. He was now on his 104th day there and able to walk and looking forward to a future he certainly would not have had before.

“What I would like to see are more practices taking on the added role of looking after wildlife. We have proved that it can be done and in the process, have gained the respect of our clients who like to be kept up to date regarding any unusual cases in our reception area. Along with our colleagues at AlphaPet we can wake up in the morning feeling we have given just that little bit more back to the veterinary profession. It is not a lot to ask. Why not consider opening the door that little bit wider to let these new-found friends in?”

(A) Surgery can be performed at all times with the dedicated veterinary team on hand – this includes wildlife

(B) Nicky Roots checks the important stock cupboard – wildlife casualties need on-going treatment also, which comes out of practice funding
Advising clients on pet insurance

Four steps to help clients get to grips with pet insurance and choose a policy that will live up to expectations

HAZEL PHILLIPS
CLAIMS ASSESSOR, AGRIA PET INSURANCE

Most vets will have faced a situation where an owner doesn’t have pet insurance and wished they had. Even worse, when they’ve been paying for what they think is the right policy only to discover later that it doesn’t cover what they’d expected – sometimes leading to a heart-breaking decision.

Whether it’s restrictions on the time an illness or condition can be claimed for, or the total amount payable per condition, lack of cover can come as a nasty surprise to owners and inhibit treatment plans. There are four steps that can be used to educate clients on pet insurance:

1. Keep it simple
Pet insurance is commonly perceived to be complex – and it can be. So, clarifying the differences between types of policies, lifetime/lifelong and time or cost-limited insurance is invaluable to your clients.

Always advise not to rely on the product name; names such as Premium or Maximum Benefit may not be all they appear to be. Reading the small print is essential. Do highlight that anything other than a true lifetime policy will restrict cover either by time or benefit payable, so it’s vital owners fully understand what will suit them and their pet, and the possible implications of their choice.

2. Have a chat
Start early – no time’s better than at first consultation or puppy party. Hopefully at this stage accidents or illnesses won’t have occurred and the animal is clear of conditions that would be counted as pre-existing to an insurer.

Offer puppy and kitten owners free insurance to get their pet started on the road to a healthy and insured life. Agria can provide any practice with vouchers for owners entitling them to four weeks of free cover. If you are an Agria Appointed Representative, the free period increases to five weeks and you can activate cover there and then.

Clients often rely on their vet for advice and if they don’t get this regarding the insurance, they will resort to Google. This can lead owners to choose a policy purely based on price and resulting in cover that won’t give the long-term peace of mind a lifetime policy would offer.

Make it a habit to discuss insurance with owners of all uninsured older pets, including those that have been rehomed. While there may be exclusions around any pre-existing conditions, having a policy that covers new problems can lift a huge burden off an owner – particularly in cases where a pet develops a long-term condition requiring ongoing treatment.

Although policies often have maximum age restrictions, it’s not impossible to insure a very mature pet. Look out for and communicate offers such as Agria’s Age Amnesty, where during specific time periods, pets of any age are eligible for a new lifetime insurance policy.

3. Get creative
Make the most of the time clients are waiting for their appointment to educate them about insurance. From “patient of the month” displays to draw attention to illnesses, accidents and conditions, to purpose-made literature and displays, it all helps to highlight the importance of insuring pets and why getting a policy that will cover long-term or costly treatment is so important.

4. Make the most of online
If your practice uses its website, email and social media to communicate with clients, why not let them know about insurance-related matters online? From linking to insurers’ claim forms to highlighting special offers and free puppy and kitten insurance available at your practice, it keeps your message clear and consistent at every opportunity.

Above all, aim to convey that having pet insurance is the norm and by taking the time to choose the right type of policy, owners can be saved considerable cost and heartache throughout their pet’s life.

Lifetime Insurance from Agria Pet Insurance could be a great choice for your clients. With flexible “pick & mix” features – so owners only pay for the cover they need – £25 every year towards health checks and vaccinations, and four and five-week free puppy and kitten policies, we aim to make insurance a perfect fit for practices and their clients.

To find out how Agria can work with your practice, please get in touch with your Agria representative or visit www.agriapet.co.uk/veterinary, where you can also order literature and posters.

HAZEL PHILLIPS
CLAIMS ASSESSOR, AGRIA PET INSURANCE

Hazel qualified as a veterinary nurse in 2000, and joined Agria in 2006. She has since got married, had two kids and worked her way up to the position of claims team leader.

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Veterinary Practice | March 2018
Canine deep pyoderma

An insight into features, diagnosis and management of the bacterial infection canine deep pyoderma

German Shepherd pyoderma is a poorly understood form of deep pyoderma, with likely genetic and immunological predispositions in German Shepherd dogs or their crosses (Figure 4). Treatment is often unrewarding, with relapse after cessation of treatment a common problem.

Predisposing factors include (after Hnilica and Patterson, 2017):

- Demodicosis, especially with pedal and facial pyoderma
- Allergic skin diseases
- Scabies
- Endocrinopathy (eg hypothyroidism, hyperadrenocorticism)
- Immunosuppressive therapy (particularly with glucocorticoids)
- Autoimmune and immune-mediated diseases, especially if there has been treatment with immunosuppressive drugs
- Trauma (eg callus pyoderma) and faulty conformation in some cases of pedal pyoderma
- Any chronic skin disease where the integrity of the skin defence mechanism is compromised

Differential diagnosis

- Demodicosis (an important common underlying cause; hair plucks, skin scrapes and in chronic cases biopsy are all advised)
- Allergic skin diseases
- Calcinosis cutis (lesions in chronic cases become secondarily infected, manifesting as deep pyoderma)
- Dermatophytosis (especially in chronic cases with secondary infection)
- Atypical bacterial infections such as actinomycosis or nocardiosis
- Autoimmune diseases
- Neoplasia

Clinical features

Lesions are variable and include serosanguinous to purulent fistulous tracts, haemorrhagic bullae, nodules and varying degrees of erythema and swelling, and may be painful. The presence of blood provides an important diagnostic clue to differentiate between deep and superficial pyoderma.

Pyodermas are almost invariably associated with underlying primary factors that need to be identified and treated for successful resolution. Lesions most often involve the trunk, pressure points (callus pyoderma, Figure 1), chin, nose and feet (interdigital pyoderma, Figures 2 and 3).

Post-grooming furunculosis, frequently involving *Pseudomonas* spp., is a newly recognised deep pyoderma that develops within a few days of shampooing and grooming.

In general, however, the most important causative bacterium, and also the most commonly isolated in deep pyoderma cases, is *Staphylococcus pseudintermedius*. Other species include *S. schleiferi*, *S. aureus* and occasionally gram-negative staphylococcal infections and anaerobic bacteria. Methicillin resistance is possible in all staphylococcal infections. Its increasing occurrence worldwide mandates culture and antibiotic sensitivity; if identified, rigorous hygiene measures and owner education are essential.

Less commonly seen than superficial pyoderma, deep pyoderma breaks through hair follicles to involve the deep layers of the skin, resulting in furunculosis and cellulitis. Due to damage to blood vessels in the dermis, bloody discharge or haemorrhagic crusts are common with a risk of haematogenous spread and bacteraemia.

It may be preceded by superficial pyoderma that has not been managed effectively, but can also be manifested as local lesions, for example with callus pyoderma, chin pyoderma, interdigital nodules, and in a multifocal or generalised distribution. It can be seen with any underlying trigger or acquired immunodeficiency, but is commonly associated with demodicosis.

DAVID GRANT

David Grant, MBE, BVetMed, CertSAD, FRCVS, graduated from the RVC in 1968 and received his FRCVS in 1978. David was hospital director at RSPCA Harmsworth for 25 years and now writes and lectures internationally, mainly in dermatology.

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Consider the history and clinical signs. There may be a history of superficial pyoderma that has not been effectively treated with subsequent deterioration and development of deep pyoderma. Rule out differential diseases. All cases will benefit from hair plucks, tape strips and skin scrapes.

Cytological examination is advisable in all cases. A suppurative to pyogranulomatous inflammation is a typical finding with phagocytosis of bacterial cocci and/or rods.

Culture and antimicrobial sensitivity is necessary in all cases. The primary pathogen is usually *S. pseudintermedius* but other bacteria may be found. Cytological examination with culture and antimicrobial sensitivity are best considered together to facilitate an accurate diagnosis. Disinfection of the outer part of a draining lesion followed by deep swabbing will reduce the risk of contaminant organisms. Where no discharging lesions are present, deep tissue may need to be obtained for culture by biopsy (the outermost part of the sample needs to be discarded before submitting in sterile saline).

Histopathological examination will reveal a deep suppurative/pyogranulomatous folliculitis, furunculosis, cellulitis and panniculitis. Intralesional bacteria may be difficult to find.

**Clinical management**

Deep pyoderma cases are challenging. Time spent with owners is essential before treatment and investigations are undertaken as the diseases are serious, require lengthy treatments and incur considerable expense.

Systemic therapy should only be administered based on culture and sensitivity and an evaluation of a cytological specimen. While guidelines specific for the treatment of deep pyoderma are still lacking, general recommendations of good antimicrobial stewardship should be followed (Beco et al., 2013). Antimicrobial therapy should be given at the full registered dose, and the dog should be...
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weighed to ensure accurate dosing. A minimum of six to eight weeks of treatment is recommended, in general two weeks following clinical resolution. Close monitoring is critical and best done under veterinary supervision at all times, including cytological evaluation as clinical "cure" precedes absence of bacterial invasion.

Topical therapy can be instigated; in conjunction with systemic therapy, it will reduce surface contamination and support healing. Products should have proven antibacterial efficacy, such as those based on chlorhexidine. Underlying causes need to be investigated and treated. Topical therapy can be continued while these investigations are ongoing, and may be useful to prevent recurrence if no underlying cause is found.

When dealing with pyoderma cases, hand hygiene is very important and thorough disinfection of tables and instruments between cases is essential to avoid transmission of resistant and potentially zoonotic pathogens. This is especially important with multi-resistant pyodermas.

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Hypoallergy and dermatology support diets are not the same thing!

Selecting the right clinical diet is key to achieving the best results when managing skin disease and can be a critical component of the treatment plan

Hypoallergy diets are intended for the reduction of ingredient and nutrient intolerances in pets with adverse food reactions, whereas dermatology support diets are intended for the support of skin function in the case of dermatosis and excessive loss of hair (EU Commission Directive 2008/38/EC).

