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EDITOR’S WELCOME

“This month, our news pages are dominated by headlines about Brexit”

Welcome to the December issue of VP magazine. I am so pleased to have received lots of positive feedback about our new design, with many encouraging comments on the readability and quality of the magazine. We also had a very interesting and insightful couple of days at London Vet Show, where we showcased our new look and launched our re-vamped website, which includes all our recent content as well as searchable archives of over 10 years’ worth of VP articles. The London Vet Show was a great opportunity to network with people from all areas of the profession and the programme was full of stimulating lectures, some of which we’ll be reporting on in January.

This month, our news pages are dominated by headlines about Brexit. Difficulty with recruitment is not a new concern for the profession, but the issue is likely to be exacerbated by the EU exit. The proactive approach of veterinary bodies like the RCVS and BVA is really encouraging and the launch of the Veterinary Capability and Capacity Project (VCCP) will provide some much-needed insight into what can be done to ease the problem. There will be more on that next month, when we will publish an interview with Chris Tufnell, RCVS senior vice-president.

With this issue, we are excited to launch a new column from RCVS Knowledge, which condenses the practical information from recent publications, giving practitioners an up-to-date evidence base for their work in practice. We have a fascinating article on managing pain in ophthalmic patients, and if you’re interested in dentistry, there’s a great Masterclass by Matthew Oxford describing a simple new technique for repairing feline symphyseal separations.

Our large animal section covers a different range of species this month, with an article updating us on caring for goats and another on flukicide use in sheep. In equine, we have the first in a short series by Kieran O’Brien, who this month is ‘asking the experts’ about wolf teeth, as well as a great piece on managing neck pain in horses.

With the festive season now upon us, I will leave you with some seasonal advice about guiding owners on overfeeding pets and an insight into what’s on David Williams’ Christmas list (you guessed it... more bow ties!).

Have a very merry Christmas (and don’t forget to check out our new website at www.veterinary-practice.com)!

JENNIFER PARKER EDITOR

For more information or to book your early bird ticket visit: www.officialvet.com
IN FOCUS

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Ophthalmic pain is produced from a variety of conditions associated with the eye and surrounding tissues and warrants prompt treatment.

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"Should the practice put written contracts of employment in place for staff?"

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How should practices prepare for the May 2018 changes to the General Data Protection Regulation?

The four key asset classes
How to use the four main asset classes to build a well-diversified investment portfolio.

What’s been good about today?
The VDS give us their monthly insight into continued training in practice.

Is there a scientific reason for wearing a bow tie? Well of course – you wouldn’t expect my attire to be anything other than scientifically justifiable, would you?!

Looking forward to the new year and beyond, I think an employment crisis is on its way.
Call for vets to be placed on shortage list

The UK’s exit from the EU will exacerbate recruitment problems for the veterinary profession, making the placement of vets on the Shortage Occupation List an immediate priority, according to the BVA and RCVS in their joint response to the Migration Advisory Committee’s Call for Evidence on the impact of the UK’s exit from the EU.

Recruitment and retention of vets has been a growing concern in the UK. The joint submission points to evidence from recent surveys indicating a current workforce shortage of 11% in small animal practice and an overall deterioration in the ability of practices to hire suitably qualified staff. There have been previous calls for the profession to be placed on the Shortage Occupation List, which would reduce restrictions on recruiting veterinary surgeons from abroad, and this will become a necessity post-Brexit. Following the exit from the EU, existing shortages will likely worsen, while changes in trade could increase the demand for veterinary skills, producing a shortfall in the UK’s capacity to ensure animal welfare, food safety and public health.

Currently, about half of vets registering each year in the UK are graduates from the EU. If there are no appropriate immigration measures in place when the UK leaves the EU, this EU contribution could decline, leaving a large gap in the veterinary workforce. Research among BVA members has indicated that since the EU referendum, about one-fifth are reporting that recruitment has already become harder. A study commissioned by the RCVS has shown that nearly a third of vets and vet nurses whose nationality is non-UK European are considering a move back home.

Animal sentience rejected from Brexit Bill

MPs voted to reject the inclusion of a crucial clause that would transfer the recognition of animal sentience into UK law post-Brexit in an eight-hour parliamentary debate on the EU (Withdrawal) Bill on 15th November.

Green MP Caroline Lucas submitted an amendment clause (NC30), which sought to transfer the EU Protocol on animal sentience set out in Article 13 of Title II of the Lisbon Treaty into UK law, so that animals continue to be recognised as sentient beings under domestic law.

The new clause was rejected with a majority of 18 for the Government: 313 against, 295 in favour.

