Feline disease
Managing feline injection site sarcoma

Plus

NUTRITION Requirements for senior pets / DERMATOLOGY Canine Malassezia dermatitis / EQUINE Dealing with diarrhoea / PRACTICE MANAGEMENT The rules on uniforms

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OPINION
“Many vets unwittingly and unwillingly end up providing ad hoc OOH cover to other practices’ clients” page 56
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Shaping the future of animal health
Un fortunately, with the rejection of Theresa May’s deal on 15 January 2019, we are still no closer to being able to provide answers on Brexit. We are, however, assured that representatives of the veterinary profession are doing everything they can to guarantee that animal welfare won’t suffer as a result. The BVA and RCVS are continuing to work with Defra and the Irish government, and there has been a further call for vets to be restored to the Shortage Occupation List.

The introduction of legislation for CCTV in Scottish abattoirs is also in the news this month, as well as advice for tackling the illegal import of brachycephalic puppies and the introduction of several new CPD opportunities for veterinary professionals.

In the events section, we have a guide to VetsSouth, the two-day CPD conference taking place in Exeter on 6 and 7 March 2019. Check out our top picks for the event and don’t forget to book your tickets if you haven’t done so yet!

For small animal vets, this issue has a feature by Ellie Groves on nutrition for senior pets and an interesting article on canine lungworm – is it a big threat in the UK? David Grant’s dermatology column covers canine Malassezia dermatitis, with a brief guide to treating the yeast infection. Turn to the “In focus” section for an article on the management of feline injection site sarcomas and a round-up of recent research in feline disease.

Leading deer specialist John Fletcher discusses the management of deer farms in the UK, providing an overview of the systems in place and the challenges faced by deer vets. Next month, John will go into more detail on common diseases in the UK’s farmed deer. Also in large animal, learn about the complexities of farm animal welfare in an interview with author Mark Fisher, and consider this year’s priorities for large animal vets in Richard Gard’s regular column.

Jon Pycock delves into the topical issue of equine obesity in the BEVA column and Jamie Frutton describes clinical approaches to diarrhoea cases. Kieran O’Brien returns with his “Ask the experts” series: in this instalment, he asks two specialists how they would approach various equine eye conditions.

Customer care is the focus of practice management this month; turn to this section for advice on how to improve the client experience as well as information on keeping professional records and the tax rules around staff uniforms.

“Leading deer specialist John Fletcher discusses the management of deer farms in the UK”
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BVA responds to Brexit vote

The BVA responded on 15 January 2019 to the outcome of the Brexit vote, under which MPs voted by a large majority to reject the proposed Withdrawal Agreement.

BVA President Simon Doherty said: “This result suggests that a no-deal Brexit is increasingly likely, which would have a profound impact on the veterinary profession, particularly in the short to medium term. We know that our members are particularly worried about workforce shortages and capacity, so we will ramp up our campaign to restore vets to the shortage occupation list and develop an immigration system that works for everyone in the profession.

“Uncertainty over the UK’s future status will put additional pressures on an already overstretched profession, so it is essential in the event of a no-deal scenario that the government gains listed status for the UK as a matter of urgency.

“In these uncertain times we would like to remind members that they can access our free legal helpline, particularly for questions over employment and immigration. BVA will continue to work with RCVS, Defra and other stakeholders, including the Irish government, to address the many detailed questions thrown up by a no-deal Brexit.”

Visit the BVA website to view briefings on “Brexit and the veterinary profession” and “No-deal Brexit and the veterinary profession”, which set out all the issues of interest in more detail.

Scottish legislation for CCTV in abattoirs - a win for welfare

The BVA has welcomed the announcement that Scottish legislation is to be brought forward to make CCTV mandatory in all areas of abattoirs where live animals are present.

In a statement made to the Scottish Parliament, Rural Affairs Minister Mairi Gougeon announced plans to introduce legislation in 2019. The majority of respondents to a recent Scottish government consultation backed the new measures.

England brought legislation into force in 2018, making CCTV compulsory in all abattoirs. CCTV is not yet mandatory in Welsh abattoirs, although the Welsh Assembly has introduced a funding package to help smaller sites with installation costs.

Another call for veterinary surgeons to be restored to the Shortage Occupation List

The RCVS and BVA have once again joined forces to make a clear call for veterinary surgeons to be restored to the Shortage Occupation List as part of the UK’s preparations for leaving the European Union.

The organisations made the joint submission to the Migration Advisory Committee (MAC) as part of the MAC’s review into the Shortage Occupation List which began in autumn 2018 and will report back in spring 2019. The BVA and RCVS had previously made calls for the profession to be added to the list in 2017 when the MAC held a call for evidence on the impact of the UK’s exit from the EU on various professions.

The latest submission is a development on this previous submission, focused on the need for the post-Brexit immigration system to recognise the issues affecting the veterinary workforce, which is already under-capacity, and reiterating its importance in areas such as public health, food safety, disease surveillance and control, education, research, clinical practice and animal welfare.

The submission details how the demand for veterinary services does not currently match supply and that the UK is therefore reliant on overseas registrants, particularly from the rest of the EU, who currently make up around 50 percent of new registrants in a given year. The RCVS and BVA add that, in the post-Brexit immigration system, this reliance on overseas vets needs to be recognised by adding veterinary surgeons to the Shortage Occupation List, thus reducing the immigration requirements needed for overseas veterinary surgeons to live and work in the UK and streamlining the application process for employers.

Commenting on the submission, Amanda Boag, RCVS President, said: "We wanted to use this submission as an opportunity to reiterate the circumstances currently facing the profession... We need for veterinary surgeons to be immediately added back to the list so that we can ensure that this flow of workforce continues, and that animal health and welfare is protected.

“In the meantime, we are continuing to work with BVA and the Department for Environment, Food and Rural Affairs (Defra) to look at how we can develop “home-grown” veterinary capacity in the UK through expanding the UK veterinary education sector; increasing retention rates within the profession and looking at how the veterinary team could be reformed... However, these are all long-term projects and not quick fixes to the issues facing the profession.”

As well as calling for a future immigration system to prioritise the veterinary profession, the RCVS and BVA also recommend that veterinary employers be exempt from the Immigration Skills Charge to avoid additional barriers or burdens to the employment of overseas vets and recommend that there is no minimum earning cap for veterinary surgeons applying for work visas, on the basis that veterinary surgeons are “skilled professionals who may choose to work in the UK for reasons other than remuneration”.

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In partnership with the BSAVA, the RCVS Mind Matters Initiative (MMI) will be piloting resilience training courses for veterinary professionals throughout February 2019. These free, full-day courses count towards a veterinary professional’s continuing professional development and are designed to help attendees gain the tools to become more resilient in their working lives and safeguard their mental well-being. The courses have proven incredibly popular, with the Edinburgh, London and Wales events reaching full capacity. This exemplifies the need for courses such as these, with an ever-increasing focus on the well-being of veterinary professionals.

The term resilience is not intended to focus on the individual “toughening up” to better suit their workplace, but rather to focus on their overall well-being and general resilience throughout their lives, both professionally and personally. Resilience is one of the most powerful tools to possess in a personal well-being “toolkit”. It allows adequate response to the pressures of everyday life and to “bounce back” when things get tough. Building resilience can be particularly important in the veterinary profession, in which it is known that veterinary professionals display higher than average rates of depression and anxiety, and that, sadly, vets are at an increased risk of suicide.

Taking place from 4 to 6 June 2019, Peter Edmondson and Roger Blowey are delivering the practical mastitis control seminar at Hatherley Manor Hotel in Gloucester. Over 700 vets and people from the industry have attended the popular course from all over the world.

Mastitis theory and epidemiology, including milking machine function, will be discussed in detail. During the two farm visits, delegates will familiarise themselves with the milking machine, learn how to carry out simple tests and understand how the machine interacts with udder health and undertake assessment of milking routine and environment on-farm. There will be a detailed close-up appraisal of two herds where participants will have ample opportunity for practical work. The seminar is presented in a practical format that involves discussions amongst all participants.

For more information, visit: udderwise.co.uk/mastitis-seminar
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New seborrhoeic dermatitis treatment

A new, symptomatic treatment to tackle seborrhoeic dermatitis in cats and dogs has been unveiled by Dechra Veterinary Products. Dermanolon combines triamcinolone acetonide and salicylic acid to effectively target lesions in difficult-to-access spots. It is advertised as a useful alternative for animals when shampooing is not possible.

The treatment does not contain an antibiotic, therefore does not contribute to antimicrobial resistance. Triamcinolone acetonide suppresses the inflammatory response and the symptoms of various disorders often associated with itching.

Salicylic acid gives a keratolytic effect and removes excess skin cells when applied cutaneously; it provides a drying effect, preventing maceration.

For more information on Dechra’s dermatology range, go to: dechra.co.uk

BSAVA and WVSC launch Vets Cymru

The BSAVA and the Wales Veterinary Science Centre (WVSC) have launched Vets Cymru, a two-day event offering both large and small animal “CPD by the sea” for vets and vet nurses.

The mixed practice event takes place in Aberystwyth on 28 and 29 June and has a “Welsh stamp” across the programme, plus an exhibition of around 25 companies and a social calendar which includes a traditional Welsh Twmpath – a dance night on the seafront.

It features four streams of clinically led CPD for small and large animal vets and vet nurses. Highlights already confirmed include vet David Church giving a lecture on small animal endocrinology and leading a medical mystery tour, and Sue Paterson lecturing on dermatology for vets and vet nurses. Fyrnwy Equine Group will provide a half day of equine lectures in the large animal stream, Burtons Veterinary Equipment is sponsoring a practical endoscopy event and BVA will lead discussions on antibiotic resistance and medicine control.

The Chief Veterinary Officer for Wales, Christianne Glossop, will give a welcome address on the Friday evening.

For more information, visit: bsava.com/Education/Vets-Cymru-2019

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French Bulldogs and Pug puppies top list of most illegally imported breeds

French Bulldogs and Pugs top the list of dog breeds vets most commonly suspected of being imported illegally into the UK, statistics released by the BVA one year on from the launch of its #BreedtoBreathe campaign reveal.

BVA’s Voice of the Veterinary Profession survey shows that 3 in 10 (29 percent) companion animal vets surveyed last year had seen puppies that they were concerned had been brought into the country illegally. By far the most commonly mentioned breed was the French Bulldog, with more than half (54 percent) of all vets who had suspected a case of illegal importation citing it alongside Pugs (24 percent) and designer crossbreeds such as Cockapoos (18 percent) as the three breeds they had most concerns about. Dachshunds, Chihuahuas, Shih Tzus and Poodle crosses were other breeds mentioned by vets.

The statistics mirror findings from Dogs Trust’s latest puppy smuggling investigation, which reported that 63 percent of puppies intercepted at the British border as part of the Puppy Pilot scheme between December 2015 and July 2018 were French Bulldogs, Pugs, English Bulldogs and Dachshunds.

Almost three-quarters (72 percent) of vets said their suspicions were raised by the client’s explanation of how or where they got the puppy. Around half (44 percent) were told the puppy had been brought from abroad, but they found it to be too young to have been imported legally. In more than a quarter of cases (28 percent), the puppy’s age did not appear to match the information on the pet passport, while in a similar number of cases the vet found a foreign microchip in a puppy that was too young to have been imported legally. Other reasons included poorly completed pet passports, suspicious vaccination records and poor health.

BVA Junior Vice President Daniella Dos Santos said: “The #BreedtoBreathe campaign highlighted the serious health and welfare issues that ‘cute’ flat-faced dogs suffer from, and we are extremely concerned that unscrupulous breeders are cashing in on the high demand for these and other trendy breeds.

“Vets see first-hand the tragic consequences resulting from puppies bred in deplorable conditions and taken away from their mothers at a very young age to undertake long, arduous journeys. They often suffer from disease, health problems and poor socialisation, leading to heartache and financial costs for the new owners.”

Dogs Trust Veterinary Director Paula Boyd said: “Since the changes to the Pet Travel Scheme in 2012 we have seen a significant increase in the number of underage dogs being brought into the country to be sold to unsuspecting owners.

“In most instances, owners are unaware of the horrors of their puppy’s early life, but we’re urging them to carefully consider the dog, where they’re getting them from and most importantly, to walk away if they have any concerns. Importantly, they also need to flag any concerns to Trading Standards. By increasing the number of cases reported, we stand a greater chance of government hearing our pleas for changes to the Pet Travel Scheme to better protect the welfare of all dogs.”

The #BreedtoBreathe campaign, launched in January 2018, seeks to highlight the serious breed-specific health problems brachycephalic, or flat-faced, dogs suffer from. It encourages prospective dog owners to prioritise health over looks and choose a healthier breed or crossbreed instead.

In August 2018, as part of its pet travel policy, BVA called on the government to extend the waiting time post-rabies vaccination to 12 weeks and restrict the number of animals that can travel under the Pet Travel Scheme to five per non-commercial consignment rather than five per person to help reduce illegal trade in puppies for sale via the non-commercial route.

For more information on the #BreedtoBreathe campaign, see: bva.co.uk/brachys

Vets urge owners to help horses lose weight

French Bulldog and Pug puppies top list of most illegally imported breeds

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For more information on the #BreedtoBreathe campaign, see: bva.co.uk/brachys

Vets urge owners to help horses lose weight

With some studies suggesting that more than half of certain horse populations in the UK are overweight or obese, the British Equine Veterinary Association (BEVA) is urging owners to act now to prevent their horses suffering weight-related health and welfare risks come the spring.

In today’s domesticated environment with greater access to forage, hard feed, stabling and rugs, horses and ponies can quickly pile on excess pounds. This significantly increases the risk of potentially fatal diseases such as laminitis as well as placing detrimental pressure on joints. If a horse or pony is overweight then its ability to perform any activity, competitive or otherwise, will be compromised.

Equine obesity is not a new problem, but it appears to be becoming more and more common and it’s not just ponies and native breeds that are susceptible. Studies have identified high levels of obesity in leisure horses and unaffiliated competition horses – especially those competing in showing and dressage.

According to David Rendle from BEVA’s Health and Medicines Committee, “A recent survey of more than 500 horse owners confirmed that owners have a poor ability to visually identify overweight animals.”

BEVA is currently developing information and tools to help vets work with owners as a team to tackle equine obesity.
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Changing attitudes to millennials

Practices must learn to attract and retain millennial employees, delegates of the BVA Congress were told

How can veterinary employers encourage staff to work together when people from different generations don’t understand each other? That question was raised – and answered – in the session on " Debunking the millennials myth" at BVA Congress on 15 November 2018.

Members of the millennial generation (born between 1981 and 1997) are often lampooned as self-absorbed, needy and having a strong sense of entitlement. That caricature is hardly accurate but even if it does hold a grain of truth, then tough. Those mainly responsible for spreading these claims – the baby boomer generation (born circa 1945 to 1963) – will have to get used to having them around, speakers warned.

Tracey Killen, personnel director with the John Lewis Partnership, reminded practice owners and managers that within five years, millennials will make up around 75 percent of the available global workforce. All employers, big or small, must learn how to attract and retain employees from this age group. “Sticking your head in the sand will not work; you will need these people if you want to stay in business.”

As the wife of a West Country practitioner, Tracey understands the pressures on veterinary businesses but points out that large corporations like John Lewis face much the same problems. A historically low unemployment rate and a shortage of key skills means that many companies are finding it hard to fill vacant posts. The labour market is also changing rapidly in response to technological advances that are making many traditional jobs disappear. In the remaining jobs, there will be a need for people with technical skills and with a flexible approach to their work, she said.

Catriona Curtis, veterinary talent manager for the Pets at Home group, noted that millennials belong to the first generation to have grown up as “digital natives”, in fully understanding the role of IT and moving with comfort around the social media world. Their career ambitions are very different from those of earlier generations and they neither expect nor want a job for life.

Tracey agreed that members of the millennial generation are more relaxed than their predecessors about their contractual arrangements. “This is becoming the age of the gig economy. Don’t be fooled into thinking that this means low paid, low skilled casual jobs because it is absolutely not. These will be well paid, highly skilled people who want to work on their own terms.”