Looking at the prevalence of cutaneous disease, 94 percent of dermatoses are unrelated to food allergies (64 percent are attributed to non-allergic dermatoses such as parasitic, mycotic and infectious dermatoses and a further 30 percent attributed to non-food related allergy such as flea bite allergy or atopy). Just 6 percent of cutaneous disease is estimated to result from adverse food reactions (Olivry and Mueller, 2017).

In many practices the sales of hypoallergy or elimination diets can drastically outweigh those of dermatology support diets. Given that this is not in line with the prevalence of cutaneous disease, it could be concluded that significant numbers of dogs and cats are not being fed the most suitable diet.

Hypoallergy diets often contain lower levels of protein so are not always formulated to manage skin and coat disease, as protein is essential in the management of these cases. If you consider that protein represents around 95 percent of the hair structure in cats and dogs, and that 25 to 30 percent of daily protein intake is systemically used for skin and coat renewal requirements (Roudebush and Schoenherr, 2010), it is not logical to feed hypoallergy diets in many of these cases.

The minimum recommended protein intake for healthy dogs is 18 percent (FEDIAF, 2014), whereas the protein requirement for skin and coat recovery is between 25 and 30 percent (Roudebush and Schoenherr, 2010). The dry matter content of hypoallergy diets on the market varies with some as low as 15.5 percent.

References and recommended reading


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Shaping the future of animal health
A nutritional approach to feline hepatic lipidosis

Usually caused by a negative energy balance, feline hepatic lipidosis can often be successfully treated with aggressive nutritional management.

The liver is an astounding organ that has a part to play in 1,500 biochemical functions throughout the body. With a considerable blood supply, massive functional reserve capacity and the ability to fulfil combined digestive, waste-management, glandular and hormone-synthesising roles, it has a connection with most body systems in one way or another. No wonder liver cases present a unique clinical challenge.

For all we know of the liver’s function, we are still unaware of the exact mechanism by which triglycerides deposit within the hepatocytes of a feline hepatic lipidosis (FHL) case. While we don’t see this as a primary condition in dogs or humans, it’s not necessarily a disease specific to cats which are obligate carnivores either. It has also been observed in fasting guinea pigs, pregnant ewes, ponies and post-partum cows (Biourge, 2005).

What are the main causes?

A negative energy balance, usually caused by anorexia, is considered the primary cause for initiating FHL (Valtolina, 2017). As we expect and observe in other feline critical care cases, protein malnutrition occurs rapidly where inadequate calories are delivered.

In 5 percent of cases, FHL occurs in healthy, often overweight cats, anorexic and/or fasted for a prolonged period of time with no identified underlying disease. This form of the disease is called primary feline hepatic lipidosis.

In 95 percent of FHL cases, anorexia is triggered by pre-existing diseases, such as malabsorption/maldigestion disorders (often due to liver diseases, small intestinal diseases or pancreatitis), increased protein catabolism (neoplasia) or endocrinopathies (diabetes mellitus, hyperthyroidism) (Center, 1993). This form of the disease is called secondary feline hepatic lipidosis.

In both cases, the imbalanced catabolic process leads to mobilisation of peripheral fat stores and lipid oxidation in the liver to fulfill gluconeogenesis. This process is particularly marked in overweight and obese cats who have greater adipose stores to contribute to the peripheral lipid load. As fat mobilisation overwhelms hepatic oxidation capacity, triglycerides accumulate excessively in the hepatocytes’ cytoplasm, resulting in secondary impairment of liver function, and intrahepatic cholestasis. FHL is cytologically or histologically diagnosed when more than 80 percent of the hepatocytes are affected (Scherk and Center, 2005).

Clinical signs commonly identified are jaundice, lethargy and hepatomegaly after an extended period, anorexia, rapid weight loss and vomiting (Figure 1). Grossly, the liver can double or even triple in weight due to triglyceride infiltration (Figure 2).

Treatment of the condition

The pathophysiology of FHL is complex and not fully understood. However, we do know that aggressive nutritional management has a significant impact on outcome for patients with primary FHL. Three to eight weeks of tube feeding can reverse the condition in 80 to 85 percent of cases (Blanchard, 2004).

In cases of secondary FHL, diagnosis and treatment of the primary underlying disease is crucial, alongside aggressive nutritional management. The outcome often depends on the nature and severity of the primary disease.

The cornerstone of treatment in FHL is early nutrition. Aggressive nutritional management should be initiated on the day of admission to reverse the negative energy balance and catabolic state. The only reason for delaying nutrition is the presence of cardiovascular instability. In this case, hypoperfusion, hypotension and severe electrolyte abnormalities (hypokalaemia etc) would be addressed first. Overall, enteral feeding should be preferred over parenteral nutrition because it helps maintain intestinal structure and function (Valtolina, 2017).

Force-feeding should always be avoided, as it may result in food aversion or aspiration pneumonia, particularly in nauseous anorexic patients with potentially decreased...
mentation. Additionally, adequate energy requirements are barely met in this way. So patent is this risk that it has been recommended that offering food per os for the first 10 days should be avoided (Biourge, 2005). Tube feeding is considered the gold standard approach to refeed these patients.

While refeeding syndrome is rarely observed in clinical practice, these cases are more prone than most. Food should be introduced over a four to seven-day period, with monitoring for phosphorus and blood glucose imbalances, as well as other complications associated with tube feeding (eg aspiration pneumonia and cutaneous abscessation at the site of the tube-feeding entrance).

Nasogastric tubes are often used in the first instance (Figure 3), particularly for immediate stabilisation in patients who are haemodynamically unstable to undergo general anaesthesia. As they are better tolerated in the long term, oesophageal or gastrostomy tubes are preferred, especially if the patient is stable enough to be managed at home with daily tube feeding, providing a good tolerance of the tube alongside their neck or abdominal dressing. Most cats will start to accept food after one to two weeks of enteral feeding, and as the condition resolves, the liver regains its normal histological structure, with regression of vacuolation after four to eight weeks (Rutgers, 2008).

**Diet composition**
The ideal diet for FHL should be high in protein (minimum 30 to 40 percent of the metabolisable energy), moderate in lipids (approximately 50 percent of the metabolisable energy), and poor in carbohydrate (approximately 20 percent...
of the metabolisable energy). Glucose should be used as a carbohydrate source because it does not require digestion and can be used by enterocytes as an energy source (Center, 2005; Armstrong, 2009). While these levels are found in most commercial cat foods, recovery and convalescent diets generally deliver calories in a more convenient and digestible format. Restriction of protein levels below 25 percent of calories (as per renal diets, for example) should be reserved only for those experiencing encephalopathy due to secondary liver failure (Biourge, 2005).

Cats with FHL are considered feeding-volume sensitive; they cannot tolerate large volumes of food per meal. The total volume of food required each day should be initially divided into six to eight portions, or administered as a constant rate infusion. Antiemetic medication is often provided alongside enteral nutrition to treat or prevent tube-feeding induced nausea or vomiting (Valtolina, 2017). The use of appetite stimulants is not recommended in this context.

How it can be prevented
The risk of FHL is increased in the obese cat. Not only are the consequences and associations with chronic, often insidious weight gain damaging to health, but equally compromising is the possibility of FHL. In overweight cats, fasting or brutal diet changes should always be avoided. Food intake should be monitored at any time, especially after stressful events, including environmental upsets we commonly associate with anxiety (moving home, introduction of a new child or pet etc).

A nutritional approach to feline hepatic lipidosis

Weight loss greater than 10 percent over a week is certainly cause for concern and intense monitoring

The risk of hepatic lipidosis is why we have weight loss maxima for healthy weight loss, commonly set at approximately 3 percent body mass loss per week. Weight loss greater than 10 percent over a week is certainly cause for concern and intense monitoring (Biourge, 2005). Because cats have a higher basal need for dietary amino acids, high protein, low calorie regimens are always a better strategy for weight management when selecting a clinical diet for this purpose.

As the hepatocytes of cats with FHL often have reduced endogenous antioxidants (vitamin E and glutathione) as well as low carnitine levels, supplementation is recommended at a preventative level (Blanchard, 2002; Center, 2002; Valtolina, 2017). The use of supplementation in management of the condition remains controversial, however the use of B vitamins is advised given rapid depletion of hepatic stores (Rutgers, 2008).

It’s important that the healthcare team appreciates the road to recovery for FHL cases. Success comes with patience. In cases of primary FHL, the outcome depends on monitoring of the consequences of the many possible metabolic processes occurring within our patients, and early aggressive nutritional management. Weeks to months of consistency as well as a long-term view of reducing disease risk and recurrence will lead to greatest clinical outcome.
Treating tough dental cases

A case report of an elderly dog with stage four periodontal disease and tooth root in the nasal cavity

A nine-year-old neutered female Border Collie was referred to the practice with a long-standing history of severe halitosis, recent facial swelling and general ill health. The dog had an on/off history of halitosis, swelling of the right-hand side of the face and pain on eating. The symptoms would respond to a course of oral antibiotics, but quickly recur after the course finished. The referring veterinarian requested that intraoral radiographs be taken to determine the extent of the oral disease and to treat any underlying pathology.

Examination (awake) including whole body, extra- and intra-oral examinations

On presentation to the referral practice, the dog appeared depressed but with no raised temperature. There was a right-sided generalised facial swelling, mainly involving the right maxillary cheek area. There was a lip fold dermatitis involving the lower lip. There was some pain on opening the mouth and gross calculus and plaque present, especially around the maxillary premolar and molar teeth, with grade three furcation involvement of several premolar teeth.

There was a discharging buccal mucosa sinus above the left maxillary fourth premolar tooth (208; Figure 1). There was evidence of stomatitis involving the cheek teeth of both sides of the maxilla. Draining mandibular lymph nodes were slightly enlarged, mobile but not painful.

The dog’s pre-anaesthetic blood analysis showed a high end of normal white cell count, but there was no renal or hepatic dysfunction.

Extra- and intra-oral examination under general anaesthesia

Under general anaesthesia, an examination of the oral cavity revealed chronic periodontitis (stage four) with a number of premolar teeth exhibiting grade three furcation bone loss. Periodontal probing revealed abnormal probing depths (more than 4mm) for a number of premolar and molar teeth.

Because of the dog’s age, the referring veterinarian and client requested a whole mouth series of intraoral radiographs to aid in diagnosis and the formulation of a treatment plan. A whole mouth series of intraoral radiographs were taken using mainly a “TRUE” size four or size five phosphor storage plate, and a size two plate for the caudal mandible (CR7 VET, iM3 Dental).