Responding to the decision, BVA senior vice-president Gudrun Ravetz said: “It is extremely concerning that a marginal majority of MPs have voted-down this seminal clause. Enshrining animal sentience in UK law would have acknowledged that we consider animals as being capable of feelings such as pain and contentment and so deserving of consideration and respect. It is a founding principle of animal welfare science, and for the way that we should treat all animals.

“As an animal welfare-led profession, BVA has been calling on government to at least maintain current standards of animal health and welfare and public health. Yet actions speak louder than words, and this action undermines the Government’s previous promises that the UK will continue to be known for our high standards of animal health and welfare post-Brexit. There is now an urgent need for clarity from Government on how the provisions in Article 13 will be enshrined in UK law to ensure we do not fall short of the high standards we expect as a nation of animal lovers.”

Profession-wide project to assess potential impact of Brexit

The RCVS and BVA have joined forces with Defra on a project to assess the challenges and opportunities posed by EU exit, with the aim to develop a flexible and skilled workforce that meets the UK’s needs for both the immediate and longer-term future.

The Veterinary Capability and Capacity Project (VCCP) is co-chaired by the UK’s chief veterinary officer, Nigel Gibbens, RCVS senior vice-president Dr Chris Tufnell, and BVA senior vice-president Gudrun Ravetz.

The project board also comprises the CVOs for Scotland, Wales and Northern Ireland, Sheila Voas, Christianne Glossop and Robert Huey, as well as the APHA.

The project’s objective is to work with the veterinary sector to better understand the UK’s workforce needs and ensure that both the Government and veterinary businesses can continue to protect animal welfare, safeguard the food chain and maintain levels of public health and public services, and enable trade in animals and animal products.

The project will include a joint BVA-RCVS submission to the Migration Advisory Committee’s call for evidence on workforce issues post-Brexit. Three working groups have been set up within the project to look specifically at issues of veterinary resources, recruitment and retention.

The BVA’s ‘Brexit and the veterinary profession’ report can be found at www.bva.co.uk/news-campaigns-and-policy/policy/future-of-the-profession/brexit/
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Overwhelming support for expanded role for veterinary nurses

Veterinary nurses and veterinary surgeons overwhelmingly support that veterinary nurses should be able to undertake additional areas of work that are not currently permitted under Schedule 3 of the Veterinary Surgeons Act 1966.

The College conducted a consultation earlier this year about Schedule 3, which allows veterinary surgeons to delegate certain acts of minor surgery and medical treatment to veterinary nurses, asking for the professions’ views on how they understand and interpret it in everyday practice, how it could be clarified and how it might be amended to bolster the veterinary nursing profession.

Some 11,625 people responded to the consultation, of whom 6,873 were veterinary nurses (around 35% of the profession and including 1,665 student veterinary nurses) and 4,752 veterinary surgeons (around 21% of the profession) – the highest number that has ever responded to an RCVS consultation.

The report on the consultation, published on 31st October by the Institute for Employment Studies, found a very high proportion of veterinary nurses (92%) and a clear majority of veterinary surgeons (71%) agreed that veterinary nurses should be able to undertake additional areas of work.

In terms of the professions’ understanding of Schedule 3 and how it applies in practice, both veterinary nurses and veterinary surgeons indicated that confidence in their understanding was not very high.

Veterinary nurses rated their personal understanding at 6.74 out of 10 and vets rated their understanding as 5.57 out of 10. Furthermore, when asked what prevented the full utilisation of veterinary nurses, the majority of vet and vet nurse respondents highlighted a lack of understanding of what tasks can be delegated under Schedule 3, with around 60% of veterinary surgeons also admitting that they are not good at delegating.

While most veterinary nurses (61%) thought that the RCVS gives sufficient support and advice about Schedule 3, only 50% of vets agreed with this statement. In corresponding comments, both veterinary nurses and vets said they would like more clarity, especially around ‘grey areas’ such as the meaning of the term ‘minor surgery’, as well as further communication from the College about Schedule 3 and for more training for veterinary nurses to ensure they have the competence and the confidence to carry out delegated procedures.

The results of the consultation will now be considered by the RCVS Schedule 3 and Legislation Working Parties, which are reviewing the efficacy of the current Veterinary Surgeons Act and whether changes need to be made to bring the legislative framework for the profession up-to-date, including consideration of the part played by allied professions like veterinary nurses in the veterinary team.

Nominations open for Ceva Animal Welfare Awards

Ceva reports that its Animal Welfare Awards 2018, returning for the ninth year, are due to be bigger and better than ever; they will once again celebrate the achievements of ‘remarkable people’ from the farming, veterinary and charity sectors.