Catriona Curtis said that millennial workers are not interested in erecting “hard boundaries” between their working and family/social lives and this is helping to drive the shift towards fewer full-time jobs. Increasing numbers of people are looking for part-time work. Indeed, it has been estima-
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First-class CPD at VetsSouth 2019

Taking place on 6 and 7 March 2019, VetsSouth is a regional CPD event held at Sandy Park Stadium in Exeter. The small animal conference has three key streams: small animal medicine, small animal surgery and veterinary nursing. Throughout the two days, the programme offers 27 hours of CPD. As usual, there will also be an exhibition of the latest products and services, with companies exhibiting from many different areas of small animal practice.

Delegates are sure to leave the first day of the conference on a high, with the interactive question and answer session on hot topics facing the veterinary profession today beginning at 5pm. The expert panel will comprise Wendy Nevins, BVNA President; Phil Lhermette, BSAVA President; and David Williams, Associate Lecturer at Cambridge University Department of Veterinary Medicine. Delegates are encouraged to prepare their questions to invoke discussion among the panel and audience.

The first day’s clinical programme contains talks on a wide variety of conditions seen in cats and dogs, from pancreatitis and acute vomiting and diarrhoea in the dog to cranial cruciate ligament disease and feline hyperthyroidism. The nursing stream on day one is largely focused on emergency techniques, though wound management also features.

On the second day, the medicine stream hosts a great range of topics. Disease in rabbits, researching cases, dentistry, using medical therapeutic lasers and blood transfusions are all covered. Rabbits also feature in the surgery stream, though it is back to surgical techniques for cats and dogs for the most part. The nursing stream is also more diverse on the second day; delegates will learn about weight loss programmes, brachycephaly and multimodal analgesia, among other interesting topics.

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A closer look at the VetsSouth programme

The VetsSouth 2019 conference programme will provide attendees with invaluable knowledge on small animal medicine and surgery.

With a range of expert speakers presenting over the two days, VetsSouth provides a fantastic opportunity for vets and veterinary nurses to access the latest insights, seek advice on each of the programme topics and obtain hours of CPD to aid career progression.

Small animal medicine
Day one of the small animal medicine stream will commence with a lecture on “The unstable diabetic dog” by small animal medicine expert Nick Bexfield. Throughout the day, a variety of possible conditions affecting canine patients will be explored, with lectures focusing on pancreatitis, acute vomiting and diarrhea and treatment of dry eye (KCS) in the dog. Day two in the small animal medicine stream begins with a talk on “Viral haemorrhagic disease in rabbits”, delivered by Molly Varga, a Recognised Specialist in Zoo and Wildlife Medicine. Attendees will also be given helpful advice on “Researching that difficult case – where to find information for free!”, and Bob Partridge will cover the possible dangers within your dental unit and how to avoid them. Other topics covered in the small animal medicine stream include cardiovascular emergencies and CPR in dogs and cats, as well as an insightful lecture from Pet Blood Bank UK on blood transfusions in these species.

SPEAKERS

NICK BEXFIELD
UNIVERSITY OF CAMBRIDGE

Nick Bexfield, BVetMed, PhD, DSAM, DipECVIM-CA, PGDip- MEusci, PGDHE, FHEA, MRCVS, is an EBVS European Veterinary Specialist in Small Animal Internal Medicine and RCVS Recognised Specialist in Small Animal Internal Medicine. Having held numerous roles in practice and academia, he is now Director of Small Animal Medical Services at the University of Cambridge.

MOLLY VARGA
RUTLAND HOUSE VETERINARY REFERRALS

Molly Varga, BVetMed, DZooMed (Mammalian), MRCVS, gained her RCVS Certificate in Zoological Medicine in 2001 and her Diploma (Mammalian) in 2007. Her special interests are rabbit medicine and surgery. Molly has contributed to several books and currently heads the Exotics Referral Service at Rutland House Veterinary Referrals, St Helens, Merseyside.

Small animal surgery
Day one of the small animal surgery stream will begin with an exploration of patellar luxation in the dog. This will be followed by a useful talk on the treatment of cranial cruciate ligament disease in practice. In the second part of the day, Jon Hall will deliver the latest knowledge on surgical treatment of feline hyperthyroidism and parathyroidectomy in canine patients. Alison Moores takes us into day two with a lecture based on emergency respiratory tract surgery in the dog, and eye expert David Williams will present his talk on dealing with ophthalmological surgical emergencies in dogs and cats. Many other key surgical procedures will be covered across both days of the surgery stream; these include: an in-depth look at mandibular symphysis fracture repair, gastric dilatation-volvulus, ear surgery and perineal surgery.

SPEAKERS

JON HALL
ROYAL (DICK) SCHOOL OF VETERINARY STUDIES

Jon Hall, VetMB, MA, CertSAS, DipECVS, MRCVS, graduated from Cambridge in 2004. He became an ECVS diploma holder in 2015 and has been a senior lecturer in small animal soft tissue surgery at the Royal (Dick) School of Veterinary Studies in Edinburgh since the beginning of 2017.

ALISON MOORES
ANDERSON MOORES VETERINARY SPECIALISTS

Alison Moores, BVSc (Hons), CertSAS, DipECVS, MRCVS, is an EBVS European Specialist in Small Animal Surgery. She graduated from the University of Bristol in 1996 before working in practices and at the RVC. Alison joined Anderson Moores Veterinary Specialists in 2008, where she works as a specialist soft tissue surgeon.
Molly Varga will also be presenting in the surgery stream on day two, when she will explain common surgical conditions in the pet rabbit.

**Nursing**
The two-day dedicated nursing stream will cover essential areas relevant to the veterinary nurse in day-to-day practice. Key parts of the programme will include sessions on managing blood transfusions, anaesthetising the emergency patient, choosing between wound care products and triage and assessment of the emergency patient. Attendees can also hear from author and veterinarian Emma Milne who will be taking an in-depth look into the welfare issues associated with brachycephalic breeds.

**SPEAKER**

**EMMA MILNE**
**ANIMAL WELFARE CAMPAIGNER**

Emma Milne, BVSc, MRCVS, graduated from the University of Bristol in 1996. After 12 years in practice, she became a technical advisor for Hill’s Pet Nutrition for seven years. She was a trustee of the Animal Welfare Foundation for six years and has written numerous books on pet animal welfare.

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Engage with an expert panel from across the veterinary profession in an interactive question and answer session at 5pm on Wednesday 6 March

**Hot topics facing the veterinary industry today**
Engage with an expert panel from across the veterinary profession in an interactive question and answer session at 5pm on Wednesday 6 March. BVNA President Wendy Nevins, BSAVA President Phil Lhermette and Associate Lecturer David Williams will be on the panel, providing the ideal opportunity to ask questions relating to big issues facing the veterinary profession today. Delegates will gain valuable advice from the panellists, each of whom has a different background and area of expertise.

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Reassuring advice for recent graduates

A final year veterinary student reviews The New Vet’s Handbook, published in June 2018

JAMIE RAHMAN
Jamie Rahman is a final year veterinary student at the University of Bristol. As part of his training, he undertook an intercalated Anatomical Sciences BSc. It is Jamie’s aspiration to become a specialist small animal orthopaedic surgeon.

The New Vet’s Handbook by Clare Tapsfield-Wright is exactly what its subtitle proclaims: information and advice for veterinary graduates. The author successfully conveys the wealth of experience she has gained throughout her 38-year career as a practitioner and practice owner for the benefit of future veterinarians.

Clare has an engaging and warm approach to her writing; with an overlying tone of reassurance, the text is informative while inspiring confidence.

As I sat down to read the book in what limited time I had away from the workload that accompanies final year core rotations, the text felt as though it had been written solely for me. I have just begun deliberating how to approach applying to jobs, and this is precisely where the author begins. It was in this instance that I knew the book would be more than just an attempt at aiding a new graduate embarking on the real veterinary lifestyle. Yes, you are taught about the brutal world that is applying for jobs, but you’re also left with heartening comments such as, “When you receive an invitation to come for an interview, pause for a moment and congratulate yourself.”

The author covers every topic that a new vet could think of and may encounter as they embark on their veterinary career. As well as relaying her experience from small animal practice, she includes advice for future large and equine vets gleaned from her time in mixed practice. Each chapter, from dealing with clients and co-workers to out of hours work and surgery, provides a thorough rundown of the basics and what to expect each step along the way, with handy bullet-pointed cheat sheets and tips for making your first months in practice that little bit easier.

A clear effort has been made to discuss, on a personal level, a topic very relevant to the veterinary profession: well-being. In each chapter, Clare takes the time to make sure that the reader considers the emotions and difficulties that they may experience in those first years in practice.

The book even has a dedicated chapter on taking care of yourself, as well as one centred around coping with helping owners, and yourself, say goodbye. Whilst students do get taught about methods of coping, having someone speak from experience with a caring tone feels more personal; Clare covers the delicate topic faultlessly.

I managed to read The New Vet’s Handbook from cover to cover in only a few days, but the book is more than a one-time read. The book’s clear progression through those first two years of a new graduate’s career means that it will be a great resource throughout that period. Beyond personal progression, there are notes for mentors, meaning that readers will be able to use the book to aid others in the future.

Clare has managed to provide friendly, thoughtful and, above all, very useful advice that I would highly recommend to anyone just about to graduate, just graduated or even beyond. The book is a funny and very informative read.
Choose new year’s intentions over resolutions

Why not adapt your resolutions to generate more achievable goals this year?

When we cultivate a sense of caring and kindness towards ourselves, when we fail or experience shortcomings, instead of self-judgement and criticism, we build resilience that can contribute to motivation and lasting change.

Have you made any new year’s resolutions? You know that list of things you need to achieve this year? The things that, if you achieve, will bring you resounding joy and fulfilment, and if you don’t achieve (ie if you fail), will bring dismay, disappointment and reiterate the fact that you’re a loser?

I recently talked with Matt, a vet from a large corporate practice. He said that he used to be a “chaser”. For most of his life, he chased happiness, perfection and prosperity, frequently using the mindset “if only I [had the perfect job, had enough money, had the perfect marriage].” Every year, he would make a new year’s resolution connected to one of his “chases” (I will resolve to work out every day; I will start looking for a new job; I will join online dating…) to finally feel fulfilled and satisfied in his life.

He was always successful out of the gate, but one setback spiralled him out of control and by February, he felt defeated and a new year’s resolution failure, contributing to his sadness and depression. Sound familiar? This year, how about we adapt our resolutions and set ourselves intentions instead?

What’s the difference between resolutions and intentions?

Unlike resolutions, which are tied to a specific outcome and can be more prone to failure, intentions allow us to recognise where we are in the moment, and be present and aware in that moment, embracing the journey more than the result.
She had fallen off the wagon by eating a biscuit – the forbidden fruit – and so what was the point in even trying?

Snickers at the corner shop, we have succeeded. The reward can be instant if you allow it.

The benefits of changing your attitude

Seem a bit airy fairy? Because success breeds more success, it may be the reason that you succeed this year where you didn’t last year (or the year before that). Losing weight is the by-product of changing attitudes. Changing your attitude is the real success, and is something you do have control over.

Your new year’s intention may be to spend 10 minutes or more in mindful meditation in the morning as soon as you have your coffee in hand. Once you’ve done it the first time, it feels like a real start. Twice and you’ve set a precedent. Three times and it’s become your new normal – a habit – part of your regular morning routine which you just do without questioning, and you’ve achieved your goal already because the goal was to meditate, not to become a monk by March.

Because now the alarm is set on your phone for the same time each morning, you have literally “created time” for yourself to benefit from however many minutes you’ve decided upon. If you skip a day, it doesn’t mean you’ve failed, it means you’ve skipped a day. It doesn’t undo the previous day’s work or negate its benefits. It doesn’t mean you can’t meditate tomorrow. It is not a failure. It’s a skipped day.

Julie’s success story

I met another person in counselling, Julie, a nurse, who felt that everything in her life was determined by her size. If she put on weight, she felt that everyone judged her to be a rubbish nurse, a useless wife, a stupid waste of an ever-increasing space. She chased the dream of being thin and therefore successful.

Every January, Julie resolved to lose two stone that year. Every February she had already “failed” and given up on herself. And yet, by February, she still had 11 months to lose the weight. The fact was, though, that it only took one “bad” day for Julie to give up on the only acceptable outcome for her. And that was it until the next new year.

She joined Slimming World, but every time she put on weight, she was too embarrassed to turn up to the meetings. She would binge at night and wake up in the morning wondering who was that person who had eaten all the biscuits in the tin?

So profound was her self-loathing, that if she ate one biscuit, it was such a failure in her mind that she may as well just finish the whole packet, plus a tube of Pringles to boot. She had fallen off the wagon by eating a biscuit – the forbidden fruit – and so what was the point in even trying?

If Julie had made a new year’s intention to eat as few biscuits as she possibly could, rather than a new year’s resolution to lose two stone, then falling off the wagon wouldn’t be a possibility; there would be no room for self-flagellation and the binges would become a rarity. Because, even eating one biscuit less than she wanted to would be an achievement, no matter if it was the last biscuit in the box or not.

The aim is to change our mindset and exert a degree of change as opposed to being within reach of the ultimate goal of two-stone weight loss from the date we take the Christmas tree down.

So Julie and I practised mindfulness-based eating awareness therapy (MBEAT) with dark chocolate digestives. Encouraging Julie to eat the one thing she was trying to banish from her life seemed counterintuitive, calorie-laden and contrary to what she had been doing every previous January for as long as she could remember.

We looked at the biscuits, carefully examining the wrinkled dark sheen on the chocolate side and the many different colours of light brown biscuit grains on the other. We slowly inhaled the mouth-watering, contrasting aromas of bitter chocolate and oaty biscuit.

The crunch of the first bite was the first time Julie had “listened” to a biscuit (understandable really). We felt the contrast between the two sides of the piece in our mouths and munched slowly, enjoying the mingling of the bitter and the sweet tastes and then swallowed, enjoying the feeling of this treat starting to fill our bellies.

It wasn’t long for the sugar hit to happen and it was gorgeous. We must have spent a good 10 minutes eating that biscuit, which Julie declared was the best biscuit she had ever eaten. She didn’t fancy or need another to be satiated.

Julie applied this mindset to her daily life. She managed to eat half a pack of crisps most days. I can’t do that. But more importantly, she did it without feeling that she had “sinned”. Every time she left the rest of the crisps in the bag, she became stronger; admired herself a bit more; felt more compassionate towards herself. By exerting some self-compassion, we rid ourselves of the need to self-flagellate in the form of binging and abusing our useless undisciplined bodies.

Not surprisingly, Julie lost a load of weight last year. More importantly, she judged herself less harshly and was able to appreciate that others were not relating her size to her worth as a nurse, wife and friend.

It is possible to develop a sense of kindness towards ourselves at times when we do not achieve what we had hoped. We can work on boosting resilience, which can help us to increase motivation and make lasting change.

Hence, when we stray off the path of our intention, if we learn from the experience, identify the triggers which push us off the path and get back on the path without self-deprecation, it builds more resilience every single time. These are the ways we keep the good intentions running at full throttle for the whole 12 months.
“Many animals across all classes are increasingly becoming victims of folklore husbandry”

Folklore husbandry” is an emerging term describing the phenomenon of unevidenced, pseudoscientific, convenience-led habit and opinion handed down from one ill-informed animal keeper to the next. Kevin Arbuckle, coiner of the term, outlined folklore husbandry as: “...methods or supposed ‘best practices’ which become established without proper evaluation, often justified simply because ‘it has always been done that way’ or for otherwise unknown or poorly substantiated reasons”.

It is what behavioural scientist Temple Grandin refers to as “bad practice becoming normal”, and although it’s been around a long time, and probably all vets see the consequences of it, many animals across all classes are increasingly becoming victims of folklore husbandry.

For a start, look at the legendarily and now laughable “false fact” that goldfish possess only a three-second memory, implying that by the time they have swam round their outrageously diminutive bowls it is a new experience for them and therefore not under-stimulating. Science says otherwise – goldfish have demonstrably long-term memory functions.

Still fairly well “known”, but perhaps trailing in popularity these days, is that budgerigars are “domesticated cage birds” and don’t need to fly. Not so; science finds when given real flying space they make very good use of it.