Size five plates are ideal for this task. Including more teeth on the plate as well as areas of the nasal cavity (to look for nasal pathology) reduced the number of exposures required to do the whole mouth series of radiographs. A size two plate was used for both caudal mandibles (using a parallel technique). Also, the reduction in the number of exposures assisted in reducing overall anaesthesia time.

Intraoral radiographs revealed significant alveolar bone loss involving a number of teeth (105, 106, 107, 108, 205, 206, 207, 208, 209, 305, 306, 307, 405 and 406) with a fractured distal root of right side maxillary second premolar (106; Figure 2). This root had most likely fractured due to the loss of periodontal support for the tooth. There was a periodontic-endodontic lesion involving left maxillary fourth premolar tooth (208), external root resorption of the distal

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PERIODONTAL DISEASE INDEX
(American Veterinary Dental College: avdc.org)

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 0</td>
<td>No disease</td>
</tr>
<tr>
<td>Stage 1 (PD1)</td>
<td>Gingivitis – reversible, no attachment (AL*)</td>
</tr>
<tr>
<td>Stage 2 (PD2)</td>
<td>AL &lt;25% or furcation 1 exposure</td>
</tr>
<tr>
<td>Stage 3 (PD3)</td>
<td>AL 25-50% or furcation 2 exposure</td>
</tr>
<tr>
<td>Stage 4 (PD4)</td>
<td>AL &gt;50% or furcation 3 exposure</td>
</tr>
</tbody>
</table>

*AL is usually best based on measurements with a periodontal probe and intraoral radiographs

Intraoral radiographs revealed significant alveolar bone loss involving a number of teeth (105, 106, 107, 108, 205, 206, 207, 208, 209, 305, 306, 307, 405 and 406) with a fractured distal root of right side maxillary second premolar (106; Figure 2). This root had most likely fractured due to the loss of periodontal support for the tooth. There was a periodontic-endodontic lesion involving left maxillary fourth premolar tooth (208), external root resorption of the distal...
root and a communication between the tooth roots and the mucosal sinus (Figures 3 and 4).

Differential diagnoses included localised immune-mediated disease (due to the severity of the oral inflammation) and stage four periodontal disease. Based on previous good responses to oral antibiotics and periodontal probing and intraoral radiographs, a diagnosis of stage four periodontal disease (more than 50 percent bone loss and grade three furcation bone loss) with areas of localised stomatitis was made.

Treatment
Due to the long-running progression of the disease and the pet’s age, it was decided in consultation with the owner that a number of poor to hopeless prognosis teeth with grade three furcation would be extracted. Periodontal therapy would be performed on remaining teeth and the owner given instructions on the daily use of Hexarinse (Virbac Australia). Mucoperiosteal flaps were raised and multi-rooted teeth were sectioned with a high-speed LED Advantage handpiece (iM3 Dental). The LED light source built into the handpiece is excellent for the visualisation of the furcation area, the alveolar bone and the underlying roots.

All extractions went smoothly except for tooth 206 with the fractured root. This tooth was sectioned into two roots but while trying to elevate the distal root, the distal root disappeared into the apical extent of the socket. A perioperative intraoral radiograph revealed that the root was in fact in the nasal cavity (Figure 5). The preoperative radiograph demonstrated the position of the root, so with the use of a size four tungsten carbide round bur (C9110, iM3 Dental), the buccal bone plate overlying the distal root alveolus was removed, to better visualise the lost root.

Removing this bone showed the entry point of the root into the nasal cavity (Figure 6), allowing for the retrieval of the root with fine curved root forceps (D3060, iM3 Dental) (Figure 7). An intraoral radiograph confirmed complete removal of the root (Figures 8 and 9). Flushing of the alveolus with saline demonstrated saline exiting from the right nostril. This confirmed an oronasal communication and the mucoperiosteal flap had a releasing incision made at its base to allow for tension free airtight closure of the wound with...
The owner was advised of the iatrogenic oronasal com-
munication and informed that the dog may sneeze blood
for up to 24 hours. He was also advised not to lift the upper
lip to avoid unnecessary tension on the wound. At recheck,
there was no nasal discharge and wound healing was con-
tinuing uneventfully. The owner had started Hexarinse daily
and the dog was cooperative with this.

Conclusions
This case demonstrates
the importance of pre-
operative radiographs
to assist in the diagno-
sis and management of
oral diseases, especially
when planning tooth
extractions. Sometime
in the future, veterinary
registration boards will
require veterinarians
to either offer intraoral
radiographs to their clients or refer patients with oral
disease to a practice that can offer the service (this has
already happened in the state of Nevada, USA). In this case,
 intraoral radiographs were essential to manage the stage
four periodontal disease, treat the mucosal sinus, identify
potential complications of tooth extraction and assist in
dealing with these complications.

It is well accepted that the use of intraoral radiography
assists in the diagnosis and treatment planning for perio-
dontal disease as well as other oral pathology.
Welcome to the VetSpec Veterinary Income Plan (VIP) which we have launched as part of our commitment to veterinary practices and to support the launch of the VetSpec Super Premium Dog Food range.

As a member of the VetSpec Veterinary Income Plan, your practice will receive an on-going revenue stream from client VetSpec purchases without the problems associated with holding stock and financing it at your practice.

The VetSpec formulations incorporate findings from the latest international research carried out at universities and other associated facilities around the world. This research is integrated with traditional knowledge and the resulting formulae are expertly balanced by experienced VetSpec vets and nutritionists.

Benefits of membership of the VetSpec Veterinary Income Plan include:

• 10% income from all sales to your clients of VetSpec Super Premium Dog Food signed up at the veterinary practice*
• 10% discount off the range for all your veterinary practice clients that sign up to the Plan
• 20% discount for all veterinary practice staff wishing to purchase VetSpec Super Premium Complete Dog Food

The VetSpec Veterinary Income Plan is quick and easy to set up in your practice and full support will be given on site to train the designated practice member. After that the vouchers with individual codes are downloaded from your secure area on the VetSpec website (www.vetspec.com/vets). These vouchers are then simply given to your clients during visits to the practice and they can log onto the website to order their VetSpec products with the 10% discount you have provided for them.

The practice revenue stream will be automatically added to your account and credited to your bank account on a monthly basis. A statement will be e-mailed to your accounts team at the same time.

VetSpec VIP - An on-going revenue stream for your practice
Simple – Secure – No stock holding – No capital employed

Free VetSpec Puppy Packs

If your clients visit the veterinary practice with a new puppy for injections and consultations there is also the opportunity for them to sign up to the VetSpec Loyalty Scheme and receive a host of benefits.

The vets and specialist nutritionists at VetSpec have formulated VetSpec Puppy & Junior Formula for your clients new puppy and as a member of the VetSpec Loyalty Scheme they will receive a free VetSpec Puppy Pack from your practice.

The VetSpec Puppy Pack includes the following:

• A 2kg bag of VetSpec Puppy & Junior Formula to get them started
• A VetSpec Puppy Brochure to help them look after their new puppy
• The VetSpec Main Brochure with full details and formulae of the range
• A VetSpec Measure so they can accurately feed their puppy as it grows
• A VetSpec Pen

The new puppy owner can also receive from you – a VIP money-off voucher code giving them 10% off all future purchases from the VetSpec website which your veterinary practice will also earn 10% from the sales.

If you prefer to stock VetSpec products in your practice to gain higher margins then this is of course possible and you can discuss this with your VetSpec Business Manager. Or you may wish to run a combination of stocking some lines but make the others available through the VIP Plan. The Plan is completely flexible to meet your needs and maximise practice revenue.

*Net of VAT
The VetSpec Weight Loss Programme

As a well-established veterinary practice we would like to discuss running the VetSpec Weight Loss Programme at your surgery. Latest research would indicate that up to 45% of all dogs are overweight and this can lead to clinical problems later in life. VetSpec SuperLite Low-Calorie Formula is produced with a new technology to optimise the dog’s nutrition whilst allowing it to lose weight in a slow and controlled way without it feeling constantly hungry. This food has 20% less calories than ‘normal foods’ if fed as directed and means that you can control your clients’ dog’s weight but it can still be fed a delicious feed, packed with high quality vitamins and minerals. VetSpec SuperLite Formula is an outstanding Veterinary Specification supplement in a CEREAL-GRAIN-FREE Super Premium dog food including 50% Chicken with added vegetables and herbs.

There is also a Senior Formula designed to address the nutritional challenges that dogs face as they reach their more senior years. It consists of a complex Veterinary Specification supplement within a CEREAL-GRAIN-FREE Super Premium dog food including 50% Chicken with added vegetables and herbs. In particular older dogs need optimum nutrition to support a healthy immune system, which means a diet rich in anti-oxidants such as Vitamins A, E, and C and other natural sources. They are also often overweight because they are less likely to be as active and therefore need less calories on a daily basis. Just as important for older dogs is that they need more nutritional support to maintain healthy flexible joints. These complex requirements are all now built into a single delicious complete dog food - VetSpec SuperLite Senior Formula. When fed at the recommended rate additional individual supplements are therefore no longer required.

At the heart of this initiative is the strong belief that a correct bodyweight significantly reduces the risks of heart disease, diabetes and mobility issues for a dog, so this programme is about doing the right thing for your clients’ pets.

An on-going clinical trial being run at the Bishopton Veterinary Group in Yorkshire has shown how effective the VetSpec Weight Management Programme can be.

The dog will be initially examined by one of your veterinary team before joining the programme, then key to the overall success, the dog must only be fed the food that you provide.

Most dogs will be fed VetSpec SuperLite Low-Calorie Formula and older dogs will be fed the Senior Formula but final decisions will be made when the consultation takes place.

The owner and dog are then expected to return to the practice approximately every two weeks for the dog to be weighed and measured. If the rate of weight loss is too high or too low an adjustment will be made to the feeding regime.

The Weight Management Programme is obviously another opportunity for you to give VetSpec Voucher codes to your clients to generate another on-going revenue stream for your practice.

For further information about signing up to the VetSpec Weight Loss Programme speak to the VetSpec Helpline Team on 01845 565630.
At the Dairy in a Day conference, a dairy promotion plan was introduced and updates were provided on antibiotic use and milk prices.

A three-year strategy to protect the place of dairy in the UK is being funded from the production levy. The consumption of milk and dairy products is falling. Extensive market research has confirmed that more than half of the people contacted do not think about the value of dairy products to them. Younger people are consuming less dairy and young mothers and primary school teachers are a particular target for information about the production and benefits of milk. Taste and emotion are considered controlling factors.