Outstanding vets, vet nurses, animal welfare professionals and animal welfare teams can now be nominated to receive an award by their peers and the general public. Nominees can come from all walks of life, all ages, and from anywhere in the world. The winners and runners-up will be honoured at a ceremony on the eve of BSAVA Congress on 4th April 2018.

If there is a vet, vet nurse, animal welfare professional or animal welfare team you feel deserves to be recognised for their ongoing commitment to animal welfare, visit www.cevawelfareawards.com to nominate. Entries must be in by Friday 26th January.
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- Feline Surgery
  - Dealing with common joint conditions
- Thyroidectomy – still a valid treatment?

**Nursing**
- Anaesthesia
  - An overview of anaesthetic premedication in dogs and cats
- Anaesthesia
  - Anaesthetising the senior dog and cat – a plan for success
- Blood transfusions in practice – what can we do?
- Nursing the trauma patient – what’s important
- Avoiding multi-resistant bugs in small animal practice
- Dealing with shock in your patient

**DAY 2**

**Small Animal Medicine**
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  - The investigation and management of chronic vomiting in the dog
- Abdominal Medicine
  - The investigation and management of chronic diarrhoea in the dog
- Abdominal Medicine
  - Applications for Alicam in the diagnosis of gastrointestinal disease in the dog
- Using behavioural observation to measure pain in small animals
- Medical ophthalmology
- Case-based clinical pathology – test your knowledge!

**Small Animal Surgery**
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- Basic surgical techniques in birds
- Surgical ophthalmology
- Abdominal Surgery
  - Surgical treatment of ureteric obstruction
- Abdominal Surgery
  - Latest thinking on gastroscopy in the dog
- Abdominal Surgery
  - Introducing the endoscopic spay in your practice

**Practice Management**
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  - The value of Pet Health Clubs in small animal practice
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  - Considerations for recruiting and retaining the right staff
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  - Top tips for communicating with clients

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Vets4Pets launch annual pet welfare report at LVS

The fourth annual Vet Report, examining the latest key insights and issues in pet welfare, was launched at the London Vet Show last month. The publication aims to support clinical research and raise awareness and understanding of current affairs in the veterinary and pet world, among pet owners and the general public.

This year’s report has authors from across the veterinary profession and explores a variety of topics, including choosing the right pet, modern veterinary care, dental health, cognitive dysfunction and pet bereavement. First launched in 2014, previous editions have highlighted issues including territorial aggression, pet obesity, microchipping and cat lifestyles, and paved the way for bringing attention to the rare, but deadly, canine disease Alabama Rot.

Dr Huw Stacey, director of clinical services at Vets4Pets and editor of the report, said: “We are thrilled to have been able to launch our fourth edition of the Vet Report at this year’s London Vet Show. We are incredibly proud that the report can be a channel through which the veterinary profession can communicate the latest research and content in a way that is easily accessible for the general public. Over the past few years it’s been amazing to see how successful our previous editions have been at engaging with the pet-owning public, and delivering important messages.”

To view the report online, visit www.vets4pets.com/thetvetreport2017

New farm antibiotic targets announced

Immediately following the news that sales of antibiotics to treat and prevent disease in UK farm livestock have achieved a record low following a 27% reduction over the past two years, targets for further reducing, refining or replacing antibiotic use across the key livestock sectors were announced at a London conference.

The sector-specific targets were developed over the past year by a ‘Targets Task Force’, facilitated by the Responsible Use of Medicines in Agriculture (RUMA) Alliance.

The headline targets for the eight sectors include a reduction in use of antibiotics in pigs by over 60% between 2015 and 2020, with minimal use of highest priority Critically Important Antibiotics (CIAs).

Data released earlier in the day indicate a good start has been made, with usage in the pig sector falling by around 35% between 2015 and 2016.
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8-28 January 2018: Emergency and Critical Care
Part 1 for Veterinary Nurses
Louise O’Dwyer MBA BSc (Hons), VTS (Anesthesia, Analgesia & ECC), Dip AVN (Medical & Surgical) RVN
This course will look at dealing with the presentation of emergency patients and how we can accurately assess and prioritise treatment for patients, along with looking at some common organ system presentations and specific indications for treatment, including the placement of tubes and drains. Aimed at nurses.

8-28 January 2018: Anaesthetic monitoring for Veterinary Nurses
Denise Prisk DipAVN (Surgical), VTS (Anesthesia & Analgesia), LTCL, LGCI, RVN
Monitoring anaesthetised patients is one of the most crucial aspects of a veterinary nurse’s role. This course will be suitable for nurses who want to update or refresh their knowledge. Both basic and more advanced methods of monitoring anaesthetised small animal patients will be covered. The periods of induction, intubation and recovery will also be discussed. Common abnormalities will be covered, e.g. cardiac arrhythmias, hyper and hypocapnia, together with the action that should be taken to address them.