Plenty more like this are out there, but being grounded in reptile biology, my familiarity with the misunderstandings, misrepresentations and male bovine excreta that these creatures in particular have endured at the behest of folklore husbandry is staggering. In fact, recent investigations by Kevin Arbuckle and another reptile biologist, Robert Mendyk, highlight many examples where zoo and pet amphibians and reptiles become hapless victims of folklore husbandry. And it’s easy to see why. Dig into the web and many veterinary textbooks and discover a veritable goldmine of... well... nonsense.

For example: “reptiles are easy-to-keep pets”; “trading and keeping reptiles promotes conservation”; “reptiles live longer in captivity than in the wild”; “some reptiles are domesticated”; “snakes thrive in small enclosures”; “snakes are sedentary”; “snakes are insecure in large environments”; “snakes do not use space”; “snakes do not need to stretch out”; “snakes suffer from agrophobia”; “snakes are anorexic in larger enclosures”; “snakes do not require UV”; “reptiles feed, grow and reproduce better in small enclosures”; “reptiles are clean pets”; and “reptiles are non-allergenic”.

One could scientifically dismiss each of these falsehoods in turn and at length, but spatial considerations of a textual nature require that a single rejection shall do based on two factors – first there is no scientific evidence whatsoever to support any one of those claims, and second, available scientific evidence both for reptiles in the wild and in captivity contradicts each and every false fact outright.

Generally, were the popular claims correct then reptiles would long be extinct because folklore husbandry is not consistent with evolution. The notion that somehow millions of years of evolved reptile and other animal life in the wild is better served by confinement in conditions of archaic concept is, frankly, ridiculous.

Were exotic (basically wild) animals content within their miniscule plastic, wire and glass surroundings, then one could leave open all doors and lids and anticipate their own rejection of the wider or more natural world – try it and see!

Robert Mendyk said “…the expression ‘that’s what we’ve always done’ may be the five most dangerous words in the zoo lexicon, as it promotes stagnancy and complacency by discouraging scrutiny and evaluation of one’s practices”. While Robert focuses on zoos, his messages (which are a must-read for any animal keeper) are even more vital concerning exotic pets, where knowledge and husbandry bases now convey the message that “it’s easy to keep an animal... well... nonsense.

But as variously articulated by philosophers, “falsehood moves faster and wider than fact”. Whether relating to false fact or mere mistake, the appeal of using what seem easy practices over complex and extremely demanding methodologies is a winner for the idle-minded.

Efforts by some in the more professional herpetological community are underway to counter folklore, such as Herpetological Review’s “Herpetoculture” section in their publication, and Kevin Arbuckle’s work. Also, the Animal Protection Agency, RSPCA and other welfare organisations now convey the message that “it’s easy to keep an animal if it’s done badly”. However, no matter how simple one’s messaging, correcting a belief system is very difficult and parallels a long lag phase for change.

As Robert Mendyk says: “Breaking long-held keeping traditions and paradigms, and adopting new ideas and approaches can be difficult to accept.”
Nutrition requirements of senior pets

A focus on protein requirements and sarcopenia related to ageing in cats and dogs

Senior pet nutrition is a growing focus as pets in the UK live longer and we recognise the key role nutrition can play in health. There are various definitions as to the age a pet becomes classified as "senior" and these are largely subjective. Generally, cats are said to be senior from age 11 (ISFM, 2018). In dogs, it varies according to breed, with larger breeds classed as senior at around five to eight years and small breed dogs from the age of 10 (FEDIAF, 2017).

Ageing involves progressive physiological and metabolic changes leading to a decrease in organ function, and is influenced by, for example: breed size, genetics, environmental factors and nutritional factors. Functional and physiological changes associated with ageing include alterations in energy requirements (with a decreased metabolic energy requirement in dogs but no similar reduction in cats), decreased digestive and absorptive ability (most notable in cats) and sarcopenia.

Sarcopenia and the role of protein

Unless a condition requiring protein restriction, such as renal disease, is present, protein restriction is believed to cause harm and may be even more damaging than in young animals (Churchill, 2018). In fact, protein requirements are increased in the senior life stage compared to adults. In dogs, this occurs due to an imbalance in the rate of turnover, with increased protein degradation and reduced protein synthesis (Churchill, 2018); in cats, impaired digestive ability also contributes (Williams, 2018).

Sarcopenia is a reduction in lean muscle mass unrelated to disease which becomes more evident in the senior pet. It is of particular significance since it increases the risks for morbidity and mortality (Lafllamme, 2018). Senior dogs lose approximately 10 percent LBM and experience a 10 percent increase in their fat mass over the same period of time – something which could make canine sarcopenia challenging to identify if muscle wastage is hidden under excess fat stores.

Given the increased awareness of the impact sarcopenia can have on health and lifespan, clinicians should monitor this regularly in their senior patients. Muscle condition scoring (MCS) charts (Figure 2) can be a very useful tool to aid this and are free to download from the World Small Animal Veterinary Association (WSAVA) website. MCS is subjective, with classifications of normal, mild, moderate and severe. A score is reached by both visually assessing and palpating the patient, with particular focus on the bony prominences and epaxial muscles, since these tend to be the earliest sites of muscle loss in both dogs and cats (WSAVA, 2018). A proactive and preventative approach is preferred, particularly since, once lost, it is more difficult to regain muscle than fat.

1. Figure 1: The pyramid of sarcopenia and cachexia (Argilés et al., 2015) shows that both involve skeletal muscle dysfunction and a reduction in muscle mass which contributes to increased morbidity and mortality. (2) MCS charts, provided courtesy of the WSAVA, are available from the WSAVA Global Nutrition Committee Nutritional Toolkit website: wsva.org/nutrition-toolkit. Copyright Tufts University, 2014.

2. Figure 2: Muscle Condition Score (WSAVA, 2018) is assessed by visualization and palpation of the spine, scapulae, skull, and wings of the ilia. Muscle loss is typically first noted in the epaxial muscles on each side of the spine; muscle loss at other sites can be more variable. Muscle condition score is graded as normal, mild loss, moderate loss, or severe loss. Note that animals can have significant muscle loss if they are overweight (body condition score > 5). Conversely, animals can have a low body condition score (< 4) but have minimal muscle loss. Therefore, assessing both body condition score and muscle condition score on every animal at every visit is important. Palpation is especially important when muscle loss is mild and in animals that are overweight. An example of each score is shown below.

- Normal muscle mass
- Mild muscle loss
- Moderate muscle loss
- Severe muscle loss

Muscle Condition Score

Ellie Groves, BA (Hons), VetMB, MRCVS, is the Veterinary Affairs Manager at Purina Petcare. Since joining Purina, she has co-founded a cross-business initiative to drive advanced nutritional training, and her mission is to achieve a greater understanding of clinical nutrition in veterinary practice.
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What is thought to cause sarcopenia, and how can it be influenced if detected? More research has been done in humans than companion animals, but it appears to have a multifactorial aetiology (Figure 3). It is believed that several management factors; importantly, physical exercise, but also nutrition, can minimise its incidence and/or severity.

When dietary protein intake is inadequate, protein will initially be depleted from skeletal muscle, accelerating muscle wastage. General guidelines of 2.55g protein/kg bodyweight (BW) for healthy dogs and 5g/kg BW for cats have been suggested, but senior animals may need up to 50 percent more than this (Churchill, 2018). Although still an ongoing area of investigation, an increased intake of protein appears to be of particular benefit and has demonstrated a reduction in sarcopenia in dogs and cats (Laflamme, 2018). As yet, however, no optimal protein level has been determined.

As well as the overall level of dietary protein, particular types of protein and amino acids may also impact LBM. The anabolic effect of protein seems to be reliant on a threshold concentration being reached and faster absorbed proteins appear able to reach this threshold better. Whey, a more rapidly absorbed protein, is thought to contribute to greater protein synthesis (Laflamme, 2018). The amino acid lysine has also shown protection of LBM in both dogs and cats in preliminary studies (Laflamme, 2018). However, more research is required to better elucidate how additional dietary protein may improve muscle mass, and the amount and source(s) which may offer most benefit.

**Other nutrients of interest with relation to sarcopenia**

Other dietary factors which may influence sarcopenia include vitamin D and omega 3 fatty acids. Vitamin D can affect gene transcription, consequently affecting muscle cell metabolism. There appear to be links between vitamin D supplementation in humans and an increase in muscle mass and strength, though more research is needed (Laflamme, 2018). Omega 3 fatty acids in fish oil are well known to be able to reduce inflammatory mediators. Inflammatory mediators are commonly seen in sarcopenic humans and may be present in sarcopenic pets. Some interventional studies in humans do demonstrate correlations between increased omega 3 fatty acids and muscle mass, but no data currently exists evaluating the impact of fish oil in muscle mass or function in companion animals.

**Feline enteropathies**

Cats show a negative correlation between age and protein digestibility, and a fifth of cats aged over 14 have impairments of protein digestibility of greater than 20 percent (Figure 4). The same is not thought to be true of dogs. In cats, increased amounts of protein within the diet may thus be beneficial not only to minimise sarcopenia but also to compensate for reduced protein digestibility.

Although the cause(s) of this poorer digestive ability is still unknown, an idiopathic chronic enteropathy (ICE) is believed to play a role in many cases. Indeed, many cats with impaired protein digestion also show a reduction in their ability to digest fat. This may therefore contribute to both sarcopenia and a reduction in body weight (which tends to be seen in cats over the age of 11 years). Although some cats may compensate for this by eating more, thus not exhibiting weight loss or sarcopenia, in others this is not the case (Williams, 2018).

Protein intake is dependent on overall food intake as well as the food’s composition, and is closely linked to energy intake, so if patients do not meet their energy requirement they will be unable to meet their protein needs. Therefore, when considering diet, many geriatric cats may benefit from both an increased energy level and protein content within their diet in order to compensate for poorer digestive ability and no reduction in metabolic energy requirements.

In comparison, older dogs show a reduction in metabolic energy requirements of approximately 25 percent. Thus, although they may benefit from increased protein levels to minimise the incidence of sarcopenia, they tend to require a food of a lower energy density. For many senior canines, therefore, a diet with a higher protein:calorie ratio is likely to be of benefit (Churchill, 2018). These are, however, generalisations only and a comprehensive nutritional assessment should be undertaken in all individuals during a senior health screen to tailor nutritional advice to the specific patient and clinical case.

**FIGURE REFERENCES**


A full reference list is available on request.
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Fads and trends in pet nutrition

With a rapidly expanding market, it is important to look past the marketing claims and determine the nutritional value of pet food products.

The pet food business is a lucrative one. The UK pet food market value, according to the Pet Food Manufacturers Association, is over £2 billion. The European Pet Food Industry Federation (FEDIAF) estimates that there are 132 pet food producing companies. Currently, there are hundreds of options in the market available to consumers.

Pets are loved family members, and we want to provide them with the best nutrition to promote a healthy and long life. Feeding trends in dog and cat nutrition have evolved in parallel to those in human nutrition and the pet food offered in the market has diversified. It is an important part of the work of veterinarians to help pet owners choose a good diet for their pet, among the hundreds if not thousands of pet foods in the market, with very different nutritional philosophies.

Nutritional evaluation

Feeding healthy pets requires using a complete and balanced diet (for the species and life stage and adapted to lifestyle and sensitivities), in sufficient amounts to ensure a healthy body weight and a lean body condition and promote health. Veterinarians must perform a nutritional evaluation at each visit to recommend the best feeding plan to achieve these goals. This assessment also will help identify risky feeding practices to discuss with owners, identifying their concerns and providing solutions to ensure they are happy, and their pets are safely nourished.

The World Small Animal Veterinary Association (WSAVA) website has a toolkit to help the veterinary team perform this assessment: wsava.org/Guidelines/Global-Nutrition-Guidelines.

Assessing nutritional adequacy

Pet food legislation is harmonised among European Union members. Legislation aims to promote safe and nutritious pet food and regulates the pet food label. The label must define if the product is "complete" or "complementary". Complete diets provide all the required nutrients and energy in the right amounts and proportions, whereas complementary diets do not. At least 90 percent of the daily calories should come from a complete diet.

The label also contains other nutritional information, such as the analytical constituents (crude protein, crude fat, crude fibre, ash and moisture) and the ingredient list. The analysis only provides values of two (protein and fat) out of the approximately 40 essential nutrients required by dogs and cats. The ingredient list does not provide any information on ingredient quality and websites using ingredients to rank pet food are not reliable. Ingredient quality depends on nutritional content, bioavailability and safety (freshness, free of pathogens and contaminants, etc), none of which can be deduced from the ingredient name or its position on the list.

The legislation does not detail the specific requirements and it is up to each manufacturer to ensure that their diet is nutritionally adequate, which requires self-regulation. FEDIAF provides recommendations to the industry regarding nutrient requirements, which have been endorsed by the EU and can be found on the FEDIAF website.

Consumers must trust that the pet food company is ensuring the nutritional adequacy and safety of the diet. It is important to assess the manufacturer: do they employ experts (nutritionists, food scientists, etc)? How do they determine nutritional adequacy, bioavailability of nutrients, palatability and digestibility? What quality control steps do they use to ensure a safe and nutritious product before, during and after processing? The WSAVA provides a document that consumers and vets can use to call up the manufacturers: wsava.org/WSAVA/media/Aprita-and-Emma-editorial/Selecting-the-Best-Food-for-your-Pet.pdf.

Claims

According to the legislation, claims should be truthful and not mislead consumers and, in the case of functional claims (such as "promotes a shiny coat"), evidence should be available backing such a claim. Maintenance diets cannot make prevention or cure claims.

One of the most popular claims is "natural". FEDIAF recommends that the term be only used to describe substances in pet food derived from plant, animal, micro-organism or mineral, to which nothing has been added and which have been subjected only to such physical processing as to make them suitable for pet food production and to maintain the natural composition. Ingredients that are GMO cannot be labelled as natural.

Basically, the claim "natural" relates to the processing of ingredients. Many commercial diets are not 100 percent natural, since many vitamins and minerals are purified sources; in those cases, the label might read "natural diet with added vitamins and minerals". Natural and other diets with ingredient claims, like human grade or organic, are not more healthful than conventional options, and claims should not indicate otherwise.

However, the above definition of "natural" does not really...
align with what consumers think when considering a natural diet. Usually, a natural diet is understood to be closer to what cat and dog ancestors would consume in the wild. Some examples of pet food marketed as such include grain free and raw diets. Arguments in favour of their use is that they are more “evolutionarily correct” than conventional pet food and therefore will result in better health outcomes.

Grain free and raw trends
Cereals have been used in pet food for a long time and are adequate sources of nutrients and energy. The grain free claim should not suggest that cereal-containing diets are negative for dogs and cats. However, some proponents of these diets do suggest that cereals are bad because dogs and cats have not evolved eating them and they are less nutritious and could result in allergies. Both arguments are untrue since it has been shown by genome studies that dogs have a better capacity to digest and use starch due to years of scavenging human leftovers, and meat sources are much more commonly reported as canine and feline allergens than grains in the literature.

Many of these diets include non-cereal starch sources such as root vegetables or legumes and therefore are not always lower in starch than grain-containing diets. Grain free diets have been in the market for a few years, and there is no evidence to support their superiority compared to diets that include cereals.

Recently, some grain free diets, especially those from “boutique” brands and those using potatoes and legumes and exotic protein sources, have been associated with diet responsive dilated cardiomyopathy in non-typical canine breeds. The FDA is actively investigating this issue. In some, but not all, of these cases, the DCM is associated with taurine deficiency, which could indicate a lower bioavailability of the precursors (methionine and cysteine) in some of these diets. In the cases with normal blood and serum taurine, the cause of the DCM is still unknown but we know it responds to diet change.

Similarly, raw diets have been proposed to be better for dogs and cats; however, the evidence does not support most of the benefits touted, from optimal nutritional adequacy to better oral health. On the other hand, their risks have been well documented and include nutritional inadequacy, problems associated with bones (obstruction, constipation, broken teeth) and microbiological contamination and zoonosis.

There have been publicised cases of humans getting sick from microorganisms present in raw pet food and feeding raw diets is associated with higher faecal excretion of pathogens in dogs, which can be silent carriers. Concerns have been raised regarding the zoonotic potential for food-borne infections, especially in immunosuppressed or immunocompromised individuals. Due to these concerns, some veterinary hospitals have implemented no raw feeding policies in their hospitalisation wards to protect their staff and their patients. If owners want to feed raw, they should be well informed of all potential risks (including risk of zoonosis) and educated in safe handling and hygiene practices but the microbiological risk is never eliminated.