Circulating positive messages to promote dairy
Over the coming weeks, messages will be promoted by the Department of Dairy Related Scrumptious Affairs. These include “Yoghurt for cultured individuals” and “Buttery crumpets for breakfast in bed or in the bath (you weirdos)”. Such messages will not be promoted on TV as such, but via on-demand services and on the London Underground. The use of social media will be harnessed to deliver positive outcomes and combat anti-dairy messages.

The Dairy in a Day conference delegates listened to the strategy outlined by Rebecca Miah (AHDB) and Simon Ashby (NFU) with interest. The budget is £1.2 million per annum and the delegates were anxious that the money would be effectively spent, although the means were a little baffling to those farmers who struggle with poor broadband and low mobile phone connectivity.

It was also a shock to hear about some of the tweets circulated on social media. The farmer’s wife who posted a picture of her daughter and herself drinking milk received messages calling her a murderer for giving her daughter poison. It was pointed out that although the extreme views are in the minority, they are very vocal and attract attention.

The circulation of positive messages will allow people to be better informed and offered a source of education. Promotional items are available from AHDB Dairy, including posters and cups, and supporting information is hosted on the website www.tellitlikeitis.co.uk. Despite the few extreme responses, all involved with the industry are encouraged to post positive images of farm and countryside including pictures of happy cows and videos of farmer experiences.

The opening speaker was due to be Nigel Gibbens but he was struck down with flu, leading to quips about birds, flu and vets. Slides had been forwarded by the Chief Veterinary Officer and these were presented by Andrew Butler (NFU) but he was not able to expand on the topics. The opening slide emphasised the reputation for world class quality enjoyed by British food and drink. Dairy exports have increased and high standards of animal welfare, traceability and sustainability will allow demand to increase further from overseas markets.

An action plan for antibiotic use
The use of highest priority critically important antibiotics (CIAs) is falling, although all antibiotic use in cattle is showing an increase in volumes administered alongside a fall in the number of treatments. Considerable work is ongoing at veterinary practice level to monitor antibiotic use. Emphasis ongoing is for improved diagnosis of disease problems at an early stage, the implementation of realistic biosecurity and a targeted use of vaccination. The need for endemic disease to be controlled by a local group of farmers, not just individuals, and understanding how some diseases spread quickly and others slowly requires sound cooperation between vet and farmer. After Brexit, the UK is committed to having mechanisms in place to ensure that animal health, plant health and animal welfare are protected.

Lisa Morgan (Bristol Vet School) was supported by two dairy farmers, Bryony Symms and Geoff Ash. They described how the action groups of six farmers in each group had influenced the uptake of improvements to the application of the technical knowledge driving the modern approach to antibiotic use. Both farmers emphasised that it is not easy to accept the observations of the other farmers, but visiting each farm and being guided by the university staff, it became apparent where improvements were possible and practical.

Moving away from critically important antibiotics has not proven a problem and increasingly, anti-inflammatories are administered first. Uptake of teat sealant and a switch to a targeted dry cow antibiotic for some cows has been effective. The management of calves has changed considerably with greater emphasis on colostrum administration, a fall in non-specific illness and a realisation that pneumonia vaccines were not being administered correctly. The benefits of being part of a group with technical direction were well founded but both farmers were critical of their vets. They...
felt that veterinary practices needed to be more proactive in pushing less antibiotic use and no use of CIAs.

Richard Simpson (Kingshay) reported on a survey of 45 herds participating in a health manager programme. Antibiotic use was assessed within six categories. It was found that there was a wide range of usage within each category, whether it be the use of intra-mammaries or injectables. Examples of costings for a case of mastitis showed that vet and medicine accounted for 28 percent of the total, with losses in production and culling significant economic factors at the herd level.

The speaker emphasised that the costs of veterinary time and medicines should be seen as an investment. Within the health manager programme, a reporting service is available to demonstrate antimicrobial stewardship with the herd performance compared with targets. The data collected forms part of the Red Tractor requirements for an annual antimicrobial use audit with the farm veterinary surgeon.

**Milk price volatility**

The current and future volatility with milk and managing the price risk was addressed by Chris Gooderham (AHDB), Richard Counsell (Stable) and Phil Cork (Crediton Dairy). The price of butter rose to an all-time high value of over £6,000 a tonne and still remains high today. Large quantities of skim milk powder remain in stores but manufacturers are unwilling to use product that is over six months old and liquid milk price fluctuates (and currently is falling).

When setting a price, the processors are looking at the milk pool and not the individual herd situation. Autumn calving herds account for 8 percent of the milk produced, with 92 percent of production from herds calving all year round.

If the age old saying of “up horn, down corn” is true, it would enable the insurance risk to be spread across agriculture. In forecasting a future price it is necessary to understand the risk of a price fall but it should be possible to insure for a period of time against a price drop at a cost of pence per litre. If the price goes up, there would be no additional fee. Farmers are encouraged to think of the value of certainty and uncertainty.

One small dairy with 70 producers and 1 percent of UK production has offered flat milk price contracts to farmers as a first step to engaging with stronger milk price predictability. The dairy collects around 100 million litres per annum and offered a maximum of 10 percent of the milk at 28ppl in October 2017, at up to 30 percent of the herd supply for two years. The dairy processes the milk as 60 percent UHT and 40 percent flavoured milk. Of the 10 million litres made available, 16 producers contracted for a total of 8.5 million litres. The initiative generated considerable discussion among farmers and it helped them to manage risk and consider future trends within their industry. A closer understanding of how the dairy industry operates has proved helpful to both milk buyer and milk purchaser.
Ethical dilemmas in practice

Is there clear guidance on whether to take referrals direct from a complementary therapist/paraprofessional?

Jonathan Pycock
BEVA PRESIDENT

Jonathan Pycock is an equine claims consultant for the Veterinary Defence Society and an equine reproduction expert. He is the current president of the British Equine Veterinary Association.

At the recent Society of Practising Veterinary Surgeons (SPVS) and Veterinary Management Group (VMG) joint annual congress held in January, I was fortunate to be on a panel considering ethical dilemmas in equine practice. The question “Should we accept referrals direct from a complementary therapist/paraprofessional?” was listed as a dilemma for the audience, but the healthy debate that followed previous questions meant we ran out of time. Hence, I thought it would be a good idea to raise it here and put forward my view.

Firstly, being a regulated profession we must follow the rules. Our regulatory body, the RCVS, is responsible for setting, upholding and advancing the educational, ethical and clinical standards of veterinary surgeons and veterinary nurses. Secondly, one has to do what “feels right” and act in the same way in which we would wish to be treated by fellow veterinary surgeons. Thirdly, animal welfare remains our first and foremost consideration.

The Code of Professional Conduct for Veterinary Surgeons is a well-written and accessible document. The Code makes it clear that veterinary surgeons have professional responsibilities in the following areas:

- Veterinary surgeons must make animal health and welfare their first consideration when attending to animals
- Veterinary surgeons must keep within their own area of competence and refer cases responsibly
- Veterinary surgeons must provide veterinary care that is appropriate and adequate

A whole section covers the “Supporting Guidance on Referral and Second Opinions”. This makes it clear that veterinary surgeons should facilitate a client’s request for a referral or second opinion. The guidance is crystal clear that the initial contact should be made by the referring veterinary surgeon and the client should be asked to arrange the appointment. The referring veterinary surgeon should provide the referral veterinary surgeon with the case history. Any further information that may be requested should be supplied promptly. The referral veterinary surgeon should discuss the case with the client, including the likely costs of the referral work, and report back on the case to the primary veterinary surgeon.

Another section in the Code is devoted to communication between professional colleagues, and is introduced with the wise words “Overtly poor relationships between veterinary surgeons and/or veterinary nurses undermine public confidence in the whole profession.” When taking over a colleague’s case, although both veterinary surgeon and client have freedom of choice, in the interest of the welfare of the animals involved, a veterinary surgeon should not knowingly take over a colleague’s case without informing the colleague in question and obtaining a clinical history.

The Code would seem eminently clear: a referral should not be made direct from a complementary therapist/paraprofessional. The referral veterinary surgeon should always make contact with the primary veterinary surgeon in order to obtain a full clinical history and, in turn, provide a full report of what has been done to the primary care veterinary surgeon. If the referral is taken on with no reference to the usual veterinary surgeon, one could also see problems if the horse develops an issue out of hours when the referral veterinary surgeon may not be available and certainly not available to provide appropriate veterinary care.

If the complementary therapist/paraprofessional feels that the horse needs specialist veterinary attention, they should communicate this to the owner who can, in turn, take the matter up with their usual veterinary surgeon. This would be the sensible and courteous approach.

I have recently had equine veterinary surgeons contact me to express disappointment that a veterinary colleague has attended a horse belonging to their client without consulting them, requesting the clinical history or providing information on what procedures they had performed. In these three cases, the situation involved a direct referral from an equine dental technician, but there are also reports of similar situations with direct referrals from a musculoskeletal therapist.

As responsible veterinary surgeons, it would seem wise to follow the guidance on acting within your area of competence and refer cases where appropriate at an early stage. As referral/specialist veterinary surgeons, we should have a responsibility to follow the Code in the way in which referrals are accepted. That way everyone is a winner and most importantly, we are doing the best for the horse.
A 97% LIKELIHOOD OF WEIGHT LOSS$^{1,2}$*

STARTS WITH A CONVERSATION ABOUT BEGGING BEHAVIOUR

Resisting a begging pet is difficult and may lead to overfeeding.$^{3,4}$ Find common ground with pet owners with a new conversation around begging behaviour, and improve adherence to your weight loss recommendations.

What are the options for oestrus suppression in mares?

A review of the indications for oestrus suppression in mares, including the pros and cons of various treatment options

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Indications for oestrus suppression
Some mares seem to experience back or colic-like pain in the peri-ovulatory period. A mare being “in season” (ie displaying signs of behavioural oestrus) is often perceived as a problem by owners, who feel that it makes the mare difficult to manage and/or detracts from her performance. Equally, mare owners often blame behavioural issues or poor performance on the mare being “in season”, when in fact there is another underlying cause (such as lameness or poor rider ability). It is therefore important, before embarking upon treatment to suppress oestrus, to verify that episodes of pain, behavioural problems or poor performance do indeed correlate with being in oestrus. This can be achieved through a combination of ultrasonography and serum progesterone analysis. Once verified, there are numerous treatment options available.

Progestin treatment
High plasma progesterone levels in mares suppress oestrus behaviour. Progesterone also has an inhibitory effect on the secretion of luteinising hormone, via a negative feedback effect on the hypothalamic-pituitary axis.