8-28 January 2018: Ophthalmology in dogs & cats
Natasha Mitchell MVB DVOphthal MRCVS, Veterinary Council of Ireland Recognised Specialist in Veterinary Ophthalmology
Ophthalmic conditions are a common presentation in small animal practice. There is a tendency to fear the unknown, so it is important to keep your university knowledge refreshed and updated. The aim of this course is to increase your knowledge, skills and confidence in approaching these cases. It is important to perform a thorough examination to achieve a diagnosis and outline the available treatment options. Aimed at vets.

5th-25th February 2018: Parasite prevention and disease detection in the travelling and imported pet
Ian Wright BVMS BSc MSc MRCVS
Increasing numbers of pets are travelling on the pet travel scheme (PETS) and being imported from abroad. This in combination with the expanding distribution of parasites and vectors across Europe is making it increasingly likely that vets and nurses will encounter foreign parasites and be required to give preventative advice. This course considers exotic and emerging diseases, their diagnosis and treatment, and will consider principals of control and safe pet travel.

5th-25th February 2018: How to Handle End-of-Life Discussions
Caroline Hewson MVB PhD MRCVS
Euthanasia is the final common pathway of many diseases. But what can you do when a client disputes the need for euthanasia? And how can you more accurately judge when exactly euthanasia is now in this animal’s best interests? This course will give you an understanding of the different responses to loss, and knowing how to manage the different client touchpoints during animals’ end-of-life with maximum peace of mind, no matter the situation. Aimed at vets, vet nurses and reception staff.

5th-25th February 2018: Diabetes in cats and dogs
This course will cover pathophysiology and aetiology of diabetes mellitus in cats and dogs, its diagnosis, management and monitoring, and address the handling of diabetic emergencies – ketoacidosis, hypoglycaemia and hyperglycaemic hyperosmolar syndrome. Case studies will be used throughout the modular series along with a forum for discussion and final MCQ exam. Aimed at vets and vet nurses.

5th-25th February 2018: Skin Cytology for General Practice
Francesco Cian, DVM, DipECVCP, FRCPath, MRCVS, European Specialist in Veterinary Clinical Pathology. Aimed at vets & nurses
This course explores the following topics:
• Module 1: Sampling techniques, slide staining and submission of cytological samples to external laboratories.
• Module 2: Approach to slide examination and how to write a cytological report.
• Module 3: Inflammatory skin lesions and response to tissue injury.
• Module 4: Round cell tumours (skin).
• Module 5: Epithelial tumours (skin).
• Module 6: Mesenchymal tumours (skin).
• Module 7: Clinical cases.
• Module 8: Final MCQ exam to gain your CPD certificate.

5th-25th February 2018: Feline Lymphoma and Leukaemias
Dr Chiara Penzo DVM PhD Dip.ECVIM(Oncology) MRCVS European Veterinary Specialist in Oncology. RCVS Veterinary Specialist in Oncology.
Lymphoma is one of the most common cancers seen in the cat and can affect feline patients of all ages. Feline lymphoma is a diverse group of neoplasms that may differ greatly in clinical presentation, prognosis and treatment. Tumour behaviour and clinical management of feline lymphoma is also very different from canine lymphoma. This practical course will teach you how to effectively diagnose and treat this multifaceted disease in the feline patient with practical examples. Aimed at vets.

Book at: www.vetcpd.co.uk or call us on 01225 445561
The future for animal health

There remains a feeling of frustration around the UK’s exit from the EU, but hopes are high for a bright future in the animal health sector.

On 1st November, NOAH held its Brexit conference, where the most up-to-date progress on regulatory issues, areas of collaboration, opportunities, and overall emotions towards the EU exit were discussed. Changes in the policies surrounding animal welfare are of great concern to vets, producers and welfare bodies alike, and it is of utmost importance that these changes are representative of the animal health sector in its entirety.

NOAH chief executive, Dawn Howard, began proceedings by pointing out the general feelings of unease toward national Brexit negotiations, but sensed that there is a more positive outlook closer to home: “At our own local level, there’s more positivity and confidence within the sector.”

The day’s key discussion areas included: animal welfare, public health and food production, research and development and innovation, bringing new products to market, post-licensing controls for the overall market, and trade and investment.

Regulatory and political context

Nigel Gibbens, the UK’s chief veterinary officer, began the morning session with an insight into ongoing preparations and described the sector’s responsibility for maintaining the UK’s status as a centre of excellence for animal welfare.