Overall, diets that are marketed as “natural”, “evolutionarily correct” or “biologically appropriate” assume that we know the diet domestic dogs and cats have evolved eating and assume that feeding such diets would promote longer and healthier lives. These are very attractive arguments, but a diet being more natural or closer to the ancestor’s diet does not imply optimum nutrition, since animals in the wild eat what is available and the lifespan of wild canids and felids is shorter than their domestic counterparts. The goals of nature/evolution are also different from pet owners’ goals, and feral animals can die young due to broken teeth, malnutrition and parasitism.

Recommendations
There is not one single ideal dietary philosophy that is best for all pets, and the best diet for a particular pet will depend on the nutritional evaluation. Finding evidence backing up the efficacy and safety of these philosophies is important to counsel our clients. When choosing a diet, the pet food company should be carefully assessed, especially their quality control, their nutritional adequacy determination and their research background. Claims should be taken with a dose of scepticism and the ingredient list should not be used to decide on the quality of a product.

Personal experience with the company and their products is invaluable; performing complete diet histories in all patients and communication with manufacturers will strengthen each clinic’s diet information database.

A full reference list is available on request
Is canine lungworm infection a risk?

An overview of the life cycle, prevalence, clinical signs, diagnosis and prevention of the parasite in the UK

Our climate is changing and regardless of whether this change is due to a lack of wind turbines and electric cars, or simply an unavoidable natural event, most of us now accept that our warmer and wetter climate is here to stay. For the small animal veterinary surgeon this may not seem to present much change to the many clinical decisions that are made every day. However, from a parasitological point of view, a warmer and wetter climate will increase survival rates for some of the parasites affecting our companion animals and this will need to be considered when advising and formulating parasite strategies for our clients.

In 2018, ESCCAP UK and Ireland identified fleas, ticks (*Ixodes* spp.) and the canine lungworm (*Angiostrongylus vasorum*) as parasites that are likely to benefit from the milder winters and warmer summers (Wright, 2018) and therefore the risk of disease caused by these parasites should be reviewed. This short article will provide an overview of canine lungworm in the UK.

*Angiostrongylus vasorum*

Since its discovery in France over 100 years ago, *A. vasorum*, also known as French heartworm, has been the focus of many headlines in the veterinary literature and press, and all for a good reason. The parasite is capable of causing severe disease in dogs, and more often than not, the pathology primarily affects the lung tissue. For this reason, *A. vasorum* is now known as canine lungworm in the UK.

Although other canine lungworm species exist, *A. vasorum* is more pathogenic than other lungworm species affecting the pulmonary system of dogs, such as *Crenosoma vulpis* and *Oslerus osleri*. The parasite, a metstrongyloid nematode, is also impossible to eradicate as it has an indirect life cycle in which slugs and snails act as intermediate hosts. Further to this, a large reservoir in the wild is provided by the red fox (*Vulpes vulpes*) and other wild canids acting as definitive hosts. Paratenic hosts include the common frog (*Rana temporaria*) and other more surprising hosts have been identified, such as captive red pandas in the UK (Patterson-Kane et al., 2009) and Denmark, and wild otters in Denmark.

The parasite’s life cycle begins with eggs hatching in the pulmonary blood vessels releasing L1 larvae, which are then carried by the blood vessels to the lung capillaries where they penetrate the alveolar and bronchial walls. The L1 larvae then migrate to the oropharynx where they are swallowed and excreted in the faeces. The further development from L1 to the infective L3 larval stage is facilitated by the intermediate host.

The L3 larvae are now ready to infect the canid, either directly by ingestion of the larvae from the environment or indirectly by ingestion of an intermediate or paratenic host. After ingestion by the definitive host, the parasite embarks on a migration from the gut wall to the abdominal lymph nodes, where it enters the portal circulation. It then migrates through the liver tissue on its way to the right ventricle and pulmonary arteries, where the final maturation and reproduction takes place. Once the eggs are hatched, L1 larvae are released and the life cycle is complete. The pre-patent period varies from 4 to 15 weeks.

Prevalence

*A. vasorum* has a near worldwide distribution, including Europe, Africa and North and South America. In Europe, *A. vasorum* is considered endemic within certain countries, including the UK, Ireland, France, Spain, the Netherlands, Germany and Italy, as well as countries with colder winters such as Denmark, Sweden and Poland. In some countries, “endemic hotspots” have been identified from which the parasite may have spread to other regions, possibly aided by the travelling of infected dogs to previously unaffected areas.
In the UK, since the first report in 1975 in a dog imported from Ireland, *A. vasorum* has spread and endemic hotspots are now identified in the south east and south west of England as well as in Wales. Comparative studies of the extent of infection in foxes in the UK, conducted eight years apart in 2005/06 and 2013/14, have shown a significant increase in prevalence, as well as a significantly higher prevalence in all regions except the south (Taylor et al., 2015).

Although an effect of short-term weather patterns and differences in mean temperatures on the results of this study cannot be completely ruled out, the survey clearly shows that *A. vasorum* is now present in all areas of the UK, including the north of England, Scotland and Northern Ireland, and as such the risk of infection is now higher than previously thought.

**Clinical features**

Disease caused by *A. vasorum* can occur in dogs of any age and studies have shown that dogs under two years old are more at risk. It has been reported that clinical signs are more likely to be seen in the winter and spring – possibly a reflection of an increased risk of infection in late summer when the intermediate hosts are more prevalent.

Clinical disease is due to the presence of adult worms and eggs in the pulmonary vessels and the larval migration through the lungs in particular. It is important to remember that mild infection with *A. vasorum* may be asymptomatic, whereas more severe infections can result in a wide range of symptoms reflecting pulmonary, cardiac, coagulative and occasionally neurological disorders due to bleeding in or around the central nervous system.

Not surprisingly, the list of clinical signs and symptoms is long and may include a cough (may be productive), dyspnoea, tachypnoea, exercise intolerance, anaemia, haematomas, melaena, heart murmurs, tachycardia, congestive heart failure and neurological defects, to name a few. No clinical sign is pathognomonic of angiostrongylosis.

**Diagnosis**

Baermann’s test is a quick method of detection which can be performed at low cost in-house by trained staff. A newer in-house test is now available for the detection of circulating *A. vasorum* antigen using serum or plasma. A faecal smear test is less reliable. Negative results do not rule out angiostrongylosis as false negative results are possible. If clinical suspicion remains, the parasite should not be ruled out on the basis of a negative test and further investigation should be considered.

**Prevention**

Considering the available research, it is clear that the risk of dogs being infected with *A. vasorum* is variable across the UK, but the risk is present, to some extent, in all areas.

To prevent infection, avoiding exposure to the intermediate hosts should be encouraged. Feeding outside should be avoided and walking dogs on the lead in the mornings and evenings as well as in damp weather, when the intermediate hosts are most likely to be encountered, may be a reasonable option for some owners. However, risk cannot be eliminated entirely by such practice.

Licensed preventative treatments with anthelmintics of the macrocyclic lactone group are today available in formulations containing moxidectin or milbemycin oxime (but note that due to P-glycoprotein interaction, products containing macrocyclic lactones should not be administered concurrently in dogs).

When these treatments are administered on a monthly basis, they will prevent established infections and the destructive migration of L1 larvae through the pulmonary tissues. Importantly, this treatment also prevents further spread of the parasite in the environment – the same environment that, due to global warming, seems to be changing and becoming more accommodating to this little, but potentially fatal, nematode.

**References**


Canine Malassezia dermatitis

How to identify the infection and tackle it with systemic and topical therapy

Although there are at least 18 species of Malassezia, the only canine species of current significance is Malassezia pachydermatis. This yeast can colonise many breeds of dogs, although Basset Hounds, West Highland White Terriers, Shih Tzus, English Setters, American Cocker Spaniels, Boxers, Dachshunds, Poodles and Australian Silky Terriers are predisposed (Bond et al., 2018). In addition, atopy is often associated with secondary Malassezia infection and in these dogs, there is often immediate test reactivity to M. pachydermatis.

Apart from breed predisposition and atopy, there are additional predisposing factors:

- Fleabite hypersensitivity (Figure 1)
- Food hypersensitivity
- Primary and secondary cornification defects
- Folds (increased warmth and humidity favours yeast infection)
- Endocrine disease
- Climate (warm humid climates favour yeast infection)

Some cases are idiopathic, however, and in these, control, but not cure, will be necessary.

Clinical presentation in dogs

- Lesions are most often seen in interdigital spaces, ventral neck, axillae, perineal region, the external ear canal or folds (Hnilica and Patterson, 2017)
- Moderate to severe pruritus
- Erythema (with or without papules)
- Scaling
- Greasy exudation
- Hyperpigmentation/lichenification (Figure 2); leathery, elephant-like skin
- Malodour
- Paronychia with crusting, greasy exudation and hyperpigmentation (Figure 3)
- Cheilitis/muzzle erythema; these cases often exhibit extreme facial pruritus

Approach to the case

A full history should be taken, physical examination performed, and clinical signs noted. Cytological examination should be performed. A variable number of yeasts may be present; even small numbers with supporting clinical signs should prompt initiation of therapy, though resampling may be necessary if doubt exists.

The most useful sampling technique in practice is adhesive tape, and the best results are obtained with ultra-transparent tape. To do this, apply the tape to the skin, remove it, wrap it around the glass slide for staining, Diff-Quik stain it and then examine it under oil immersion high power to identify yeast organisms (Figure 4).

![Figure 1](image1.png) Malassezia hypersensitivity in a German Shepherd dog. There is a band of erythematous pruritic skin dorsally of one year’s duration. The underlying cause was fleabite hypersensitivity, which had been resolved, but clinical resolution of pruritus required four weeks of topical therapy for the secondary yeast infection

![Figure 2](image2.png) Lichenification and hyperpigmentation in a West Highland White Terrier secondary to chronic atopic dermatitis

![Figure 3](image3.png) Greasy erythematous exudation and hyperpigmentation in the interdigital region of a dog

Numerous Malassezia organisms (at X1,000 magnification) from an adhesive tape preparation stained with Diff-Quik (photo courtesy of Otto Fischer)

![Figure 4](image4.png) Malassezia organisms in the deeper layers of the stratum corneum (photo courtesy of Chiara Noli)
The number of yeast organisms varies according to the breed, site sampled, technique used and host immune status. More organisms are isolated with tape strips than dry scrapings. Numbers are higher in the axilla region, and lower if hypersensitivity has developed. Bassets do not exhibit hypersensitivity and numbers can be particularly high in this breed. Contact plates and detergent cup scrubs allow quantitative culture – but these are more frequently used in research.

Relying on *M. pachydermatis* counts for diagnosis is problematical because, although tape stripping is the most widely used diagnostic test in primary care practice, the number of organisms seen is variable and has a low sensitivity. Furthermore, there are, as mentioned, breed and site variations, as well as overlap between counts in health and disease. Thus, a threshold population has not been identified.

Many clinicians employ trial therapy where clinical signs and/or the presence of yeast organisms strongly suggest *Malassezia* dermatitis. Response to therapy (partial or complete) is usually seen within three weeks.

**Histopathological examination**
It is debatable whether histopathological examination is more reliable than tape stripping in the primary care setting. Organisms may or may not be seen in the deeper regions of the stratum corneum (Figure 5).

**Therapy**
Therapy may be systemic, topical or a combination of both.

**Systemic therapy**
*Malassezia* dermatitis will respond to treatment with any of the drugs listed below. The best evidence of efficacy is with ketoconazole or itraconazole (which is the most frequently used systemic treatment in the UK currently).

- Ketoconazole (5 to 10mg/kg sid/bid)
- Itraconazole (5 to 10mg/kg sid or two days on, five days off)
- Fluconazole (5 to 10mg/kg sid) plus cefalexin
- Terbinafine (30mg/kg sid or pulse) with or without cefalexin

**Topical therapy**
Topical therapy is the initial recommended treatment in most cases. Best evidence to date is for 2 percent miconazole plus 2 percent chlorhexidine, applied twice weekly with a contact time of at least 10 minutes. Other treatments reported to be successful are:

- 3 percent chlorhexidine shampoo twice weekly
- Chlorhexidine with or without climbazole mousse (applied every three days) can be alternated with shampoo; this is convenient for owners and there are anecdotal reports of efficacy

Response to treatment may be complete – test for underlying cause, or partial – test for residual disease, eg pyoderma and then underlying cause.

**Prevention**
Correct the underlying disease and consider intermittent topical therapy; this is the preferred option for long-term therapy. Also consider pulse treatment (but note that this may favour development of resistance) and allergen-specific immunotherapy. Note however that there is limited evidence to date of the efficacy of any of the above.

**Zoonotic aspects**
There have been several isolated reports of nosocomial infection with *M. pachydermatis*, especially in neonatal baby units. Overall, the risk appears to be low, provided that barrier nursing and hand hygiene is of a high standard.

**Summary**
*Malassezia* should be considered routinely in canine dermatitis. Always do sampling for cytological examination in any case suspected on clinical grounds. Treat yeast when it is found and gauge the effect (clinically and mycologically). Use topical first line where practicable and systemic (itraconazole as first choice) for the "unbathable" or severe cases. Assess concurrent predisposing factors throughout.

A full reference list is available on request.
A year of activity and progression

What are the current priorities for vets working in the large animal sector?

There is no sign of complacency from those who investigate, collate and report on cattle health. The fourth report of the Cattle Health and Welfare Group states clearly that mastitis, lameness, fertility and respiratory disease are major issues on many farms. However, a certain amount of back slapping happened in 2017 when the EU Food and Veterinary Office investigated dairy cow welfare in member states and found that the UK strategy was well coordinated, and the final report offered no suggestions for improvement.

This has spurred the welfare group to be even more diligent and a specific Dairy Cattle Welfare Strategy is now in place, with eight priorities, aspirations, proposed actions, evidence sources, time scales and coordination responsibility. Within the actions are veterinary practice expectations, which include:

- Promoting anti-inflammatory treatment in cases of lameness
- Proactive calf health planning
- Measuring welfare outcomes on-farm as part of the herd health plan review
- Continuous improvement in cow comfort
- Raising awareness of the impact of welfare on farm businesses
- Encouraging active prevention
- Recognition and control of mastitis
- Promoting best practice transition cow management
- Supporting effective protocols for improving fertility on-farm

Many cattle veterinary surgeons will indicate that they do all those things already, but how effectively and with how many cattle farmer clients?

Antimicrobial use

It is believed that the targets that were set for the reduction of antimicrobial use are being exceeded. In December 2018, veterinary surgeons working with farmed animals were asked to complete a survey to identify diagnostic practices and how these inform decisions to use antimicrobials. The findings will be released in due course and it is hoped that positive direction will be given to those using, developing and marketing diagnostic tests.

Herds with intractable disease issues that have been prescribed critically important antibiotics should by now have been weaned away from relying on a syringe to resolve their difficulties. The British Cattle Veterinary Association (BCVA) has decreed that “the regular use of HP-CIAs [highest priority critically important antibiotics] is no longer acceptable”.

The use of products including colistin, third and fourth generation cephalosporins and fluoroquinolones should only take place where it has been clearly shown that no other

There are practical reasons why mistakes in cow identification or misunderstandings about withdrawal times can occur, and 87 percent of the failure herds had a single incident in the year
treatment options are available to avoid animal suffering.

The BCVA President, David Barrett, is calling on members to make 2019 the year when it can be said that the cattle industry in the UK went HP-CIA free. If anyone has isolated a pathogenic organism sensitive to an HP-CIA and resistant to all other available licensed cattle medicines, please contact the BCVA office.