The oral synthetic progestin altrenogest (Regumate Equine, MSD Animal Health) is the only treatment licensed for the suppression of oestrus in mares in the UK. The license is for use during the vernal transition period, for 10 days, although oral altrenogest is often used (off-licence) for prolonged periods in mares who would otherwise be cycling regularly during the physiological breeding season.

Despite common use, oral altrenogest has significant disadvantages. It can cause positive drug test results for in-contact horses via feed contamination. It also poses risks to pregnant women, women of childbearing age, and those with certain types of tumour and thromboembolic disease. It is crucial that horse managers are aware of these risks, and that the drug is handled according to the data sheet.

The use of altrenogest may exacerbate endometrial infection if a low level of (sometimes undiagnosed) infection was present when treatment was initiated. Its use is contraindicated in mares which have been diagnosed with uterine infection. Furthermore, the use of oral altrenogest is not permitted by the governing bodies of some competitive equine sports, and others require special permissions for use to be issued. This must be discussed with the horse owner/manager.

In Australia, an injectable form of altrenogest is available (Readyserve, CEVA Animal Health). This has reduced risk of cross-contamination compared to the oral form. The same concerns otherwise apply. Injectable altrenogest can cause discolouration of the coat, alopecia and hair thinning at the site of injection – mare owners should be warned of this.

Injectable altrenogest can cause discolouration of the coat, alopecia and hair thinning at the site of injection – mare owners should be warned of this.

GnRH vaccination
The injection of the GnRH hormone (or a modified form) plus an adjuvant induces GnRH antibody formation. The antibodies bind to endogenous GnRH, and prevent endogenous GnRH from acting on pituitary receptors. This removes the normal stimulus for gonadotrophin (LH and FSH) production, and thus ultimately abolishes behavioural oestrus by reducing steroid hormone secretion.

There is no GnRH vaccine currently licensed in the UK. A GnRH vaccine (Equity, Zoetis) is licensed in Australia for the suppression of oestrus in mares. Injection site reactions have been reported. There is great individual variation in response to vaccination. Some mares continue to display behavioural oestrus, despite ovarian inactivity. Some (particularly older mares) require repeated vaccination for the treatment to work. Others enter very prolonged suppression of reproductive cyclicity, or fail to regain ovarian activity at all. Owners should be warned of this – the vaccination is not recommended for use in mares intended for future breeding.
Repetitive oxytocin injections
Repetitive injections of oxytocin during dioestrus using various regimes have been shown to suppress oestrus in some mares (Gee et al., 2012; Vanderwall et al., 2016). Normally, oxytocin mediates the endometrial prostaglandin release, which induces luteolysis and brings a mare back into oestrus. Repetitive injections of oxytocin disrupt this mechanism, probably either by down-regulating oxytocin-receptor synthesis, or by decreasing receptor sensitivity. The main disadvantage of this technique is the need for repetitive injections, which may produce injection site reactions and muscular soreness.

Injection with human chorionic gonadotrophin
Injection with human chorionic gonadotrophin has also been used as a method of suppressing oestrus in mares. It has been reported in one study using a small number of mares, with variable results (Hedberg et al., 2006).

Insertion of an intrauterine device (eg marble)
The introduction of a 30-35mm sterile marble or plastic ball into the uterus immediately after ovulation has been reported to suppress oestrus in mares (Nie et al., 2003). The mechanism of oestrus suppression was believed to be that the marble blocked the release of PGF2α from the uterus, either by mimicking an embryo moving through the uterus, or by mildly damaging the endometrium.

In recent years, it has become apparent that the use of an intrauterine marble or similar device is not an efficacious nor reliable method of suppressing oestrus in mares (Argo and Turnbull, 2010). There have been a number of reports of adverse side effects including marbles fracturing, and adverse effects on future fertility by damaging the endometrium. There are ethical issues surrounding failure to declare the insertion of an intrauterine marble at the time of sale, or during competition. Removal of marbles when they are no longer required can be difficult; conversely, some mares seem to quite literally "lose their marbles" because the treatment fails, they return to oestrus, and the marble escapes through a relaxed cervix.

Intrauterine infusion of plant oils
One paper reported that intrauterine infusion with either fractionated coconut oil or peanut (arachis) oil at day 10 post-ovulation suppressed oestrus in the majority of mares for up to 30 days post-ovulation (Wilsher and Allen, 2011). It was postulated that this worked by monounsaturated fatty acids and polyunsaturated fatty acids found in the plant oils interfering with prostaglandin synthesis, and thus blocking luteolysis.

Subsequently, two separate publications (Diel de Amorim et al., 2016; Campbell et al., 2017) reported that neither fractionated coconut oil nor peanut oil reliably suppressed oestrus in mares when infused into the uterus at 10 days post-ovulation. Both papers also suggested that intrauterine infusion of plant oils causes at least a temporary inflammation in the uterus. Veterinarians considering the use of intrauterine plant oils as a method of oestrus suppression in mares should make owners aware of these facts, and alert them that sports governing bodies could consider intrauterine plant oils to be medication.

Ovariectomy
The permanent surgical removal of the ovaries from a mare may suppress oestrus behaviour, but does not always do so. It is therefore advisable to evaluate the mare’s response to non-surgical methods of inducing ovarian quiescence (such as GnRH vaccination) before proceeding to surgery – if behavioural oestrus is not significantly diminished by medical methods, it is unlikely to be by surgery. While ovariectomy avoids problems of medicine administration, it carries associated surgical risks, and obviously results in irreversible loss of fertility for the mare. Some sports governing bodies may require ovariectomy to be declared.

Conclusion
Before embarking upon suppression of oestrus as a treatment for behavioural or performance issues in mares, veterinarians should verify the correlation between the mare being in oestrus and the occurrence of the episodes of pain/undesirable behaviour/poor performance. There is currently only one licensed method of oestrus suppression for mares in the UK. All the methods described above have significant disadvantages associated with them.

References and recommended reading


The strategic role of the vet in treating equine gastric ulcers

How to devise a treatment plan for equine gastric ulcer syndrome

**MATT SWANBOROUGH**
VETERINARY ADVISOR, NORBROOK

Matt Swanborough, BVSc, MRCVS, graduated from the University of Bristol in 2014. After a few years practicing in Somerset, he joined Norbrook Laboratories GB as a veterinary advisor, providing technical and product support across all veterinary disciplines.

Equine gastric ulcer syndrome (EGUS) is now widely used as an umbrella term to encompass the regionally defined diseases of equine squamous gastric disease (ESGD) and equine glandular gastric disease (EGGD). These are the two terms we now need to become more familiar and comfortable with when talking to the horse owner and devising a treatment plan.

Of the two regionally defined causes of equine gastric ulcer syndrome, ESGD can be described in relatively simple terms. It can occur as a primary disease in horses with an otherwise normal gastrointestinal tract or secondary to delayed gastric outflow, potentially caused by pyloric stenosis (Skyes et al., 2015). Both primary and secondary disease can be easily graded in severity of appearance from 0 to 4 (Figure 1), something most horse owners are familiar with as a benchmark for treatment and the healing process.

While Table 1 demonstrates how all horses are at risk, it can easily be seen that ESGD is prolific and predominant in the racehorse. Up to 37 percent of untrained thoroughbreds and 80 to 100 percent of trained thoroughbreds will be affected by some degree of squamous ulceration (Skyes et al., 2015). Exercise type, as well as intensity, can hugely influence the prevalence of ulcers, with high-intensity training posing the most risk. An Australian study found that horses trained in urban areas were almost four times more likely to have gastric ulcers (Lester et al., 2008), which suggests even the training environment can influence the presence of the disease.

Currently the pathophysiology of EGGD is poorly understood, with the process and risk of development still to be elucidated. The grading of EGGD is also not clearly defined. When using the squamous 0 to 4 grading system, a high inter-vet variation was found when relating this scheme to glandular disease. It was deemed not to be an accurate scale to use for benchmarking the severity of ulcer appearance and, therefore, healing (Skyes et al., 2015).

As a result, the current recommendation by the European College of Equine Internal Medicine consensus is for vets in practice to use descriptive terminology instead, alongside clear distinction of the affected anatomical gastric regions (Figure 2).

![GRADE 0 The stomach lining is intact and there is no appearance of reddening or thickening](image1)

![GRADE 1 The mucosa is intact, but there are areas of reddening and thickening](image2)

![GRADE 2 Small, single or multifocal lesions](image3)

![GRADE 3 Large, single or multifocal lesions or extensive superficial lesions](image4)

![GRADE 4 Extensive lesions with areas of apparent deep ulceration](image5)

**TABLE 1** Prevalence of ESGD and EGGD in different breeds of horse (Skyes et al., 2015)

<table>
<thead>
<tr>
<th>Breed</th>
<th>ESGD prevalence (%)</th>
<th>EGGD prevalence (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thoroughbred (in training)</td>
<td>80-100</td>
<td>47-65</td>
</tr>
<tr>
<td>Thoroughbred (not in training)</td>
<td>37</td>
<td>(no available data)</td>
</tr>
<tr>
<td>Show/sport horses</td>
<td>17-58</td>
<td>(no available data)</td>
</tr>
<tr>
<td>Pleasure horses (predominantly in home environment)</td>
<td>37-59</td>
<td>54</td>
</tr>
<tr>
<td>Endurance horses</td>
<td>48</td>
<td>16</td>
</tr>
<tr>
<td>Endurance horses (during competition periods)</td>
<td>66-93</td>
<td>27-33</td>
</tr>
</tbody>
</table>

**FIGURE 1** ESGD grading system for both primary and secondary disease (Norbrook Laboratories Ltd)
Diagnosis

Gastric ulcers have been associated with a plethora of clinical signs, all of which are not specific and could be attributed to other factors. Typically described clinical signs include poor body condition, changes in behaviour, poor performance and poor appetite. There is currently no evidence that presenting clinical signs can be attributed to either ESGD or EGGD, nor to any particular lesion grade/descriptive terminology. Some of the more severe lesions by grade can be present as a secondary finding, with the affected horse showing no obvious signs of their presence.

In recent years there has, however, been an increase in the association of colic and gastric ulcers; up to 83 percent of recurrent colic cases have had ulceration, usually ESGD (Skyes et al., 2015). Gastroscopy is the only definitive way to diagnose gastric ulcers, so it’s good to see the proportion of practices with access to a gastroscope is increasing.