In a statement, he described the necessary steps to achieving this: “We have to ensure that the UK maintains its standards of animal health and welfare and its reputation – its brand – to make sure that we’re a force to be reckoned with globally, as we step out to deal and trade globally to a greater extent than we ever have before.”

Nigel spoke of the Withdrawal Bill and its progress to the House of Commons this month, stating that it will “provide certainty to our trading partners and certainty for you as businesses”. He went on to describe how continuing access to EU medicines is critical to maintaining animal health standards in the UK and is a priority in Brexit negotiations.

Peter Borriello, chief executive of the Veterinary Medicines Directorate, offered some assurance for people concerned about decentralised and centralised marketing applications: “I’m going to say something that hasn’t been said anywhere else: any product which is in the UK as a medicine, that has a mutual recognition or a decentralised procedure marketing application, automatically has a national one. A centralised procedure has a slightly different approach in the EU market, but we are committed to ensuring that every single product through the centralised route, that has been approved to date, in the UK, will be a legal product from the day that we leave. Those products will remain available and will remain legal.”

Securing our future

In the final session, Julie Girling, MEP for South West England and Gibraltar, addressed the potential for Brexit to improve the UK’s status across the animal health sector.

Julie said we must stop discussing maintenance as an achievement: “I keep hearing the phrase: ‘at least maintain animal welfare standards’ and people thinking that maintenance is going to be an achievement... It’s only useful if we get something out of it... that we’re not currently getting out of our relationship with the EU.

“I don’t mean to be downbeat – I think there are opportunities, but we need to look beyond the obvious to find added value issues. What I’d like to see is the government making real effort in industries to find added value of leaving the EU.”

3
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People from a range of backgrounds came together to discuss the treatment of animals at the first Animal Law, Ethics and Legal Education Conference.

The first meeting of the Animal Law, Ethics and Legal Education Conference was held at Liverpool John Moores University in September, bringing together people from diverse fields, including law, animal science, veterinary medicine, philosophy and the charitable sector.

The aim of the conference was to explore interdisciplinary approaches to the treatment of animals in society and find ways of achieving positive change for animals by bringing together people with research expertise, scientific credentials, ethical reasoning skills and legal experience for implementation of animal welfare in practice.

Mike Radford of the University of Aberdeen opened the meeting with a keynote speech entitled ‘Beyond Bestiality, Benny-Hugging and Turkey Twizzlers: The increasing development and impact of animal welfare law scholarship’ – explaining that for a long time, animal welfare law as an academic subject was ignored because it was thought to lack academic rigour. Interest in the subject is now growing among researchers and students.

Brexit – opportunities and challenges

The opportunities and challenges relating to Brexit were examined by Peter Stevenson from Compassion in World Farming. Of immediate concern is the potential of UK animal welfare law dropping the notion of non-human animal sentience should Article 13 of the European Lisbon Treaty no longer apply.

The clause states: "...the Union and the Member States shall, since animals are sentient beings, pay full regard to the welfare requirements of animals, while respecting the legislative or administrative provisions and customs of the Member States relating in particular to religious rites, cultural traditions and regional heritage". Compassion argues that this is a vital addition to the Animal Welfare Act – which only covers people’s actions towards animals rather than ascribing value to the animals in their own right.

Concerns over welfare standards relating to imports could be met by imposing tariffs, said Peter, citing WTO case law allowing individual countries to impose trade restrictions where there is an issue of public morals, which could include attitudes to animal welfare. On leaving the EU, Peter saw an opportunity to ban live exports, providing a trade agreement can be reached with the WTO.

Opportunities for positive change in animal welfare following Brexit could include the use of farrowing crates and a move towards better systems such as the SRUC’s PigSAFE crates, and welfare-based subsidies to farmers for using such systems. Also, better labelling of consumer products, including dairy products to display the farming method, better management of supply chains to encourage public services like hospitals to source sustainable meat with high animal welfare standards, and a ban on the preventive use of antibiotics on the farm.

Pets as property

The place of animals within the family and their legal status as property, objects or autonomous beings was examined by Marie Fox and Sue Westwood of the universities of Liverpool and Keele respectively. Animals are still regarded in law as property, but recent cases such as rulings preventing the separation of elderly people entering care homes and their pets are bringing into question pets’ roles in the family home.

The authors argue that, backed up by increasing social scientific evidence, the legal status of pets as property should be re-examined and their place in the family reconsidered, suggesting that understanding animals as relational, embodied and vulnerable persons allows us to re-assess some of the most intractable debates within animal law – whether animals should be regarded as property or persons and whether rights or welfare approaches should be adopted.