Culling rates

The cattle tracing system records that there are some 54,000 beef cattle premises in Great Britain (over 11,000 dairy and over 2,000 dual purpose), farming over 8 million animals. For dairy herds, the median culling rate is 26 percent, with 5 percent culled within the first 100 days of lactation, averaging 3.6 lactations at six years of age. The identified reasons for culling from commercial data collection organisations are:

- Not in calf/not seen bulling/out of calving pattern (28 percent)
- Mastitis/high somatic cell count (13 percent)
- Lameness/legs and feet (10 percent)
- Infectious diseases including Johne’s and TB reactors (8 percent)
- Accident/trauma/injury (5 percent)

For beef, the replacement rate in suckler herds is 14 percent, with mortality of 2 percent. It is anticipated that more veterinary practices will be able to collect detailed information about the impacts of disease from clients and that improvements in health and welfare activities can be better monitored.

Milk residues

Meetings have taken place with veterinary surgeons at several locations to highlight the latest developments in detecting milk residues. Milksure, Arla and the National Milk Laboratory have presented a package of measures to tackle the milk failures that were reported on 1,300 farms last year.

There are practical reasons why mistakes in cow identification or misunderstandings about withdrawal times can occur, and 87 percent of the failure herds had a single incident in the year. But multiple failures are happening, and veterinary practices are being asked to help their clients avoid the potentially severe penalties. The UK has a higher failure rate than many other countries.

The sensitivity and accuracy of the tests now available enable the sources of failure, including antibiotics, anti-inflammatories and flukicides, to be identified; the true cause of a farmer’s difficulties can be pinpointed, and the herd supported. Different milk buyers schedule various testing regimes, but this whole area of residues is a complex one that the farmer cannot be expected to sort out without technical assistance.

Medicine storage

The University of Bristol has published the findings of a dairy herd study into medicine storage on-farm that has opened a discussion about expired products and doses remaining from earlier treatments. It is suggested that a medicine cupboard health check is incorporated into the annual herd health review.

Expired medicines were commonly found together with HP-CIAs. This is perhaps not surprising if the use of CIAs is being talked down, and so the bottle stays in the cupboard and partial treatments remain, possibly because the animal died or recovered more rapidly than expected. Some farm cabinets also contained medicines not licensed for cattle. A tidy up, clear out and safe disposal of medicines is recommended. Further studies and reports from beef, sheep, pig and poultry farms are anticipated.

Frequency of veterinary visits

It is interesting that the use of antibiotic footbaths and feeding waste milk to calves has been inversely related to the frequency of veterinary visits by a study of Arla producers. The more often the farm is visited by a vet, the less likely it is that bad practice is adopted. Also, the farmers who identified that the role of the vet was to save them money were more likely to have poor standards. Make of it what you will from a limited questionnaire approach but note that many herds utilised veterinary products from non-veterinary sources. This is another area where it may be important to identify what is taking place rather than assuming that all is as a practice would wish.

Vaccine use

Last autumn a campaign to improve the uptake and use of vaccines was launched and the proposals for replacing antibiotics with preventative vaccines is very much in need of an ongoing push from practices. The uptake of bovine respiratory disease and bovine rhinotracheitis vaccines has been seen in around 20 percent of herds despite a 70 percent incidence, so annual improvements are anticipated.

Much has been highlighted about the storage and administration of vaccines on-farm with unintended freezing, expired products and incorrect course administration seen as areas where vets can have a direct influence. There are developing levels of technical understanding with research on T-cells and maternally derived antibody interference with the level of early protection. Ways and means of obtaining the best outcomes will be ongoing, with deep discussions on the benefits of mucosal administration over injection. It appears that the better informed the farmer becomes, the more targeted advice and monitoring is needed from the vet.
Could we improve animal welfare by harnessing human culture?

Mark Fisher, author of *Animal Welfare Science, Husbandry and Ethics: The evolving story of our relationship with farm animals*, explains the complexities of farm animal welfare

Coming from an extensive sheep and beef cattle farming background, Mark developed a passion for animal physiology and how science can paint a bigger picture – not just improving the economics and efficiency of keeping animals, but also the social and relational side of farming.

In an interview with 5m Publishing, Mark explains the thought processes behind and key learnings from his new book on welfare, husbandry and ethics.

**What species does the book include?**
The book begins with the dog, because it is the animal most of us understand, then goes on to address sheep, cattle, goats, poultry, pigs, red deer, coyotes, rabbits and badgers (there are a few more too).

Unlike other animal welfare books (John Webster’s superb *A Cool Eye Towards Eden* and *Limping Towards Eden*, for example), I have not provided an appraisal of modern farm animal welfare by species. Instead I have used those animals as examples to illustrate the themes of the changing relationship between people and animals – relationships which have changed over the last 10,000 or so years. Those themes include domestication, revolutions in farming, extensive and intensive systems, the consequences of improving animals (eg production diseases), killing, etc.

**Who is your target audience?**
Really anyone with an interest in animal welfare but especially students, researchers, policy makers, farmers, veterinarians and even the media. All have a role and responsibility in animal welfare and, to begin with, the aim is to understand the system – the big picture, the context – call it what you will.

**What prompted you to write this book?**
There are many dimensions to complex issues like animal welfare (eg political, religious, economic) and in order to progress, we have to understand and manage them. They cannot be solved just by telling the farmer how he or she must manage their resources.

I was really prompted by the realisation that if forces from beyond the farm gate are driving some of the practices affecting animal welfare, then perhaps we should look at the potential for changes from beyond the farm gate to improve animal welfare. Should farmers be the only ones who pay for animal welfare?

**What impact do you hope this book will have?**
Firstly, to recognise the different drivers of poor animal welfare.
welfare – there are obviously those who take shortcuts as there are people experiencing severe financial, personal and health issues. But secondly, to understand why farmers are seeking to improve their animals, making them more productive and efficient.

[There are] activities which society is beginning to question – with pig, poultry and dairy intensification, especially, under scrutiny. It is this second part which is the main focus of the book – if there are limits to improving animals, what do we do when we reach them? Perhaps there is an opportunity to think about the drivers of intensification (mainly financial) and recognise that farming may need economic incentives if society wants higher standards of animal welfare.

Are welfare and ethical considerations different for each species?
As noted above, the considerations apply to all species as they reflect the relationship between humans and farm animals. I guess, rather than differences between species, it is the differences between extensive and intensive systems which I have explored in most detail.

What should consumers look out for when buying animal products?
This is a really tricky one. I started off thinking consumers could pay more, but some may not want to believe, for example, that animal welfare is taken care of by farmers, governments, etc. If consumers were to pay more for higher animal welfare products, or be more discerning, we’d also have the issue of ensuring the premiums go to rewarding good or improved animal welfare.

So, it’s pretty complex. I’ve tried to explain it is complex and that we, either individually, perhaps, but also as a society collectively, must understand that complexity and come up with solutions.

Those solutions will inevitably be a mix of market (eg consumers) and legislative changes. But, to do so, we have to think about what will be sustainable – having farmers reduced to producing more, and more efficiently, comes up against animal welfare, the environment and farmer well-being, and merely telling farmers how they should maintain their resources, be they animals or the land, will not be sustainable in the long run.

Animal welfare is the most talked about subject in animal production and the most taboo for some. Where does this taboo come from and do you feel it hinders progress?
Many people are put in defensive situations and naturally close their doors. Yes, it hinders progress, but the bigger insight is to get everyone to start thinking about their role in animal welfare. It is too big and too important to be left to farmers alone.

I’ve described it as human culture: the largely affluent population gaining their food and wealth from farming and that affluence enabling them to question farming practices, driving agriculture. Could we improve animal welfare by harnessing human culture (eg paying a bit more for meat and milk)?

Perhaps there is an opportunity to think about the drivers of intensification (mainly financial) and recognise that farming may need economic incentives if society wants higher standards of animal welfare.

Could we improve animal welfare by harnessing human culture?
Deer farming in the UK

Expert insight into managing farmed deer is provided in part one of a two-part article from a UK-based deer specialist

JOHN FLETCHER
John Fletcher, BVMS, PhD, Hon FRCVS, FRAgS, graduated from Glasgow before completing a PhD from Cambridge on breeding behaviour of red deer on the Isle of Rum. He developed the first commercial deer farm in Europe at Auchtermuchty and currently provides advice to new deer farmers through Venison Advisory Services.

Steadily growing demand for venison is fuelling a significant rise in farmed deer numbers. Market analysts have confirmed this growth in venison consumption. Kantar Worldpanel (2014) reported an increase of over 400 percent in UK venison sales and Mintel (2015) identified venison as a “star performer”, with growth expected to continue until at least 2020. Venison has become a “must-have” for supermarkets during the last decade, with one supplier to a single multiple retailer constructing a dedicated abattoir and cutting plant for farmed deer in 2018.

Because wild venison cannot always provide the consistency demanded by modern retailers, and as there are limited prospects for increasing the supply of wild deer meat, farmed venison provides the only opportunity to increase supply. A large proportion of the venison retailed in UK supermarkets is imported from New Zealand deer farms.

The New Zealand influence in British farms
Many of the techniques for farming red deer were developed in Scotland as far back as the 1970s and 80s, but few deer farms were established because subsidies favoured conventional agricultural sectors, and because the market for farmed venison was in its infancy and under-explored. These constraints did not exist in New Zealand and deer farming developed rapidly with around one million deer now on their farms and many deer units carrying over 1,000 deer. UK deer farms benefit significantly from techniques that have evolved in New Zealand.

Although venison has always been the principle driver for New Zealand deer farming, the growing antlers of deer are amputated annually for sale into the traditional oriental medicine market. This by-product provides around 15 percent of their industry sales.

The removal of growing antlers was made illegal in Britain by a Schedule 3 Amendment Order (1988) to The Veterinary Surgeons Act 1966. This prohibits “the removal (otherwise than in an emergency for the purposes of saving life or relieving pain) of any part of the antlers of a deer before the velvet of the antlers is frayed and the greater part of it has been shed”.

UK deer parks
Britain, and especially England, is unique in having a large number of traditional deer parks, often established centuries ago, which provide a highly valuable and distinct habitat. In addition, many more recent deer enclosures have been established to provide amenity value and as zoos and wildlife parks. Deer within parks have to be culled to avoid overstocking and this is done by skilled marksmen and women with the carcasses processed in the same way as wild deer, through Approved Game Handling Establishments.

Park deer are predominantly fallow (Dama dama) but frequently include red deer (Cervus elaphus) and sika (Cervus nippon) as well as occasional other species. In addition, there are now many business enterprises carrying reindeer (Rangifer tarandus), catering for the Christmas demand in town centres, etc. Reindeer have their own health problems associated with the milder climate in southern Britain, to which they do not seem to be well suited.

FIGURE (1) Housed red deer readily use diagonal feed barriers to eat silage (photo courtesy of Rudzie)
FIGURE (2) Red deer hinds are often strip grazed using a forage crop (Photo courtesy of John Burdge)
British deer farm management
This short article in two parts is devoted to the management and diseases of farmed deer – not those in parks. As in New Zealand, almost all British deer farms use red deer (Figure 1). This species is easier to handle than fallow or sika. The following management notes are therefore based entirely on red deer. It must be remembered that taxonomically, the relationship between different deer species is, with few exceptions, as close as, for example, that between sheep and cattle, and may be more distant. Extrapolation between deer species in relation to management, diseases or therapies is therefore extremely unwise.

Red deer have only been domesticated for a few decades. They have therefore not yet been selected to produce what might be considered pathological quantities of milk, wool or meat. Thus mastitis, ketosis, milk fever, etc are unknown in farmed deer.

They also retain their seasonality with an autumn rutting season, an average 233-day gestation length and crucially a calving in May and June to provide maximum feed value for lactating females or hinds. Wild red deer normally lactate until mid-winter and provide parental support after that but on deer farms, calves are weaned either before the rut in late August or September or after the rut in November. With good management and early weaning, calving can be advanced into early May or even April on good pasture.

Stags should be removed from the hinds in November to prevent late calves. Hinds are seasonally polyoestrous, cycling at around 20 days with oestrus lasting 12 to 24 hours commencing in early October and continuing to February if they do not become pregnant. Oestrous behaviour becomes more intense as the season progresses. Hinds can normally be expected to produce around 12 calves in their lifetime.

During the rut, multi-sire mating is generally used, with one adult stag to around 40 hinds, but single sire mating groups of up to 60 or more hinds have been used. Hinds first conceive as yearlings at around 15 months and groups of yearlings are most effectively mated by using yearling stags at a ratio of around 1:10.

Calving
Hinds benefit from some cover during the calving season to reduce the risks of mismothering, especially amongst first calvers. Even clumps of rushes or nettles will serve, but scrub or woodland is valuable and will also, of course, provide shelter during the winter. Hinds are best left in seclusion during calving. Dystocia is rare but if there are problems then this is commonly associated with hinds being over-fat.

Calving percentages of over 95 percent are normal in well-managed, established herds with lower percentages, and slightly later calving, in first calvers.

During the summer, hinds and calves should be given good grazing with a sward length of 10cm; this is normally provided by rotating the deer between paddocks. Forage crops of brassica, chicory, etc are valuable (Figure 2).

Weaning
Calves at weaning are normally ear tagged, sexed and wormed. They may then be housed or grazed on good pasture with shelter. It is advisable to feed concentrate ration to both hinds and calves for a few weeks prior to weaning to accustom the calves to hard feed. Weaning is the most stressful episode in the farmed deer calendar and calves are most vulnerable to disease at this time. Regular feeding is essential, ideally twice per day until calves are well settled after weaning.

Calves are normally slaughtered at about 15 months from late summer but there are increasing moves to feed deer well by using forage crops thus achieving the desired 60kg carcass weight much earlier; perhaps as early as seven or eight months.

Due to the prohibition on removing growing antlers and a further regulation prohibiting the transport of deer with growing antlers, young stags cannot be transported to the abattoir until the antlers are hardened when they can be legally sawn off without causing any pain. Adult stags should have their antlers removed as soon as the velvet is cleaned in late summer and before testosterone levels have risen sufficiently for them to become aggressive. Modern deer crushes, usually based on a hinged gate system but also occasionally hydraulic, are essential for antler removal.

Carefully designed yards for weaning, weighing, tagging, de-antlering and loading into trucks are vital for a deer farm and new deer farmers will need advice and to visit as many existing farms as possible before constructing their system. It is also advisable to have the paddocks linked by raceways leading into the yards. This permits different classes of stock to be drafted independently into the yards.

To make improvement more rapidly, many deer farmers are using laboratories to confirm the parentage of calves by genetics. Many deer farmers are now having their hinds scanned, usually in December, and artificial insemination has become increasingly popular where farmers wish to improve their genetics, often using semen imported from New Zealand where stags of proven breeding value are available. Embryos have also been imported and implanted. These technologies are now established and effective.

FURTHER READING
The Veterinary Deer Society has published a handbook, Management and Diseases of Deer; which is now available on disc from Mark Dagleish (mark.dagleish@moredun.ac.uk).

For over 30 years, the Deer Branch of the New Zealand Veterinary Association has published annual proceedings of its deer courses. These are available online from: info@sciquest.org.nz. For more information, visit: sciquest.org.nz/deer.


Proceedings of papers read at many Venison Advisory Service meetings are available at: venisonadvisory.co.uk.
Feline injection site sarcoma

Surgical management combined with radiotherapy is the best option for treating the rare malignant tumour

Histology and behaviour

The majority of FISS are fibrosarcomas, but behave very aggressively compared to other sarcomas, with faster growth, increased local invasiveness (often extending along fascial planes) and higher recurrence rates following surgery (14 to 59 percent). Metastasis is reported to occur in 10 to 28 percent, most commonly to the lungs, and therefore complete staging is essential. Contrast enhanced CT or MRI imaging allows for accurate planning and appropriate decision making; incomplete margins can result in recurrence as soon as two weeks post-operatively. A disease-free interval of approximately two years is possible with tumour-free margins, as opposed to 100 days with incomplete removal. Recurrence rates of up to 50 to 70 percent within six months are reported even with clean margins.

Surgical management

Radical surgical excision with follow-up adjunctive treatment offers the best prognosis. Complete en-bloc resection with a minimum of 3 to 5cm lateral margins (Figure 1) and one or two complete deep fascial planes is advised. Given that numerous reports document that surgeons achieve smaller histopathological margins than they plan or report intra-operatively for a variety of skin tumours, and given the invasive nature of FISS, it is wise to aim for 5cm lateral margins and two deep fascial planes.