There is a clear relationship between exposure of the naturally unprotected squamous mucosa to acid resulting in ESGD. What is not clear is the pathophysiology of EGGD, yet unfortunately it is a question often asked by horse owners following diagnosis. It is believed EGGD is caused by a breakdown of normal physiological protective mechanisms, leaving the mucosa vulnerable to damage (Skyes et al., 2015). But why? In human medicine it can often be attributed to stress, Helicobacter pylori and/or NSAID use (Skyes et al., 2015). Helicobacter-like organisms have been found in some studies of horses affected with EGGD, but not all studies concur (Skyes et al., 2015). NSAIDs are equally controversial. While some appear to be able to induce ulcers when given at doses higher than recommended, there is little correlation across the population given how many individuals are prescribed these NSAID drugs overall (Skyes et al., 2015). Therefore, it is thought EGGD is likely to occur as a result of several, yet to be fully determined, compounding mechanisms.

Treatment

What remains the same no matter the region of stomach affected is the mantra of “no acid, no ulcer”, so acid suppression is still the main target for treatment. Proton pump inhibitors (omeprazole) and H2-receptor antagonists (ranitidine) are the most commonly used drug classes along with mucosal protectants such as sucralfate. There is a significant difference between the healing rate of ESGD and EGGD.

In a recent study, only 25 percent of EGGD lesions healed with 28 to 35 days of omeprazole treatment at 4mg/kg PO once daily, in contrast to ESGD lesion healing rate of 78 percent (Sykes et al., 2014, 2015). This is something that is worth highlighting to the horse owner when commencing treatment. This is compounded by all horses not responding to treatment the same way, or as expected. The horse owner may try every “hearsay” remedy for their horse, including supplements and nutraceuticals, due to ease of use and availability. A few studies have shown that some nutraceuticals can have a prophylactic effect and include combinations of an antacid (magnesium hydroxide), a pectin-lecithin complex and Saccharomyces cerevisiae for ESGD and EGGD. However, evidence for their true benefit is limited and therefore medical management remains at the forefront for the treatment of EGUS.

Implementing management changes at the time of diagnosis is important as without them the ulceration could recur within as little as five days, once medical therapy is withdrawn. Taking time with the client to discuss areas for improvement in husbandry and diet, and making suggestions of how to achieve this is invaluable and will significantly improve treatment outcomes. Something as simple as increasing the duration of the day a horse spends foraging, by increasing access to hay or turning out, is often enough to prevent ulcer reoccurrence. Ways to relieve boredom and reduce stress, particularly around times such as transport, should also be implemented.

A full reference list is available on request

The Peptizole Gastroscopy Report and Treatment Plan (a tool to aid vets with the discussion of diagnosis, treatment and management with the horse owner) can be downloaded at: norbrook.com/resources
Pathogenesis, diagnosis and treatment of strangles

Though most cases of strangles, caused by *Streptococcus equi equi*, resolve without major complication, some can have severe effects

Complications seen with *S. equi* infections can be as high as 20 percent (Ford and Lokai, 1980) and can include bastard strangles, purpura haemorrhagica, myositis, muscle infarctions, myocarditis and severe respiratory distress and mortality.

**Shedding**

*S. equi* shedding usually begins two to three days following the onset of pyrexia and can continue for two to three weeks in most animals. This can be longer when there is persistent infection within the guttural pouch or sinus. Following infection, horses can have an extended immunity to the disease, although this can be overcome if the bacterial challenge is very high (Galán and Timoney, 1985).

**Bacterial survival**

A recent study presented at the European College of Equine Internal Medicine Congress in 2017 by A Durham showed that during the summer months, *S. equi* survival appears to be up to seven days in a moist, protected environment, while in the winter, survival in buckets can be as long as 30 days. Thankfully, the bacteria are very sensitive to cleaning and strict biosecurity protocols should reduce the risk of spread.

**Diagnosis**

Routine blood work can be unrewarding as it will generally show a nonspecific inflammatory profile, which can include a neutrophilia, elevated serum amyloid A and decreased systemic iron.

Culture, though widely available and cheap, can have reduced sensitivity and so should not always be relied upon. This can be due to lack of bacteria on the mucosa in acute cases as they have migrated into the tissue, competition with *S. zooepidemicus* as these produce zoocins which kill *S. equi*, or overgrowth by the *S. zooepidemicus* complicating interpretation. Therefore, culture is often indicated alongside the use of polymerase chain reaction (PCR) rather than alone.

PCR detects partial DNA sequences and will generally have a turnaround the same day of submission, giving quick and useful results. Theoretically, the sample can pick up both dead and live bacteria, but in most cases, this is not clinically significant and the cases should be treated as infectious. Serology, via an enzyme-linked immunosorbent assay, is available and can confirm exposure to the bacteria up to six months later.
The use of serology should be carefully considered and can fulfill the below purposes but will not rule out a carrier animal:

- Comparison of paired titres to indicate current exposure/infection
- To aid in diagnosis of *S. equi* associated purpura haemorrhagica or bastard strangles
- To attempt to rule out infection prior to travel

The exact choice of test relies on the clinical scenario, but a rough guide should be:

- If there is an external abscess, then a swab for culture and PCR
- If there is nasal discharge, then a pharyngeal wash for PCR
- If there is no overt clinical disease but you are checking for carrier status, then a guttural pouch wash for PCR/culture

Serology can be used prior to movement to confirm no recent exposure.

In the acute phase of the disease, nasopharyngeal washes have been shown to be more sensitive than a nasal swab alone, likely due to the increased surface area accessed during the process (Lindahl *et al.*, 2013). To perform a nasopharyngeal wash, slowly instil 50ml of saline via a 15cm cannula or uterine pipette inserted to the level of the nasal canthus; instil the fluid and collect the washings.

Guttural pouch washes should be performed to rule out carrier status and can be performed by instilling 50ml saline via tubing passed through the biopsy channel of the endoscope and then the fluid collected.

**Control**

Reducing exposure is the best method of control and therefore quarantine of new animals (for three weeks) and screening prior to arrival is efficacious in reducing the risk of disease.

If an outbreak occurs, it is important to set in place a biosecurity control programme that should include:

- Cessation of movement on or off the yard, which should continue for two weeks beyond resolution of the clinical cases and when all cases are declared *S. equi* negative
- Implementation of suitable biosecurity, including cleaning of equipment between horses
- Implementation of a traffic light system for horses on the yard:
  - Red: clinically affected horses should be under strict isolation protocol
Pathogenesis, diagnosis and treatment of strangles

Guttural pouch empyema should be considered in all cases with persistent nasal discharge

- Profound lymphadenopathy and subsequent respiratory distress
  - Horses with lymph node abscessation generally do not require antibiotics as they will be ineffective at penetrating the abscess – instead topical treatment should be instigated to promote abscess maturation
- Bastard strangles and purpura haemorrhagica
  - Antibiotics should not be used as a preventative. This will increase resistance in the bacterial populations and decrease the immune response. If antibiotics are warranted, penicillin is considered the drug of choice and there is very little evidence of emerging resistance to antibiotics. Trimethoprim-sulfadiazine (TMPS) is generally considered efficacious but does have poor penetration and efficacy in abscesses.
  - The use of NSAIDs should always be considered as this can improve the horse’s demeanour and increase feed intake.

Conclusions

S. equi infection is normally a mild respiratory disease that has more yard implications than it does for the individual horse. Affected horses should be closely monitored to ensure they do not progress or require intensive therapy, but the mainstay of veterinary involvement includes biosecurity implantation.

References


Dog Bites: A Multidisciplinary Perspective
Daniel S. Mills, Carri Westgarth
Dog Bites brings together expert knowledge of the current situation on dog bites and dog aggression directed at humans, from a wide variety of disciplines.

Veterinary Ethics: Navigating Tough Cases
Siobhan Mullan, Anne Fawcett
Veterinary Ethics presents a range of ethical scenarios that veterinarians and other allied animal health professionals may face in practice. The scenarios discussed are not only exceptional cases with potentially significant consequences, but often less dramatic everyday situations.

The Science Behind a Happy Dog
Canine Training, Thinking and Behaviour
Emma Grigg and Tammy Donaldson
Making use of the latest in animal behaviour research and studies, The Science Behind a Happy Dog covers both scientific approaches to dog raising and practical solutions to common behavioural problems in a clear and accessible style.
A look through the latest literature

Endocrine analyses in Arab mares that reject their newborn foals

Dalia Berlin and others, Koret School of Veterinary Medicine, Jerusalem

Maternal rejection of the foal is a serious concern for horse breeders, preventing colostrum transfer, the formation of normal bonds between dam and foal and sometimes leading to physical injury in cases where the mare is especially aggressive. The phenomenon occurs more commonly in primiparous mares and in Arabians when compared with other breeds. The authors examined serum progesterone, oestradiol and prolactin levels in 15 Arabian mares that rejected their foal and eight similar mares that behaved normally towards their offspring. They found no significant differences in overall levels of the three endocrine parameters between the two groups. However, the oestradiol:progesterone ratio was higher in the normal mares at one day post parturition while this ratio increased significantly between day one and day three in the group that rejected their foals. Although the number of mares involved was small, this study offers the first evidence for possible hormonal involvement in the rejection process and is worthy of further investigation. 

The Veterinary Journal, 232, 40-45.

Current applications of infrared thermography in equine medicine

Maria Soroko and others, Wroclaw University, Poland

Infrared thermography is an imaging technique that maps changes in surface body temperature which may help in the localisation of a range of inflammatory, vascular or neurological disorders. Improvements in camera performance mean that the equipment is becoming less costly and more widely available. However, the application of this technology requires a controlled environment and strict adherence to the recommended imaging protocol, in order to avoid errors in interpretation. The authors review evidence on the utility of this modality in veterinary medicine and outline its advantages and limitations. 

Journal of Equine Veterinary Science, 60, 90-96.

Effects of reducing inspired oxygen concentration during general anaesthesia

Eduardo Uquillas and others, University of Sydney, New South Wales

A high concentration of oxygen in the inspired air may be linked to ventilation-perfusion ratio abnormalities in horses positioned in dorsal recumbency for general anaesthesia. The authors investigated the effects of reducing the oxygen concentration from 100 percent to 60 percent during equivalent procedures in 24 horses in dorsal or lateral recumbency. This reduced oxygen concentration maintained adequate arterial oxygenation for at least 50 minutes in horses anaesthetised with isoflurane and mechanically ventilated. However, the changed protocol did not reduce the risk of pulmonary function abnormalities induced by the anaesthesia and recumbency. 

Australian Veterinary Journal, 96, 46-53.