Another interesting outcome from the conference was Jamie Murray’s (Liverpool Hope University) speculation that animal law may perhaps be the future basis for law relating to artificial intelligence. Chris Butler Stroud of Whale and Dolphin Conservation described how the global moratorium on commercial whaling in 1982 was a landmark in conservation and animal welfare.

However, while understanding of whales and marine life has increased significantly, political infighting, economics and political pressure from countries which derive economic and cultural benefits from whaling have stalled any further advancement in whale conservation and pose a threat to whale welfare.

The overall aim of the conference was to broaden debate and bring people with diverse expertise together. It was highlighted that ALAW (Association of Lawyers for Animal Welfare) membership is open to everyone and participation in the organisation is actively encouraged to build a broad foundation of expertise and positive action.
3D printing is changing surgery

Steve Fletcher, from Freelance Surgical Ltd, tells us how 3D printing is currently used and what the technology might bring to the profession in the future.

Three-dimensional printing, also known as additive printing, is a computer-controlled process by which a 3D shape is built by adding layer upon layer of material. The technology has been developing over the last 25 years and is now starting to appear in veterinary surgery; it is likely that some of the products you’re already ordering and using are 3D-printed.

What are the key uses of 3D printing in the veterinary profession?

In the veterinary market, this technology is used to produce several key products. CT scans can be utilised to make accurate, 3D-printed plastic models of deformed or complex anatomy. These scans are accurate to the submillimetric degree; they facilitate operational planning and enable implants to be precisely sized and contoured in advance of a procedure, effectively enabling a surgeon to practice a procedure before entering the operating suite. Another popular use of this technology is in the production of bespoke, sterile surgical guides for use in highly-complex surgical interventions. These guides may include deformity corrections, vertebral stabilisations and complex fracture alignments. Each guide is manufactured specifically for an individual case to improve the surgical outcome.

A new use of 3D printing is the printing of bespoke surgical implants directly, using titanium powder. This process enables unique implants to be manufactured for specific challenging cases. Implants are designed directly from the CT scan and can be manufactured to any style, shape or dimension.

The final key use is to manufacture unique internal structures within surgical implants. As the implants are built up in layers, the internal structure can be controlled at the microscopic level. This level of control was not possible before 3D printing. Fusion TTA implants offer an example of this technology, where the internal structure of their titanium implants has been designed akin to trabecular bone to optimise osseointegration and bone in-growth.

What makes 3D printing so valuable?

3D printing enables tailored, one-off products to be manufactured with internal structures that have never been available before. They can be manufactured from a wide range of different materials, are infinitely flexible and produce minimal waste when compared to standard manufacturing processes.

What is the future of 3D printing?

Will vets soon be printing their own patient-specific implants in clinics? Currently, the titanium printing machine costs more than £500,000, so this seems unlikely. But 3D printing will become the standard manufacturing technique, rather than being considered a cutting-edge technology. Current research into 3D printing is focusing on printing using biological materials, so in future, perhaps there is potential for printing a tissue or organ on demand.

Tissues are already being printed for use in drug development, and many billions of pounds are being invested to make this a reality.

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The final key use is to manufacture unique internal structures within surgical implants. As the implants are built up in layers, the internal structure can be controlled at the microscopic level. This level of control was not possible before 3D printing. Fusion TTA implants offer an example of this technology, where the internal structure of their titanium implants has been designed akin to trabecular bone to optimise osseointegration and bone in-growth.

What makes 3D printing so valuable?

3D printing enables tailored, one-off products to be manufactured with internal structures that have never been available before. They can be manufactured from a wide range of different materials, are infinitely flexible and produce minimal waste when compared to standard manufacturing processes.

What is the future of 3D printing?

Will vets soon be printing their own patient-specific implants in clinics? Currently, the titanium printing machine costs more than £500,000, so this seems unlikely. But 3D printing will become the standard manufacturing technique, rather than being considered a cutting-edge technology. Current research into 3D printing is focusing on printing using biological materials, so in future, perhaps there is potential for printing a tissue or organ on demand.

Tissues are already being printed for use in drug development, and many billions of pounds are being invested to make this a reality.
Putting evidence into practice

Current treatment of feline herpesvirus type-1 is aimed at reducing clinical signs, but a drug used in humans could target the virus directly.

Evaluation of three studies investigating the clinical response to the administration of the antiviral famciclovir in cats with confirmed or suspected FHV-1 has shown the drug to have a significant positive effect associated signs, with few to no adverse effects.