A retrospective study (Phelps et al., 2011) found that a 5cm lateral margin resection can achieve a median survival time of 900 days, with 14 percent local recurrence and 20 percent distant metastasis after surgery. With no recurrence or metastasis following complete excision, survival times of 1,500 days are reported (probably surgical cure). These

Pathogenesis and epidemiology

A theoretical causal relationship between rabies vaccination and fibrosarcomas was first recognised in the USA in 1991, with successive studies linking increased usage of rabies and feline leukaemia virus (FeLV) vaccines and the development of these tumours. Since this time, several studies have further characterised FISS and implicated other injectable medications (antibiotics, corticosteroids, NSAIDs), suture material and microchips in their development. Though the definitive pathogenesis remains elusive, the putative mechanism is that chronic inflammation at the injection site undergoes neoplastic transformation.

Epidemiological study of FISS is challenging because the appropriate study population is difficult to select (ie all cats, cats visiting a practice or cats receiving an injection). The estimated incidence of FISS in the UK is 1 in 16,000 to 50,000 per year in veterinary registered cats. In the USA, the incidence is estimated to be 1 to 4 in 10,000 vaccinated cats; however, direct comparison cannot be made between these groups as the inclusion criteria and populations studied differed between studies.

Prevention

Recommendations for prevention include vaccinating only as frequently as necessary (guidelines are available), avoiding adjuvanted vaccines (although there is no consistent evidence that formulation change alters incidence) and avoiding unnecessary injections. Vaccinating in the distal limb is advocated so that wide surgical excision can be performed, but vets in the USA and Europe still mostly inject the inter-scapular region. Recording the vaccination site is sensible.

Given the low incidence of FISS, vaccination still provides low-risk essential protection, but protocols tailored to individual requirements are important. Allowing vaccinations to reach room temperature prior to administration (not leaving unrefrigerated for hours) may reduce the inflammatory response. A “three, two, one” protocol has been suggested to monitor for post-vaccination masses: any mass at the site of injection three months or more following vaccination, more than 2cm in diameter, or that increases in size one month after vaccination should be investigated and surgical excision of the mass is warranted.

Feline injection site sarcoma (FISS) is a rare malignant tumour and appropriate surgical management provides the best long-term prognosis. The pathogenesis of FISS is unclear, but it occurs at sites commonly utilised for injections. Surgery offers the most significant improvement in survival when it is aggressive and augmented with radiotherapy.

IN FOCUS

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IAN FAUX

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results should be interpreted with caution; limitations of the study included 35 percent of the cats being lost to follow-up prior to documentation of recurrence and cats which underwent preoperative radiation were excluded, which may have introduced bias.

Interscapular masses are the most common location for FISS. En-bloc resection of the dorsal spinous processes and superficial paraspinous musculature (generally limited to the trapezius, but potentially including part of the origin of the cleidocephalicus or deeper rhomboideus) can achieve the deeper fascial plane necessary. Some cats can have a wide-based stance and lameness following extensive surgery, or difficulty holding the head up; this generally improves with time, but owners should be clearly warned.

Partial scapulectomy (Figure 2) is indicated when tumour lateral margin extends over the dorsal aspect of the scapula. Resection of greater than 50 percent of the scapula may substantially compromise limb function and necessitate securing the scapula to the trunk using bone tunnels and circumcostal sutures (as per scapula luxation), but in the authors’ experience, such large resections are rarely necessary. Tumours located on the thoracic and abdominal wall may require body wall resection, and the thoracic wall can be reconstructed with various combinations of latissimus dorsi muscle flaps (Figure 3), diaphragmatic advancement and/or the use of synthetic mesh implants.

Tumours arising from the limbs (more common in the USA) can be amputated and these patients have been shown to have improved outcomes compared with masses located elsewhere. In cases where the sarcoma is invading the proximal hindlimb and pelvic soft tissues, hemipelvectomy is indicated. Iatrogenic, intraoperative seeding of soft tissue sarcomas has been reported in human literature and one should avoid breaching of the tumour. A large skin excision increases the risk of incisional dehiscence, but this is not a primary concern. Skin flaps can be used to close large defects, but these are generally avoided if follow-up radiation treatment is planned. Most dehiscence heals by second intention; this can be facilitated using negative pressure wound therapy.

**Additional treatment**

Adjunctive radiation treatment can decrease recurrence and prolong remission times. Neo-adjunctive (pre-surgical) radiotherapy is also described; however, disease-free interval and survival time is reduced compared to post-surgical adjunctive radiotherapy. Chemotherapy is largely unproven and is generally used when radiotherapy is not available. The use of pre- and post-surgical epirubicin improved disease-free intervals in comparison to historical controls (Bray and Polton, 2016) and in another study (Hahn et al., 2007), doxorubicin in combination with radiotherapy and surgery was found to prolong disease-free intervals. Immunotherapy (transfected canary-pox virus, locally expressing IL-2) has recently been shown to prolong the disease-free interval when used in combination with radical surgery and radiation. Whilst immunotherapy may be a promising alternative, efficacy has only yet been shown for low grade FISS.

The management of FISS requires an aggressive surgical approach requiring thorough preoperative planning, and the use of adjunctive radiation treatment improves outcomes. There is a lack of multivariate analysis in the literature, making treatment recommendations and prognostics challenging. Though rare, the serious consequences of this disease and its association with vaccinations and other injectable medication make preventative measures paramount.

A full reference list is available on request.
A look through the latest literature

**Effects of providing flavoured water on fluid intake in cats**
Brian Zanghi and others, Nestle Purina Research, St Louis, Missouri

The domestic cat was adapted for life in arid regions and may be reluctant to drink water. Cats fed exclusively on dry food may be predisposed to developing chronic health problems. The authors investigated the effects on feline water intake of providing a nutrient-enriched source of water, with or without a poultry flavouring. The cats appeared to find highly palatable both the nutrient-supplemented water and that with the additional flavouring. Fluid intake increased significantly in both treatment groups compared with controls, but with a larger increase in those cats given the flavoured water. *American Journal of Veterinary Research, 79*, 1150-1159.

**Subcutaneous ureteral bypass in treating a cat with bilateral ureteral obstruction**
Corie Borchert and others, Animal Medical Center, New York City

A seven-year-old spayed female domestic short-haired cat was presented with a 14-day history of weight loss and poor appetite. Abdominal ultrasound revealed right-sided hydrourephrosis, dilation of the proximal aspect of the ureter and a small left kidney with irregular margins. Surgical exploration revealed a retroperitoneal mass involving the caudal mesenteric artery and both ureters. A subcutaneous ureteral bypass (SUB) device was surgically implanted to treat right ureteral obstruction. In a second procedure, another SUB device was inserted on the left side and the mass was successfully removed. *Journal of the American Veterinary Medical Association, 253*, 1169-1176.

**Evaluation of a method for assessing muscle mass in clinically normal cats**
Lisa Freeman and others, Tufts University, North Grafton, Massachusetts

Loss of lean body mass, or cachexia, occurs in many chronic conditions including congestive heart failure, renal failure and cancer. Muscle is generally the first tissue to disappear, but early changes may be masked by increases in fatty tissue or fluids. The authors describe a method for measuring muscle mass, based on radiographic and ultrasonographic calculations of the vertebral epaxial muscle score. Comparisons in 29 healthy cats suggest that the method is a reliable way of estimating muscle mass and further studies are justified to measure changes in different disease states. *American Journal of Veterinary Research, 79*, 1188-1192.

**Monitoring of ventricular arrhythmias in cats with hypertrophic cardiomyopathy**
Urszula Bartoszuk and others, University of Zurich, Switzerland

Arrhythmias can complicate the investigation and treatment of cardiac disease in cats and are a potential cause of sudden death. The authors examined the nature of cardiac arrhythmias in 41 client-owned cats with both compensated and decompensated hypertrophic cardiomyopathy. Echocardiography and 24-hour Holter recordings showed that ventricular arrhythmias were common in cats with both conditions but neither the presence or the complexity of the arrhythmias could be linked to the prognosis for that patient. *The Veterinary Journal, 243*, 21-25.
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The rise in equine obesity

It is time for the veterinary profession to act on the increasing prevalence of obesity in horses

Jonathan Pycock
IMMEDIATE PAST PRESIDENT, BEVA

Obesity in horses is now considered by equine welfare charities to be the greatest threat to equine welfare in the UK. For some time, horse vets have rightly been concerned at the growing numbers of overweight and obese horses. BEVA has prioritised this issue and is developing measures to help its members tackle equine obesity.

Whilst not a new problem, equine obesity is becoming more common and there is a growing appreciation and understanding of the potential health and welfare impacts of obesity in horses. British native breeds such as pony breeds, cobs and draught horses are more susceptible to becoming obese and developing obesity-related disease because they are more efficient at utilising feed and convert more of it into fat.

Studies of obesity in horses have confirmed that owners have a poor ability to visually identify overweight animals and that perceptions of ideal weight for animals participating in showing classes were perceived to be significantly greater than for other equestrian disciplines. Vets in the field find it hard to persuade owners that their horses are overweight and unfortunately, it is common for vets to see obesity-related disorders such as laminitis in show horses.

Obesity can lead to a number of health problems as well as poor athletic performance, abnormal skeletal development and behavioural problems. Laminitis is the most devastating consequence of obesity. This condition is now one of the most common conditions seen by vets treating leisure and pleasure horses and is a common reason for euthanasia. It is unknown exactly how many horses are euthanised each year as a result of laminitis secondary to obesity but it is likely to be many hundreds if not thousands. Many more horses suffer recurrent bouts of excruciating foot pain.

Many colleagues comment that they are struggling to figure out how to get through to horse owners how serious obesity is. Even owners of horses with chronic laminitis often just seem to accept it and don’t seem to try to manage the feed intake/weight situation.

The dramatic increase in rates of obesity is multifactorial. First and foremost would appear to be overfeeding by owners who consider horses members of their family and enjoy spoiling them. This is a problem that is common to dogs, cats and other pets. Rewarding obesity in the show ring, which distorts the perception of normal, is also involved. Negative peer pressure from other horse owners who discourage those who are trying to implement weight loss and keep their horses in an appropriate body condition plays a significant role.

What can owners do to tackle weight loss? Most important would be to discuss with your clients whether their horses need to lose weight and how this might be achieved. To do this, you should assist your clients with simple ways they can assess and monitor the condition of their horse. Then it is a case of encouraging exercise of their horses as much as possible. Limiting access to grazing can be helpful along with reducing hay intake and soaking it to reduce calorie intake whilst maintaining fibre intake. It has been proven effective to get smaller hay nets and bowls and scoops and weigh feed to ensure intake is accurate.

Likewise, encourage feeding little and often and using measures to slow feed intake such as multiple hay nets and small weave nets. Many vets are now joining an organised weight loss club with a review of progress with someone independent every one to two months.

As vets, we should aim to remove the stigma attached to having a “fit” or lean horse, which can be hard to bear in many livery yards. There is a tendency for an owner with a horse of perfectly acceptable body condition score of 2 out of 5 to be criticised and accused of not feeding enough, or allowing the horse to suffer from ulcers, as why else would the horse be so "thin"? However, there is rarely any criticism made of an obese horse.

Prevention is better than cure and avoiding weight gain is notoriously easier than trying to effect weight loss. Early diagnosis of obesity is critical and it makes sense that routine monitoring is the obvious way to go.

BEVA wants to encourage the profession to say to horse owners, "It’s OK, we know this will be hard work, but we’re here to help and support you." Let’s work together as a team in an open and honest way, because if we don’t, the only one who will pay the price for any combination of apathy, ignorance, denial, laziness or defeatism, is the horse or pony. Improving equine lives by reducing the incidence of obesity-related disease could be the most powerful and rewarding thing that our nation of horse-lovers has done for the species. How fantastic would it be if as equine vets we could be at the forefront of that?

I acknowledge the help of David Rendle and Lucy Grieve with writing this piece.
Dealing with diarrhoea

Aetiologies and diagnosis are considered in part one of a two-part series on equine diarrhoea

Jamie Prutton, BSc (Hons), BVSc, DipACVIM, DipECEIM, MRCVS, completed an internship at Rossdales Equine Hospital before starting an internal medicine residency at UC Davis. He holds Diplomate status from the American College of Veterinary Internal Medicine and has been practising at Liphook Equine Hospital since 2015.

Diarrhoea is a common ailment in adult horses; though frequently innocuous, in a minority of cases it can become fatal. There have been no major changes or breakthroughs in the diagnosis and treatment of equine diarrhoea, yet it continues to plague both ambulatory and referral vets. More recent research has looked at the microbiome of the horse and hopefully this will shed light on the aetiology of the idiopathic cases, which make up the majority of cases. Only 30 percent of cases in one study had a definitive aetiology diagnosed antemortem, although with changes and advances in diagnostic techniques since the study was performed, this percentage might now be higher (Love et al., 1992).

Biosecurity should always be at the forefront of the attending veterinary surgeon’s mind to ensure there is not a zoonotic risk to the owners, particularly if there are any immunocompromised people involved in the care of the animal. Therefore, if infectious aetiologies are considered a risk, all personnel involved should wear protective personal equipment.

Simplistically, diarrhoea can be broken down into three main groups: idiopathic, acute colitis and protein losing enteropathies. This list is not exhaustive as each aetiology is not discussed in detail.

Idiopathic diarrhoea

Owners will often report that horses have a free water phase of faecal expulsion. There is no clear aetiology behind this, although speculation surrounding fibre digestion in the colon has been put forward. Changing the diet can help these clinical signs, with an improvement in the dietary fibre being helpful. Ideally, blood work should be performed and if this is unremarkable then ongoing monitoring is advisable. Faecal analysis should be performed to rule out any infectious aetiologies.

Sand enteropathies are location dependant but can lead to either chronic or acute diarrhoea depending on the severity of the sand accumulation.

Acute colitis

These are often the most severe of cases with marked disturbances in the haematological and biochemical parameters, particularly acid-base values, electrolytes and serum proteins. If the horse is presenting with sepsis and endotoxaemia, immediate empiric intensive care should be instigated to facilitate the best prognosis. During the initial diagnostic phase, the owners should be made aware of the high risk of secondary problems such as laminitis and thrombo-phlebitis.

The aetiological agent in these cases is frequently difficult to ascertain. Possible causes can include: antibiotic-induced diarrhoea (with secondary bacterial overgrowth), salmonellosis, encysted cyathostominosis with mass emergence (Figures 1 and 2), clostridial overgrowth with enterocolitis and carbohydrate overload when the horse had access to unusual or excessive food. The inciting cause can be something as innocuous as a colic episode that leads to a suspected imbalance in the microbiome within the colon.

Protein losing enteropathies

More frequently these cases will present with weight loss rather than diarrhoea due to the propensity for the small intestine to be affected rather than the large intestine (Figure 3). Some cases of right dorsal colitis due to NSAID toxicity will present with diarrhoea and a severe thickening of the right dorsal colon.

If a PLE is suspected, then diagnoses can be made if appropriate samples can be taken (rectal or duodenal biopsies) although in some cases a laparoscopic approach is required to retrieve a suitable sample for diagnosis.

Diagnostics

In all cases of diarrhoea, full haematology and biochemistry should be run. Haematology will allow:

- Evaluation of the white cell population: marked neutropaenia is seen in acute cases due to sequestration into the site of inflammation. In more chronic cases, you would expect to see a neutrophilia. The neutrophilia will become severe in cases of encysted cyathostominosis.
- Assessment of red cell indices for evidence of hypovolaemia but splenic contraction can lead to an elevation in PCV so other markers such as lactate can be used if concerned. Anaemia can be seen secondary to chronic inflammation as a negative acute phase reaction.
Biochemical analysis will often show several derangements in severe, acute colitis cases, but particular attention should be paid to:

- **Serum proteins:** The equipment used, and their associated reference ranges, can dramatically alter the interpretation of results. Some analysers have completely inappropriate reference ranges for horses. Most horses will have an albumin of 30-40g/L and when using a refractometer, the total solids will include globulins (25-40g/L) and therefore should have a range of 55-80g/L. Interpretation of results should be made using absolute numbers rather than just the highlighted abnormal results. The hydration status of the horse must be taken into account. If a horse is severely dehydrated with a “normal” serum protein, once it is rehydrated it will likely have a severe hypoalbuminaemia and may start to show clinical signs of hypoproteinaemia.