Prevalence of headshaking in the UK equine population

Sarah Ross and others, University of Bristol

Headshaking is a condition involving repeated, uncontrollable movements of the head and neck that will often be associated with self-inflicted trauma. There is rarely any evidence of a physical cause and the condition is usually classed as an idiopathic facial pain syndrome. The authors report the results of a questionnaire survey circulated on social media, horse forums and veterinary websites. Within this sample, owners reported that the behaviour had been witnessed in around 5 percent of the population. Only about one-third of owners had sought veterinary advice for the condition. 

Equine Veterinary Journal, 50, 73-78.

Clinical and pathological features in 34 cases of equine intestinal neoplasia

Jessica Spanton and others, House and Jackson, Blackmore, Essex

Intestinal neoplasia is considered a relatively rare condition in horses with alimentary lymphoma the most common form seen in one study. However, the risk of these tumours increases with age and with a growing population of horses aged more than 15 years, the prevalence may be expected to increase. The authors describe the clinical findings in 34 cases with a mean age at presentation of 19 years. Weight loss, acute or recurrent colic, inappetence, diarrhoea, depression and pyrexia were the main clinical signs. Where possible, complete surgical resection offered the best outcomes, but generally the prognosis in these patients was poor to hopeless. 

Equine Veterinary Education, 30, published online 18 January.
A friend of mine made it his new year’s resolution to learn a new word every day. That seemed rather taxing to me, so I’ve gone for one a week. My first word was maieutics. The dictionary defines this as the Socratic method of teaching, whereby the student’s latent ideas are brought into clear consciousness. A bit strange you might think, but stranger still, the Greek word means midwifery! As Socrates said in 400 BCE, “my midwifery has all the standard features [of helping women give birth] but I practice it on men instead of women and supervise the labour of their minds not their bodies.” If he had asked the women I’m sure he would have found that they had equally active minds to those of his male students, but that’s ancient Greek prejudice for you.

I’m writing this from the new veterinary college at City University in Hong Kong where, contrary to Socrates, I have 11 women and one man as students; I’m teaching them animal welfare and ethics in the first year of their course. It’s very much helping these young people give birth to their ideas; new understandings of what their aims should be as prospective vets with regard to the welfare of the animals they will be caring for and the ethics of how the animals should be used, or whether indeed they should be used at all in certain circumstances.

CityU has been proactive in developing a welfare-orientated course. All of us vets will remember the first year of our courses starting with anatomy and physiology, but the decision has been made at CityU to initiate students into a very much One Health and One Welfare programme and leave the basic science material for later in the course. And there is a good amount of time for practical instruction.

I’m only here for two weeks to give a European perspective on animal welfare, but already we’ve visited Ocean Park, a huge zoological collection associated with an amusement park very easily accessible on Hong Kong Island. The Ocean Park vets and animal carers have been tremendously helpful, showing us behind the scenes of their panda and dolphin exhibits and demonstrating how the interactions between keepers and their charges really improve the animals’ welfare. Having said that, of course, there are people who would argue that we shouldn’t keep animals in captivity like that, no matter how good the welfare is.

Introducing that ethical viewpoint to the students who were all amazed at how well the animals were kept, encourages the development of their views with exactly the midwifery approach Socrates talked about all those years ago. Here though, we are in the midst of a culture with philosophical routes going back even further than the ancient Greeks – the students are also taught animal ethics by a philosopher from the public policy unit in the university. Being able to sit in on his lectures has been really interesting, looking at how Daoist and Buddhist thought might influence our views.

Having such a small number of students has enabled a great bond to develop between us, even in just two weeks. We walked around the Goldfish Market in MongKok, close to the university. Talking one-to-one with the students as we examined the welfare of the ornamental fish, reptiles and even puppies and kittens sold in the market here really allowed us to debate how to deal with the very different public perception of animal value from what we might think ourselves. I look forward to much further discussion with these pioneering young people!
Disarming an angry client

Listening and taking your time should be the first considerations when dealing with an intimidating client.

A report published by the BVA at the start of October found that 85 percent of vets have reported that either they or a member of their team has been left feeling intimidated by a client’s actions or language. While it’s understandable – clients treasure their pets – it doesn’t make abuse right and it leaves vets and practice staff having to find strategies to cope.

There are a number of steps that practice staff can use to lengthen the fuse of irate clients. No matter what your approach, one thing is certain – your actions will either make a friend or an enemy out of the client – so tread carefully.

Customers are allowed to be angry

We’re all human and so while never deliberate, mistakes do happen. But when mistakes come to light, clients will make a point of bringing it to the practice’s attention. Whoever is on the receiving end of the complaint is probably going to want to take a stand, deflect the complaint or settle it quickly – all on the hop while the client is still talking. Contrary to what some might say, the advice here is to start from a position of assuming that the client has every right to be angry. Maybe they thought the vet was rude and didn’t listen to their concerns, or the treatment didn’t do what was promised. It’s entirely possible that the client is continuing with a previous issue they have had with the practice. Alternatively, they are angry and emotional because they are tired and the pet needs treatment at a time (and cost) when it is inconvenient. But no matter the reason or whether they’re right or wrong, you need to make a point of letting them vent their spleen. In doing this you will let them express the root cause of the complaint, which you can deal with.

Listen carefully

Listen to what is being said and how it’s being expressed. Are there any key phrases that keep being repeated that will give you a clue as to the real issue? Is it technical or personal? Fixing a problem with, say, a booking system, won’t do much for harmony if the client has a real issue with the personnel administrating the booking system over the phone.

Whatever you do, never respond with any form of emotion. A client is not angry at the person they are talking to, but rather the practice or something within it.

Allow time

Rarely will a client say everything in one go – they will seek attention, start talking, ramble and move into other areas before coming back to the main point. The worst thing you
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can do is to interrupt them – it will just make them angrier. If you let the client talk until they are done, their emotional high will subside and they will be more amendable to interactive conversation.

Be supportive with your comments and when the client has finished, take control of the situation by acknowledging that there is an issue.

Be gentle
You will never win a shouting match with a client. Sure, you may win a verbal argument, but you will have lost all self-esteem and control in the process and other clients (and staff) will hear the ruckus.

A much better solution is to always respond by speaking in a calm and gentle tone; shouting over the client will just raise tensions and voices and the key point of their complaint will never be heard. Remember that silence is golden – listen and learn. Given time, an angry client will have to calm down in order to hear what you are saying.

Don’t lose sight of the fact that the client wants to hear what you have to say – it’s the very reason they have approached you. If they didn’t want to talk, they would not have complained and instead made a point of telling everyone they know what they think of the practice. In essence, the client wants your help in seeking a resolution to the problem.

Acknowledge the problem
Before you can properly deal with the issue at hand, it’s important to go over your understanding of what the client is upset about, reiterating the key points and the priorities as the client sees them. This will not only confirm your understanding but also reassure them that you understand their problem. Again, use a gentle and calm voice and ask the client to confirm your understanding is theirs.

Work the problem
It’s irrelevant how a problem started or where the client sees themselves in the resolution process. All that matters is that you take ownership of the client’s problem and see it through to the bitter end. It’s very tempting to deny responsibility for the issue and state that it has been caused by someone else, hoping that the client and their problem will go away. Unfortunately, in today’s litigious and social media-based society, it is not going to.

The harsh reality is that even if you need to go to someone else to find out more, possibly at another of the practice’s locations, you will still be the client’s main point of contact. The client doesn’t care for hurdles and is also not bothered how internal procedures work – they just want a resolution. You, as far as they are concerned, are the one with knowledge and internal access, so assure them that you’ll use it on their behalf.

People first
Do not lose sight of the priorities. Should you fix the issue first or deal with the angry client? Should you deal with the technical or the personal? Everyone will have a different take on the quandary, but the best bet is probably to deal with the person rather than the technical issue. While it may seem entirely logical to deal with the physical manifestation, dealing with the human side of the complaint will help satisfy the client. Once they have calmed down you will be able to move on to the technical issue with them on your side. So – deal with the anger first and then progress on to fixing the problem.

Interestingly, it may transpire that the technical issue behind the complaint – say a poor booking system or a double charge made on a credit card – could be affecting other of your clients. Your client could actually be doing you a favour by bringing the issue to your attention.

Fix the problem
Once the client has been reassured, you need to move and deal with the reason for the complaint while also looking to ensure that long term, the problem does not reoccur. Cast iron guarantees that the problem (or something similar) will never happen again are not always possible. However, what you can do is tell the client that should an issue ever arise, you will be happy to be their point of contact. That said, if you think you’ve fixed the problem once and for all, make a point of proving this to the client.

Follow up
People like to be remembered and it is good practice to revisit a complaint and contact the client to ensure that they are happy with the resolutions (and the practice). A phone call or personalised email or letter is all that it takes to make the point that the client is valuable to the practice and that their complaint was taken seriously. It’s an incredibly powerful message to show that you care.

Remember if you truly don’t care about clients, dealing with issues will only ever be a short-term problem; no more clients, simply put, means no more complaints.
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5–8 April 2018   Birmingham, UK
Sometimes even your own bank won’t support you

What are the benefits of finding the right bank to support your practice?

Graham has over 40 years’ experience working in the banking industry. The last 10 years have been concentrated solely in healthcare. This also included a national responsibility for the veterinary sector.

Twenty years ago, the local vet would walk into their local bank to introduce the new partner or director who was buying into the business. A courteous meeting with the bank manager would ensue and after an appropriate time, the meeting would be concluded. The funding to allow the buy-in would have been agreed and all parties would be satisfied with the outcome.

Fast forward to 2008 and the world changed. Even though the risk profile of veterinary practices had not changed, the banks became reticent to lend and in some cases, closed their doors altogether. Long-term track records counted for nothing as the banks were forced to repair their balance sheets. Unsecured lending became particularly unattractive and where it was still available, the terms were far removed from what went before. So, what does one do now?

Surely our bank will support us?

The following case studies underline why it pays to speak to an independent financial broker to ensure you get the best deal from a bank.

Buying out a retiring partner

We were approached by a long-established and profitable mixed practice regarding the buy-out of a retiring partner. The practice felt it had an adequate succession plan in place but this was affected by the unforeseen retirement of a partner. The incoming partner had little or no cash to input and as a result, took a substantial loan from the incumbent bank. The other three partners also had “personal” loans with the bank and all were at very attractive rates.