A crucial intervention

The Knowledge summary ‘In cats infected with feline herpesvirus type-1 (FHV-1) does treatment with famciclovir result in a reduction of respiratory and ocular clinical signs?’ in Veterinary Evidence concluded that famciclovir – normally used in the treatment of shingles and other herpes viruses in people – could be an important intervention in cats showing the signs of FHV-1, particularly if they haven’t responded to antibiotics.

Limitations to the primary literature mean more research is needed before famciclovir can be routinely recommended, but widespread improvement seen in all the evidence, combined with a general lack of side-effects even at high doses, make this antiviral a strong consideration on a case-by-case basis.

Dosing and course of treatment

A dosage regimen is yet to be established, but one study demonstrated a possible correlation between an increased dose (90mg/kg versus 40mg/kg, three times per day) and median duration of improvement.

Based on the evidence, treatment lengths vary widely (from two weeks to four months) and should be adapted depending on the patient’s response.

Metabolism of the drug is unknown in cats, so caution is recommended when treating patients with underlying liver or kidney insufficiency.

Dose-related side-effects weren’t apparent, but gastrointestinal clinical signs can occur. Metabolism of the drug is unknown in cats, so caution is recommended when treating patients with underlying liver or kidney insufficiency. For human use, famciclovir usually comes as 125mg tablets and is only available by prescription in the UK. Feline herpesvirus type-1, alongside feline calicivirus, is the most common cause of respiratory infections in cats. Clinical signs, which may include conjunctivitis and dermatological issues as well as breathing problems, can be severe, and permanent damage to the eyes and respiratory tract can occur.

The vast majority of infected cats become lifelong carriers of the virus, which not only predisposes them to relapses, but also makes them reservoirs for the spread of the disease. There are currently no antiviral drugs indicated for the treatment of FHV-1, so the likely efficacy of famciclovir, both in terms of reducing the severity of clinical signs and controlling contagion, offers a new possible avenue of intervention to practitioners.

Widespread improvement seen in all the evidence, combined with a general lack of side-effects even at high doses, make this antiviral a strong consideration.

In addition to a reduction in clinical signs, famciclovir appeared to reduce viral replication, as demonstrated by a reduction in the presence of FHV-1 viral load and antibodies.

Viral shedding was also lessened – an important finding when considering the contagious nature of the disease. However, questions remain over the efficacy of the drug in reducing corneal ulcers and improving abnormal tear film. Additional topical treatments would appear to be necessary in patients with these clinical signs.

Full Knowledge summary: https://veterinaryevidence.org/index.php/ve/article/view/105
Changing mindsets in the battle against obesity

With pet obesity and the accompanying health problems continuing to rise, how can veterinary professionals convince owners to change their behaviour?

A colleague emerged from his consulting room and hissed, “That border collie was more than double the weight she should be.”

It’s particularly sad when confronted with a case like this. Of the three collies I’ve owned and adored, not one has allowed me to forget for an instant the importance of physical stimulation to keep them fit. Yet here was an example, all too concrete, of one of Britain’s most athletic dogs, a victim of obesity.

Vets and vet nurses all recognise animal obesity as a form of abuse. It’s no less horrible than neglect or physical cruelty. We’re all familiar with the statistics (Table 1).

And we can all list the risks of obesity-related issues:
- Pancreatitis
- Heart disease
- Diabetes mellitus
- Osteoarthritis and other joint illnesses
- Respiratory distress

Petplan reports that there are five main reasons for the obesity problem, which result from owner behaviour:
- Too much food
- Lack of exercise
- Ignorance of correct weight or shape
- Snacking
- Wrong food

So how do we reverse the trend of obesity? We can show clients weight charts and invite the client to return in four weeks’ time – having followed a strict dietary and exercise regime – for a free weight check. We can promote metabolic diets, advocate weighing meals, splitting meals, avoiding snacks and increasing exercise.

But how often is our advice falling on deaf ears? It’s incredible how many clients laugh at their pet’s weight problem, or fail to understand that they are accountable for compromising their animal’s health.

Many owners confess to being seduced by their pet’s beguiling exploits to gain food, or come up with excuses like ‘he’s always hungry’ or ‘he’s just big-boned’.

The big, brown eye yarn speaks more about the client’s sensibility than the pet’s allure: the client is allowing himself to be manipulated for the sake of reward: the pet looks sweet – the client rewards the pet – the pet rewards the client with a tail-wag/purr.