- **Acute phase proteins:** Serum amyloid A, fibrinogen and iron can all be analysed to assess the severity of the inflammation, giving some gauge as to the chronicity of the disease process.

- **Azotaemia:** It is important to distinguish between pre-renal, renal and post-renal elevations to give an appropriate prognosis. This is virtually impossible at presentation but you would expect to see a dramatic improvement/resolution of creatinine levels with appropriate fluid therapy in less than 24 hours.

- **Lactate:** This is a fundamental marker that can help monitor fluid therapy outcome and help predict prognosis once therapy has started. There can be a worsening of the lactate levels when fluid therapy is started due to reperfusion, but this should gradually resolve with ongoing fluid therapy.

Faecal analysis is essential to arrive at a diagnosis and there are multiple different tests that should be performed:

- **Worm egg count:** It should be noted that false negative results will frequently be seen, especially when considering encysted cyathostominis as they are not reproductively active. There is a large inter-day variability in the production of eggs which can again lead to false negatives. It is a useful adjunct to the diagnostics, but a negative result does not always rule out parasitism.

- **Sand:** Faecal analysis for sand is notoriously inaccurate as often it will remain in the colon without passing into the faeces or can pass through with no accumulation within the colon. If sand is considered a likely aetiology for the diarrhoea, abdominal radiographs should be taken. These cases will often present with a low-grade diarrhoea, intermittent colic or hypoalbuminaemia.

- **Culture:** The only pathogen that is important to culture for is *Salmonella*. A positive result does not definitively confirm *Salmonella* as the cause but is likely relevant and strict biosecurity should be implemented. Culture of anaerobic bacteria such as clostridia is rarely helpful as they are often a commensal of the gastrointestinal tract.

- **PCR:** Rapid and sensitive results can be achieved for *Salmonella* and research has shown it to be as sensitive and specific as culture. Positive results cannot be typed without having to culture them first. Often the speed of diagnosis heavily outweighs the delay in typing. More recently there has been interest in coronavirus as a cause. It has been diagnosed by PCR frequently in the United States, Japan and France with the first diagnosis in the UK in 2016. It seems to be an infrequent pathogen but should be considered in appropriate cases.

- **ELISA:** Analysis for toxins associated with *C. difficile* and *C. perfringens* can be the most rewarding diagnostic modality utilised in equine patients. It is important to test for the toxins themselves rather than the bacteria to confirm that they are active and likely causing the clinical signs. *C. difficile* is frequently associated with antibiotic-induced diarrhoea and should be tested for at the earliest opportunity in these cases.

Ultrasonography is often essential when considering PLE, encysted cyathostominis or other forms of diarrhoea. The most important aspect of the scan is to assess the intestinal wall thickness of both the small and large intestine. It can also be helpful to assess the gut content (Figure 4), although liquid faeces in the colon does not always correlate with clinical diarrhoea.  

A full reference list is available on request

The next article will discuss treatment protocols
Asking the experts about eye problems

Learn from two ophthalmology experts as they are posed questions on common equine eye issues

Managing eye disease is an important part of equine practice, and an assessment of the eyes is an essential aspect of a pre-purchase examination. Here I ask two experienced ophthalmologists, Claudia Hartley and Jim Carter, to give their opinion on various eye issues commonly encountered by equine clinicians in first opinion practice.

At a pre-purchase examination, a horse is found to have peripapillary chorioretinopathy (butterfly lesions) in one eye. What criteria do you use to assess the significance of this finding and what would your advice be to the purchaser?

CH These lesions are considered a hallmark of previous equine recurrent uveitis (ERU) attacks involving the posterior segment. However, as far as clinical significance is concerned, if there are normal retinal vessels overlying the depigmented zone, I am encouraged that there is likely to be normal retina over this area too (the retinal vessels sit in the nerve fibre layer of the retina). I recommend re-examination in six months to check there has been no progression in these cases. Where vessels are attenuated or absent, I am very suspicious that the retina is similarly atrophic – suggesting an impact on vision.

JC I will always look for indications within the vitreous and lens for indications of a previous bout of uveitis. It is also important to look at the vascularisation within the retina coming off the optic nerve head and see if it is spanning the butterfly lesion. If there is marked vascular attenuation, then there are going to be significant retinal issues. I would always advise clients that we have found the lesion, and it is not necessarily possible to define how much visual impairment can be related to these lesions, but in those with significant vascular attenuation, you would expect there to be a significant visual field deficit.

Once a second episode of equine recurrent uveitis has been successfully treated in a horse, have you any suggestions to prevent further occurrences?

CH ERU is the most common cause of blindness in horses. So, at this stage, I would always discuss the surgical
options for trying to prevent future ERU attacks. These include suprachoroidal sustained-release cyclosporine implant placement and pars plana vitrectomy (either transpupillary or endoscopically). Other management options involve long-term medical strategies (including low dose steroids), but this can come with problems in competing animals and the complications of any long-term medication.

**JC** Once we have treated our second bout of uveitis and confirmed that we have a patient that conforms to ERU criteria, prophylactic treatment with a low dose of phenylbutazone may have some benefits. Many of these patients potentially have subclinical uveitis grumbling along the whole time. We are not necessarily treating a reoccurrence, rather just a re-flare of the continued disease process. Checking the intraocular pressure is one way of monitoring the level of response to medication. A difference of more than 5mm Hg between the two eyes (the affected eye is lower) is significant. Many of these cases with repeat bouts of uveitis may benefit from a cyclosporine implant which can be surgically placed and can maintain a constant slow release of cyclosporine. This in conjunction with systemic medications can make a significant difference in these patients.

**What are the indications for using the topical NSAID ketorolac tromethamine (Acular) in horses? What should the treatment interval be?**

**CH** It is useful in situations where you need anti-inflammatory action, but steroids are contra-indicated eg in corneal ulceration. I actually now prefer the NSAID bromfenac as I feel it is a bit more potent, but it is more expensive. Treatment interval depends on the indication – something low grade may manage with twice daily, but more aggressive inflammation might require as much as six daily (or even q2hourly in a hospital situation).

**JC** We would typically use this in patients with uveitis as an adjunct therapy to topical steroid usage. The analgesic effect of ketorolac appears to be relatively minimal in comparison to systemic flunixin, so I would not use this instead of a systemic non-steroidal anti-inflammatory but as an adjunct to it. I try to avoid using this drug in the face of corneal ulceration as there may be an increased risk of keratomalacia.

**The eye lesion in Figure 1 was seen at a pre-purchase examination. What would your advice be?**

**CH** This is a large iris cyst and can be treated quite effectively under standing sedation with diode laser deflation. This one could theoretically have an impact on vision when the pupil is small (in bright light). However, it is my experience that many of these cases have no discernible
behavioural or vision problems and are an incidental finding. If the owner (seller or even purchaser) is concerned, then treatment is relatively inexpensive and curative so can negate any effect on the pre-purchase examination and value of the horse.

JC This lesion is a large iris cyst attached to the ventral granular iridica and more than likely is having some influence on vision in view of its size and location within the visual axis. This visual impairment will become more prominent in increased light intensity as the now constricted pupil will be significantly impaired. We can be certain this is an iris cyst in view of the fact we can transilluminate it as noted in the ventral part of this picture. I would typically advise surgical removal of the cysts either by laser surgery or, in the hands of an ophthalmologist, direct aspiration. This should significantly improve the horse’s vision and potentially performance.

What medications are suitable for subconjunctival injection and what should the treatment interval be if this is the sole route of treatment of an eye?

CH There are rather a lot of medications that can be used subconjunctivally (as well as many that can’t!) but some of the ones I use more commonly would be: dexamethasone sodium phosphate (lasts 8 to 12 hours), methylprednisolone (lasts approximately 1 week), triamcinolone (approximately 3 weeks) and voriconazole (48 hours). Generally, I choose the preservative-free formulations without a harsh pH (closest to 7.4).

JC I do not personally use subconjunctival injections for treating ocular disease, but in most of the species that we treat, if we have to use subconjunctival injections, I would tend to only use medications that have an aqueous base or could be given intravenously. The exception to this would be when we use subconjunctival steroids in some of our small animal patients, which are typically in a suspension rather than an aqueous solution.

Do you consider hyaluronan gel a useful adjunctive treatment for corneal ulcers? When should it be applied?

CH I really like the hyaluronan-containing products. They generally last longer (and people certainly report longer duration of comfort with these dry eye preps) so they don’t need to be applied as frequently as, say, the carbomer polymers or hypromellose agents. They are useful for cases with poor tear films (Rose Bengal staining can help to identify these cases) and indolent ulceration, but to be honest they can be useful in most corneal ulcers (but not full thickness/perforations) as a form of analgesia (soothing in poor tear films, coating exposed corneal nerves abraded by eyelid movements).

JC I routinely use hyaluronic acid-based topical lubricants for treating patients with ocular surface disease as I think there is a significant improvement in the level of comfort when a film quality has improved. These lubricants will also help the movement of the third eyelid and the upper and lower lid moving over the corneal surface, reducing irritation and generally improving timeframe for superficial corneal surface disease to improve. There are numerous different hyaluronan-based lubricants available on the market, and they are typically what I would advise clients to use to help train their horses and get used to topical medications.

A single linear opacity is seen in the cornea of a horse at a pre-purchase examination. What would your judgement be?

CH I’d definitely want to look at it with a slit lamp, but I think you might be referring to linear band keratopathy, which is stretched Descemet’s membrane (DM). These have been suggested to be linked to glaucoma, and definitely occur in some glaucoma cases. However, they have also been seen in apparently normal horses with no history of glaucoma. There are various theories as to their pathophysiology – globe stretching and stretching of DM (glaucoma), birth trauma and blunt trauma to the globe. A big red “glaucoma flag” for me is if they are associated with corneal oedema (Haab’s striae) or if they are multiple or branching. I would always discuss this finding with the client so that they are aware of the risks.

JC The presence of a linear lesion in the cornea does not necessarily mean that there is long-standing disease. Before I can give any advice with regards to the solution we would need to determine exactly what level within the cornea this lesion is – ie epithelial, superficial corneal stroma or Descemet’s membrane. Some of the superficial lesions may be indicative of previous ulceration or trauma, where similar deep lesions may be indicative of previous glaucoma or repeat bouts of uveitis. There is no necessarily safe or dangerous linear corneal lesion. Each must be judged on their individual merits and in light of clinical disease.
The rules on uniforms

Where do tax exemptions apply when it comes to employee uniforms?

There are a number of reasons why employers want to give staff a uniform. It may be to create greater brand awareness, to offer physical protection to employees or simply to offer them a perk in that they don’t have to provide their own clothing. No matter the reason, the provision of a uniform carries a cost which, if HMRC’s rules are followed, can be offset against a business’s tax bill. But as might be expected, treading a path through HMRC’s complex tax rules is not easy.

Defining a uniform

According to HMRC, for a garment to qualify as a uniform, either the individual wearing it should be recognisable as belonging to a particular occupation (such as firefighters, nurses or the police) or the garments should carry a conspicuous badge or logo. Importantly, the badge or logo should be permanently attached to the garment. If it is removable, then there is a real risk that HMRC will argue that the garment is not really a uniform. For many businesses, the latter is the more relevant category when they supply branded items of clothing for their employees to wear out and about to promote the business. In a practice context, medical uniforms stand a good chance of qualifying.

It’s also worth pointing out that there are some cases where “ordinary” clothing can qualify under tax rules as a uniform – for example, where it is customary in a profession to wear specific clothing. A waiter wearing a dinner jacket is a good example, but these situations are less usual. It is wise to seek a ruling from HMRC in these cases to avoid a nasty surprise later on.

Items of clothing are considered individually by HMRC. If an employer supplies a branded top and pair of ordinary trousers as part of what they want the staff to wear, while it might be what the employer considers the overall uniform, from HMRC’s perspective, only the branded top will qualify as a uniform for tax purposes. The provision of the trousers would create a benefit in kind on which tax is payable by the employee.

WHY FIRMS PROVIDE STAFF UNIFORMS

1. A uniform can help all staff to look their best. Whether they are in administration, management or on the front line of a practice, a unified look – a uniform – gives everyone the opportunity to look good and feel their best.

2. Employees spend less time deciding what to wear to work. Just as some schools are now banning high-end branded clothing, employees also have to worry about what to wear to work, asking themselves what is appropriate. By implementing a uniform policy, a practice removes this stress from staff.

3. Employees look more professional. It’s a fact that we’re judged on appearances, and quickly too. By creating a uniform look for the team, a practice can ensure that its front-line staff always look professional as they represent the brand.

4. A uniform will immediately establish the image of a professional business that attracts and helps retain customers. This is especially important for client-facing staff. A well put-together uniform speaks to the customer in a way that gives them confidence in the practice and its offerings.

5. Uniforms work as a form of advertising and enhance the brand. Businesses spend a fortune on advertising and marketing. From logos to colours and documentation, the brand should be everywhere. It’s a huge mistake to forget about adding the brand to the clothing that staff wear.

6. Uniforms promote team spirit and a sense of belonging, in turn improving productivity. Sports teams wear a standard strip for a reason – it helps to build a team with a sense of belonging and cohesiveness. This in turn can enhance productivity.

7. It saves money. Good quality corporate clothing can be expensive. By investing in a quality uniform upfront, money can be saved in the long run. Whether the practice chooses to supply all or part of the uniform, staff can salary sacrifice their contribution where appropriate. This means staff are not required to spend ongoing money on work clothes and there will be no need to worry about keeping up with the latest fashion trends.
Professional financial planning and insurance advice tailored to you

Clive has been in his fair share of tight spots. It’s a mark of his experience that makes him a dependable team mate, at work and on the pitch.

We help vets like Clive deal with unexpected challenges, through our commercial and personal insurance services. And, with our extensive knowledge of retirement planning, we help them look forward with confidence too.

What matters to you, matters to us

www.lloydwhyte.com
Protective clothing
Other items that employers commonly supply to employees include protective clothing such as gloves, facemasks, goggles, protective boots, overalls, etc. Here, an employer can claim full tax relief for the cost where genuine protective clothing is needed and there is no taxable benefit to the employee.

Note though that if the employer provides for clothing to be worn under the protective clothing, this is not usually allowed as a tax-free benefit. Equally, the employee cannot claim a deduction for the cost of the clothing they use.

Cleaning
If the item has been accepted as a uniform or form of protective clothing, then it follows that the employer can claim tax relief for the costs of maintaining and/or cleaning these items and this will not create a benefit in kind for the employee.

The tax position
Where the employer provides (either gives or loans) exempt items of uniform or protective clothing, and/or cleans or maintains these items, they will be covered by an exemption and there is nothing to report. However, where an employer provides non-exempt items, there may be tax consequences. These depend on whether the employer has loaned the employee the items or given them.

If the employer gives the employee clothing that they can keep, the employer must report this on a P11D as a benefit. The amount to report will be the initial cost of the clothing to the employer or the value of the clothing when it is given. The employee will pay tax on the benefit, and the employer will pay Class 1A National Insurance.

If the employer loans the employee clothing then the benefit is assessed on 20 percent of the market value of the clothing, or the annual rental paid for the clothing. Again, this would go on a P11D and Class 1A National Insurance should be paid by the employer.

What if the employee incurs costs?
If an employee is required to supply their own uniform, or they have to buy branded items of clothing from the employer to wear, they will be entitled to claim tax relief for the cost of the uniform. Again, this relief applies strictly to qualifying uniform items only. For example, if a member of staff is required to wear black trousers and buy a branded top, then relief only applies to the cost of the branded top. There is no tax relief where clothing can be worn both for work and casually.

If the employer incurs costs cleaning or maintaining their uniform or protective clothing, they can claim tax relief for the reasonable cost of doing so. There are various flat rate expenses that can be claimed, details of which can be found on the HMRC website (gov.uk/guidance/job-expenses-for-uniforms-work-clothing-and-tools).

The amounts vary by job or profession. While the veterinary profession isn’t listed, there may be coverage found under “Healthcare”, where nurses can claim up to £125 off their tax bill, while uniformed ancillary staff can claim £80.