When the senior partner came to retire, the bank was, at best, lukewarm regarding further exposure and wanted to reorganise all the debt on more attractive terms for the bank. This included additional borrowing covenants and a requirement to move a substantial part of the overdraft facility on to a loan. The remaining partners were none too happy and as a result, I called to see them.

The partnership agreement allowed the retiring partner to be paid out over a period of three years and the bank was insisting that this was adhered to in order to limit their exposure. In addition, financial performance covenants were going to have to be met to allow drawdowns on the loan in years two and three. The dangers of this type of approach are obvious and it was possible that the practice would not be able to make payments to the retiring partner in years two and three. This could then result in the retiring partner taking legal action against the practice. All in all, an unsatisfactory position and not one that seemed to be in the customer’s best interests.

I suggested that the best way forward was to arrange a facility that allowed immediate and full payment to the retiring partner. The remaining partners would have certainty and this approach meant they could negotiate a better deal.

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(for them) in terms of how much they paid out.

Knowing the likely players in the banking sector meant I could approach those banks that I knew would play ball. One bank was extremely keen to assist and was quite prepared to refinance the existing partnership debt as well as provide 100 percent finance to pay the retiring partner. The existing “personal” loans were left with the original bank. The bank could not amend the terms as no breaches had been made on these loans and the partners were therefore able to continue to enjoy the attractive terms the loans were agreed on.

The new bank also agreed to continue with the existing overdraft facility and no onerous covenants were included in the lending agreements. In total, facilities of over £1 million were provided and the deal was completed within four months of my first meeting with the partners.

**Buying into a practice**

The second case study is, in some ways, even more frustrating. This was another long-established and profitable mixed practice in a rural area with limited, if any, competition. The directors, in recognising the issues of recruitment, had wisely decided to offer one of their associate vets the opportunity to buy into the business. The practice’s own bank was approached to assist. The practice had a very low level of borrowing, which was fully secured against various properties. However, the response to the loan application was, at best, lukewarm.

We were approached by the prospective new director to assist. One of our panel of lenders was very interested but wanted the practice banking as well. One of our other lenders will lend on a stand-alone basis, but didn’t like the idea of lending to an individual to buy shares in a limited company. The practice’s bank was approached once again and initially agreed, but then changed their minds. We managed to negotiate a loan with a promise from the directors that they would move their business to the new funder.

Another hiccup occurred in that the funder wanted a second charge from the new director to secure their loan. The first mortgagee proved extremely unhelpful and we stepped in to negotiate the highest level of unsecured loan for the new director. The practice funded the small shortfall and the loan was finalised in short order.

The result of all this was that the practice now has a new young director to help with succession planning. The practice also has a bank that is very keen on the veterinary sector and is prepared to lend over sensible periods of time. This is as opposed to the ridiculously short period the original bank had reluctantly indicated they would lend over.

In both cases, a clean break to an enthusiastic and knowledgeable new lender has allowed the practices to move forward and concentrate on running the practices for the benefit of the partners/directors, staff and clients and not for the bank.

Raising finance is something you do infrequently – we have 30 years’ experience of doing it every day.
What are the pitfalls of social media for the practice?

Social media has its benefits and pitfalls for veterinary practices, but there are ways to minimise damage caused by negative comments online.

Social media has revolutionised the way we do business online and you are probably already using some form of it to market your practice. With more customers than ever using online searches and reviews to choose who they go to for animal care, an effective and positive social media presence can be key to winning and retaining customers.

Negative social media comments can damage your practice’s reputation, but you can limit that damage by having an effective online risk management and response plan in place and knowing your legal rights.

An unhappy customer has posted a negative review about my practice – what is the next step I should take?
Great practices are all sometimes subject to customer complaints, but even if you have an almost perfect satisfaction rate, it only takes a couple of aggrieved customers (rightly or wrongly) to change this.

Most reputable review websites offer you a right to reply. If you are considering writing a response to a negative review, don’t rush it. Ensure any response is solution orientated, rather than defensive, and do remember that your response could be reposted anywhere online.
A great customer service response from you, which

One of my employees has posted a defamatory comment about my practice online – what can I do?
Employee misuse of social media can be devastating to your practice, both legally and from a PR perspective.

A properly drafted and enforced policy on the use of social media by your employees is your most effective tool in protecting yourself against legal liability and harm to your reputation.

It’s crucial that parameters are established for the safe and effective use of social media and it is made clear to staff that you have the power to take action if they contravene that guidance.

What are the consequences of posting animal images online?
If you are the photographer – none. Pets are legally considered belongings and so do not have a right to privacy. Nonetheless, you will need to make sure that you respect your customers’ rights to privacy and comply with data protection law. This means you will need to remove any personal information of a customer from an image.

If you are not the photographer of the images – be careful! If the picture is taken by a third party or posted to your Facebook page by a customer, you cannot use it unless you have the permission of the photographer. The person who takes the photograph owns the copyright in that image; if you then use that image without their permission, you will be infringing on their rights.
“Blame and shame” is a term coined from the world of medicine. It relates to professional errors and refers to the reaction of the clinician, their colleagues and the organisation when things go wrong. While most people will acknowledge that we all make mistakes in “normal” walks of life, it seems different rules apply if you are a professional working in the safety-critical industry of human medicine. We trust doctors with our families, and we expect our professionals to step up. Failure is really not an option – we expect them to be superhuman.

To quote an actual superhero, “With great power comes great responsibility.” The “power” invested in the title of “professional” carries with it the burden of accountability. It’s what makes our jobs so satisfying when we get things right and so crippling when we get them wrong – because with responsibility comes blame, and all too often it is focused on the individual.

There are many sources of blame in our veterinary world. The most obvious is our regulator, the RCVS. The College, in its November 2016 newsletter, acknowledged that there was a “damaging perception” that it expected “100 percent perfection” from its members. This is not the case, exemplified by the extremely small percentage of disciplinary cases which arise from clinical mistakes. However, many in the profession believe that the College will come down on us like a ton of bricks if we have a human moment and get it wrong.

Blame comes from many sources

Clients are probably the most immediate and vociferous source of blame, demanding explanations, apologies and their money back, together with the threat of social media exposure. Not only do you have to deal with one person blaming you for your actions, you have to endure the opinion and judgement of an entire online community.

Then there are your colleagues – the people who should understand better than anyone why you did what you did and how it feels to have done it. I would hope that on every occasion, they are the people you turn to for support but I don’t think this is always the case. As James Reason points out, “the only difference between the person who acted and the one who judges those actions is knowledge of the outcome”. That knowledge is key. Our inherent hindsight and outcome biases open the door to blame.

It is not just our clients who expect us to be superhuman – we expect it of ourselves. We work long hours, don’t take breaks and struggle on when we are hungry, thirsty, ill or swamped. We fail to recognise the impact that has on our performance together with the effect of the system on our ability to deliver care. We don’t blame the identical looking packaging when we administer the wrong drug, or the poor handover procedure when we misdiagnose the patient; we berate ourselves for being careless, inattentive or sloppy. We blame ourselves.

Changing the culture

It is notable that medicine has been engaged in this debate for 18 years. Since the publication of the famous “To err is human” report, medicine has been trying to change its culture. The current Bawa-Garba case demonstrates just how difficult that is to achieve, and we should be mindful of that as we talk about changing culture in our world. It won’t happen overnight but if we want to address blame culture in veterinary practice, understanding the human factors of error management might be the place to start. 

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His month’s article marks the last in our series looking at what we expected being a vet to be like and whether the career lives up to expectations. We began with a sixth-former at the start of the series and this month, we hear from a semi-retired vet.

Bob Lehner graduated from Edinburgh in 1974; he completed a PhD in parasite immunology, and then went into general practice. He was an early adopter of in-practice certification and obtained his Cert VR in 1988. Bob was a partner in a mixed veterinary hospital (VH) practice in Hertfordshire for 25 years. Now that he is semi-retired, Bob does part-time clinical work and is employed by the RCVS as a senior PSS assessor.

I asked him to reflect in brief on his career following the same questions as earlier articles. After a fairly gloomy prediction for the future last month, Bob looked on the bright side of what the future may hold for vets just starting out.

Why did you decide to be a vet?

I was born and brought up in Kenya, at the tail end of the British Empire. Animals played a big part in my childhood. As well as domestic pets, we had horses, ponies, donkeys and a motley collection of wildlife orphans coming through the door. At one time, collecting and swapping snakes was the schoolboy craze – until one boy was bitten by a puff adder, which put a dampener on things. I was an enthusiastic rider and did well at show jumping.

Nasty tropical diseases were a part of life – I remember seeing a favourite pony die very unpleasantly from African horse sickness – which made a lasting impression on me. In fact, I didn’t really consider any other career – although I rather pompously declared, aged 12, that I would be a research vet rather than a GP (which is where I actually ended up).

I went to a fairly brutal public school, which I loathed, but we did do Cambridge Overseas A Levels and by some miracle, I was offered a place at Edinburgh (no interviews in those days), where I arrived on a cold autumn day to start my new life in a strange foreign country.

Has it lived up to expectations?

Yes. I think us post-World War II kids really were the blessed generation. Free university education, plentiful jobs and the chance to make a good living if you found your niche in a half-decent practice. After a stab at academic research I changed tack and went into practice. I ended up as a partner in a very busy and successful mixed VH practice, mainly doing first opinion equine work, but really I was the archetypal jack of all trades. I covered just about everything – farm animal, equine, small animal, deer farming, zoo work, external vet work for a major pharmaceutical company, livestock export work, etc.

Sadly however, it wasn’t all good news and I ended up an over-stressed workaholic, and then suffered some significant health issues – basically I burnt out. I realised I would have to get out, or I was surely heading for an early grave.

If you could go back in time to the 18-year-old you, would you advise him to do it again?

Yes – I can’t think of a preferable profession – but I’d look after myself better and not be so driven by chasing material success.

If you were 18 now, would you do it?

Probably, yes – but with some reservations.

What do you think the future of practice holds for the next generation of vets?

I think we’ve all become a bit gloomy and downbeat. Certainly today’s younger graduates have things tougher than we did, with massive student loans, crazy house prices and the difficulty of finding a partnership to buy into, but equally they are often better looked after these days. Who knows how long the corporate buying spree will last – the next stock market crash or rising interest rates may well be a game changer.

I’m convinced that the good privately owned practice will always flourish and I am encouraged in my PSS work that I get to visit many wonderful practices, well managed and superbly equipped, and employing competent, enthusiastic and dedicated young graduates. I’m sure they are not all going to abandon their careers for domestic bliss and parenthood.
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* Study conducted by the Royal Veterinary College. Data on file.
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