National Minimum/Living Wage issues
Lastly, employers who require their employees to purchase specific items of clothing do need to take care that this doesn’t result in the employee being paid less than the National Minimum/Living Wage. The definition of a uniform for the National Minimum/Living Wage is not the same as for tax purposes and if employers are taking deductions from their employees or require them to purchase specific items of clothing to do the job, they need to check if such costs could reduce staff pay below the legal minimum.

Providing uniforms to employees can be of great benefit to both the employer and the employee. While an employer can do whatever they want in terms of providing uniforms, they must follow the rules carefully if they want a tax write-off against those items provided.
All you need to know about ISAs

Individual savings accounts can offer an attractive tax-free shelter for savers

W
ith standard bank and building society savings accounts, taxpayers can be liable to pay tax on any interest earned on their money. This will depend on their total income from interest payments and their other taxable earnings in that tax year. It is worth noting that from April 2016, interest payments are now paid gross and taxpayers are liable for accounting for this on an individual basis.

On 6 April 2016, a tax-free Personal Savings Allowance (PSA) was also introduced for savings income (such as interest) paid to individuals. Broadly, this means that basic rate tax payers will be able to receive up to £1,000 of savings income, and higher rate taxpayers can receive up to £500 of savings income, without any tax being due. The PSA is not available to any saver with additional rate income.

With regards to investments, tax will usually be liable on the income and profits made from investments in the stock market, like company shares or unit trusts. However, ISAs serve as a kind of “wrapper” to protect savings from tax. ISAs allow individuals to invest monies up to maximum limits (by way of regular or single amounts) each tax year in a range of savings and investments and pay no personal tax at all on the income and/or profits received.

The main benefits of ISAs are:

- No personal tax (income or capital gains) on any investments in ISAs
- Income and gains from ISAs do not need to be included in tax returns
- Money can be withdrawn from a standard ISA at any time with no loss of tax breaks

ISA/NISA maximum contribution limits

After 30 June 2014, ISAs were renamed new ISAs, or NISAs. To save confusion, I have referred to ISAs throughout this article as the regulations remain the same. The overall maximum contribution limit to an ISA is £20,000 (for the tax year 2018/19). Adults can invest up to £4,260 for the benefit of a child in a Junior ISA.

The basics of how ISAs work

There are two types of ISA: cash – usually containing a bank or building society savings account, and stocks and shares – in the form of either individual shares or bonds, or pooled investments such as open-ended investment funds or investment trusts. The term Stocks and Shares ISA can be deemed slightly opaque and it would more accurately be known as an investment ISA; this form of ISA can also hold assets that are not shares – such as Government Securities (Gilts).

All your allowance can be invested in stocks and shares or split between cash and stocks and shares with either the same or a different provider. You can only invest in one cash and/or stocks and shares ISA in any tax year. You can transfer money saved in previous years’ cash ISAs to stocks and shares ISAs (or transfer in the opposite direction) without affecting your current year’s allowance.

Help to Buy ISA

If you are saving for your first home, you can save into a Help to Buy ISA, which is a type of cash ISA with additional tax benefits, although the investment limits are more restricted than a standard cash ISA. If you are saving into one of these, you cannot pay into another cash ISA in the same tax year.

Let us guide you through the mortgage maze

You’ll find us on Stand 1 at VetsSouth (6-7 March)

Contact us today! 0330 088 1157

A mortgage is a loan secured against your home or property. Your home or property may be repossessed if you do not keep up repayments on your mortgage or any other debt secured on it.
Lifetime ISA
Lifetime ISAs (LISAs) are available to anyone aged between 18 and 40 with a £4,000 limit; this forms part of the normal ISA subscription of £20,000. The government will add a 25 percent bonus on the contributions paid. Contributions with the government bonus can be made from age 18 to age 50. LISAs (including the government bonus) can be used to buy a first home up to £450,000 at any time from 12 months after opening the account. Any withdrawals not related to a first property purchase can be made but, if the saver is below age 60, the government bonus will be lost, and a 5 percent charge will be payable. Savers will be able to contribute to one LISA in each tax year, as well as a cash ISA and a stocks and shares ISA within the limits.

Stakeholder Standard stocks and shares ISAs are designed to meet the needs of a wide range of investors

Taxation
Any investment returns received will be largely tax free, although the tax credit on dividend income received by the fund is not recoverable. However, cash and fixed interest funds are deemed to receive interest rather than dividends and a 20 percent tax credit is recoverable. There is no personal tax on income taken and no capital gains tax on any gains made.

Qualifying investors
To be eligible to invest in an ISA, an investor must be an individual (ie not a company or trustee) who is 18 years of age or over (though 16- and 17-year-olds can invest up to £20,000 in a cash ISA and up to £4,260 in a Junior ISA) and who is resident and ordinarily resident in the UK (or is a crown servant serving overseas or the spouse of such an individual who accompanies their spouse abroad).

When an individual ceases to be eligible to invest in an ISA, any existing ISAs will continue to be exempt from UK tax, but future contributions to regular investment ISAs must be terminated and no further single contributions may be made.

Stakeholder Standard ISAs
Stakeholder Standard ISAs are those which meet government guidelines regarding cost, access and terms. Both types of ISA component can qualify for a stakeholder standard. The cost limit varies with each investment type and the access and terms criteria specify that investors must be able to get their money back at any time without penalty and with no other restrictions. The ISA must also offer low minimum investment limits and a maximum of 60 percent can be invested in equities and property, with the remaining 40 percent in less volatile assets such as bonds and cash.

Because of these limits, Stakeholder Standard stocks and shares ISAs are designed to meet the needs of a wide range of investors. They may, therefore, be less appealing to more experienced investors who want to maximise their long-term growth potential and so are more likely to seek specialist investment funds.

The presence or absence of a Stakeholder Standard cannot predict whether an ISA will prove to be a good or bad investment. A Stakeholder Standard ISA has not received government approval of any kind, nor is your money or investment return guaranteed by the government.
Mind the gaps in customer care

It is important that you minimise the gaps between expectations and experience to boost customer satisfaction.

**The delivery gap**

This is where your best intentions come to rest. You can write SOPs (standard operating procedures) to your heart’s content, but if your team lacks either the will or the skill to put them into practice, there will be a gaping hole between what you think your practice does, and what it actually does. This gap is common across all industries, and it’s your biggest weakness because chances are you think you’ve taken steps to get it covered. It’s the great value healthcare plan that your receptionist doesn’t recommend, because they’re not sure they really understand it. It’s the new laser tool you bought that your nurses don’t feel confident to use. The new in-house lab test for same-day turnaround that your vet doesn’t have time to report until tomorrow anyway.

What makes this gap even more of a threat is that it affects job satisfaction just as much as client satisfaction. Hopefully your practice is a safe space where you can ask your team what’s holding them back and receive a meaningful answer, but even then, a little secret shopping goes a long way to uncovering the truth – you care enough to do it to your competitors, why not your own practice?

**The communication gap**

If your practice’s website, social media and booking process were its online dating profile, then the client’s initial visit is the first date. Be honest, are your photos five years old? Did you overstate the shape you’re in? There’s nothing wrong with being an “established” practice, but don’t misrepresent yourself with photos of your opening day, or worse – stock photos! Go deeper; if your vets carry themselves as very serious professionals, don’t refer to them as the pet’s “aunties and uncles”. Identify what your practice’s personality is, and be true to it, so that the expectation matches the experience.

**The policy gap**

Maybe you’ve got it sussed; your clients asked for online booking and a cat-friendly waiting area – done and done. But when was the last time you took your practice out for a test drive? Is your online booking system smooth and speedy? Is it mobile compatible? What about your cat-friendly waiting area? Does it feel like an afterthought?

**The knowledge gap**

What do pet owners in your town want – late-night opening, the latest gadgetry, the lowest price tags? Are you sure? Practice owners can expend a lot of their time and money, and everyone’s energy, failing to meet clients’ expectations, when some answers are right in front of them. Receptionists don’t just book appointments, they also have to turn some down, so find out why. Had the potential client wanted a time you couldn’t offer or a service you don’t offer, or did they mention when arriving flustered that parking outside was a nightmare? Fix what you can and accept what you can’t – consider altering your consulting hours and stop advertising your “convenient, central location” if you know parking spaces are at a premium – manage expectations.

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Improving the client journey

What is seen, heard and felt are the most important factors driving clients’ opinions of a practice

My wife and I took our first puppy to a practice 15 years ago. There was no parking, no receptionist present when we arrived and no acknowledgement of our puppy or us as new clients. Much to our embarrassment, the puppy peed on the floor. No one said anything, even when we apologised. You won’t be surprised to hear that we didn’t go back. The hard fact is that only a tiny proportion of your clients who feel they have had a bad experience will tell you. The vast majority will say nothing but may be happy to tell their friends. And many – like us – will move to another vet.

Getting the customer experience right is one of the most important things you can do to create loyal, bonded clients who will recommend you to others. The key drivers of clients’ opinions are: 1. What they see, 2. What they hear and 3. What they feel. Each of these will be discussed in relation to the three key stages of a practice visit and some simple steps suggested to ensure as many of those opinions as possible are positive.

Arriving at the practice

It may have been some time since you entered your business with “client’s eyes”. Try it. Perhaps ask someone who is not a client to walk with you and tell you what they see and feel as they enter. When a client walks in, make sure they experience:

- A clean, organised, welcoming room that smells pleasant and feels comfortable
- A personal greeting to help them feel valued and looked after
- Smartly dressed team members, exuding friendliness and professionalism
- A tidy waiting area without ancient leaflets and posters cluttering every surface
- A well-briefed, friendly and caring reception team, who are aware of your visit – particularly if it’s for euthanasia. They should also be able to talk knowledgeably about your approach to preventative care and other basic healthcare questions
- An explanation for any delay

The consultation

There is no such thing as a standard consultation. Many will be routine, some will be heartbreaking – but, whatever the content, clients know what they expect from a good one and you’d be amazed how many times basic principles get overlooked. Focus on the following:

- Leave the previous consultation behind you and focus your full attention on the pet and owner in front of you
- Make sure you know the name of the client and their pet when you greet them. It shows that you care and that you are treating their pet with respect
- Explain exactly what you’re doing and why as you go: “Temperature is fine, teeth look fine” etc
- Make sure the costs you discuss for any treatments are accurate – don’t be tempted to guess
- At the end of the consultation, it’s courteous to open the door for the client and, ideally, escort them back to reception

The departure

A nodding client may not fully understand what you’ve said to them. It has been noted that though most clients say that the vet explained well and in language they understood, the majority of those later admit that they didn’t really understand. Many ring the practice back for a further explanation. This highlights the importance of ensuring that clients leave the practice feeling not only as if they and their pet have been well looked after but that they are clear about next steps. Make sure that:

- Your reception team check with the client that they understand the instructions they have been given and have the necessary medications and food
- A clear explanation of the bill is given including a breakdown of costs. If they can see what they’re paying for and how the bill is made up, it makes it more palatable. An offer to help with insurance paperwork, where applicable, is also a good idea

Few clients are driven by price alone. Pets are members of the family and the care and compassion you show to them is more important to many. If they feel that you genuinely care about their pet and offer an environment that is welcoming, friendly and supportive, even at the most difficult of times, they will be loyal, and they will recommend you.

STUART SAUNDERS
CHIEF OPERATING OFFICER, RALPH REFERRAL CENTRE

Stuart Saunders has been a practice manager for more than a decade and has recently taken on the role of Chief Operating Officer at the Ralph Referral Centre in Marlow. He has been a board member of the Veterinary Management Group since 2016.

CUSTOMER CARE

VP
As veterinary surgeons and nurses, we have a professional duty, imposed by the RCVS, to keep “clear and accurate detailed clinical and client records”. Not only are good records essential for joined-up patient care, they can also prove pivotal in dispute resolution when things go wrong. For the purpose of this article, records fall broadly into four categories: clinical (patient) records; client records; audits; and reports created in contemplation of claims or complaints.

**Clinical records**
Clinical records document information relating to the patient, such as clinical findings, test results, treatment plans, outcomes and communications that are relevant to clinical decision making. Clear, concise, contemporaneous clinical records can be crucial to the VDS’s ability to defend its members’ actions because they provide powerful evidence of the circumstances of a case, what was said and what was done.

Clinical records are owned by the practice. Information about an animal is not considered personal data under the GDPR, therefore clients do not have the right to view clinical records via a subject access request, except insofar as such documents record personal data (such as a client’s name and address). However, the RCVS expects you to disclose copies of clinical records when they are requested by (or with the authority of) the owner. This includes relevant records that have come from other practices if they relate to the same animal and the same owner. It does not include records that relate to the same animal but a different owner.

In addition, clinical records are normally stored against a client’s name and address. Following the introduction of GDPR, the RCVS has amended its advice regarding the transfer of clinical records to another practice and now expects you to obtain the explicit consent of your clients to do so, unless all personal data is redacted.

**Client records**
Client records, such as contact details and financial information, are personal data and are therefore subject to the GDPR. Individuals have a right to access such documents in full via a subject access request, except insofar as such documents record personal data (such as a client’s name and address). However, the RCVS expects you to disclose copies of clinical records when they are requested by (or with the authority of) the owner. This includes relevant records that have come from other practices if they relate to the same animal and the same owner. It does not include records that relate to the same animal but a different owner.

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**Audits**
Practices may generate reports relating to internal quality assurance or investigations, such as audits of patient outcomes or “significant event” reviews, which may inform “morbidity and mortality” meetings. These often relate to specific animals and, by default, their owners. If they are not anonymised, the personal data contained within these reports may be disclosable in response to a subject access request under the GDPR.

**Reports created in contemplation of claims or complaints**
Documents may be produced because a formal legal claim or complaint is in progress or has been threatened, or because there is a reasonable prospect that either may happen. Such documents are not routinely disclosable to the client, not even under a subject access request, or to the RCVS, which might request documents as part of an investigation.

Examples of such documents include those recording the internal investigations of complaints or mistakes, such as VetSafe reports, reports to the VDS documenting your involvement in a case or even a pre-emptive, contemporaneous note of potentially contentious circumstances that might be made for internal purposes whilst memories are fresh.
The world of veterinary practice is in a state of flux. The delicate balance of providing veterinary care to animals 24 hours a day, seven days a week, is one of the factors that can, for all its difficulty and issues for those of us tasked with providing it, be one thing that helps maintain the status quo. I recently had some communication with a friend in practice who described an episode that has rocked the local boat somewhat – and includes some pertinent points for all of us.

The area in question is a rural one where all the practices do their own out of hours (OOH) work. Up until five years ago, most of the practices were mixed independent practices and on call was par for the course. After a few years of mergers and acquisitions, corporate takeovers, etc, there is now one large farm and equine group, one large mixed practice and several small animal practices and hospitals. Standalone corporates had largely stayed away as they could not find a vet to start up a new practice and do all their own on call work. A corporate had even built a practice, but it stood empty for half a year. Such is the recruitment crisis, but that’s another story.

So, it came as some surprise to the local vets when a new corporate practice opened a few months ago. Some simple research and phone calls revealed that the practice was not doing its own OOH work. They had found a practice over an hour away to cover the OOH callouts and OOH inpatient and post-op care. To the local vets, this seemed a bit of a stretch. Some clients may make inquiries about OOH cover but not many will ask about inpatient cover, and a one-hour drive post-op was considered less than ideal.

One local practice (also a corporate – but a different one) had already lost a vet to the new practice as they could work in the same town and not do OOH. That vet has not been replaced and its clinical director ended up picking up extra on call over Christmas. Another phone call was made to the RCVS and the practice owner was informed that it was definitely not OK for the new practice to do this. The RCVS said they would look into it.

However, even if they are asked by the RCVS not to tell clients to do this, there is nothing to stop clients ringing round to find somewhere nearer for OOH, and this is indeed quite common in areas where OOH is contracted out to a provider a long way away. Many vets unwittingly and unwillingly end up providing ad hoc OOH cover to other practices’ clients. I have also seen various stories in vet social media about clients being unable to afford OOH treatment at OOH providers as the fees there are so much higher than their usual vet’s.

The finances and geography of OOH cover has many implications for the business and quality of life of veterinary surgeons and veterinary practices. We seem to be in a state of change about how this is being provided. At least one thing has been made clear to the local vets in this story: it is not OK just to shut up shop and tell clients to ring round.™
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