So, how do we persuade owners to get their pets fit? In some cases, it may be pertinent to remind the client that the RSPCA will remove a pet from ownership if a pet is morbidly obese (not just if it’s been starved or beaten); but it’s clear that a multi-modal approach is incumbent on veterinary professionals:
- Explain the risk of obesity-related disease and the benefits weight loss could have.
- Advise regular, repeat free weight checks.
- Maintain a weight chart on the patient’s notes, and show the client the changes.
- Give detailed, specific advice about food – how much, how often, what sort.
- Provide tailored daily exercise advice.
- Listen to the client’s limitations and consider these when working with them to formulate a plan.

<table>
<thead>
<tr>
<th>Table 1. Petplan stats and facts on obese pets</th>
</tr>
</thead>
<tbody>
<tr>
<td>36% of all dogs vets treat are obese</td>
</tr>
<tr>
<td>29% of cats vets treat are obese</td>
</tr>
<tr>
<td>71% of vets agree that cases of pet obesity are continuing to rise</td>
</tr>
<tr>
<td>53% of vets say that cases of cat and dog diabetes are rising</td>
</tr>
<tr>
<td>70% of pet owners say that their animal has never been overweight</td>
</tr>
</tbody>
</table>
Spend 2018 delving into veterinary ethics

David Williams reviews an accessible new title on veterinary ethics that blends hardcore theory with plenty of practical examples

It was going to be a long flight – Utah and back in three days. But I have some decent reading material to occupy me on the flight – Siobhan Mullan and Anne Fawcett’s Veterinary Ethics: NAVIGATING TOUGH CASES (their capitals!). Well, for starters I have to say that this is a big book! I don’t know quite what I was expecting, but not over 500 pages’ worth of volume that the postie managed – just to squeeze through the letterbox!

“How on earth am I going to get through this?” I wondered. Twelve hours to Utah might allow me to make a start. But a lady at the back of the plane has just had a seizure mid-Atlantic and we’re headed back to Dublin to ‘deplane’ the poor woman before heading back to the States – more time to enjoy this book. And enjoy is exactly the word to use.

They say that youths these days have an attention span of only 10 minutes, but if I have to spend much more than that reading about Rawls’ Theory of Justice or the equivalent, I tend to drift off myself. That is why you only spend five minutes in this text on a subject like that before Siobhan and Anne give you an example to think about and a useful set of bullet-points on what they see the strengths and limitations of the theory to be.

We plunge straight from that chapter on making ethical decisions into ‘Animal Death’, where we see situations in which those decisions need to be made: everything from welfare of poultry on a stunning line to the perils of a veterinary student dealing with a terminal dog in Thailand where euthanasia in the UK would be the obvious route, but Buddhist teaching there outlaws it. And we’re only a fifth of the way through the book! There’s animal use from agriculture to laboratories to come, and issues of finance and consent and cloning and team building…

Should be near the top of the student list

Do I have any reservations? I’m a bit worried that with all the texts students have to buy, this one might not be near the top of their list, but it should be. Anatomy and biochemistry, pathology and pharmacology, surgery and medicine all crowd their way into the course and often ethics is squeezed in to the extent that buying a text like this might not seem of prime importance. But for students, for everyone, even though the volume looks a bit intimidating by its size, part of the joy of the book is how colour pictures and cartoons interspersed with text keep you reading and add to the interactive nature of the writing.

There are plenty of ‘what would you do?’ boxes giving the ‘TOUGH CASES’ the title suggests. Some of them are followed by discussions by various contributors while in others, it is left for us to make up our own minds – which is what we have to do each day in the clinic. Ask for this book for Christmas – and then spend all of 2018 delving into it!
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The emergence of small animal practice in the UK

The 1950s saw many key changes in the veterinary industry, including the spread of x-ray machines, introduction of new medicines, and formation of the BSAVA

There was growing awareness in the 1930s that small animal practice was creating a need for animal hospitals. The concept was attractive, but the initial costs were high and the economy was weak. Most urban practices were either in converted shops or part of the veterinarian’s home; refrigerators and x-ray equipment were rarities and anaesthesia equipment was rudimentary.

In the 1950s, the economy strengthened and these became the formative years for small animal practice in Britain – demand for veterinary services was expanding as pet populations grew, but the downside was the spread of ‘hardpad’, a variant and invariably fatal form of canine distemper. In certain urban areas, contention had also arisen between private practitioners and animal charity clinics. The animal welfare society issue was founded on allegations of frequently poor-quality almoning, unqualified practitioners, and clinics being established in direct competition to veterinary practices.

The BVA was engaged in discussions, but to many hard-pressed practices these were ineffectual. The demand for action was increasing.

Codifying products

The British Veterinary Codex, published in 1953, was the first official attempt to codify the pharmaceutical and biological products used in veterinary medicine. The valuable reference work identifies many products that had been in use for generations, listing only those that could be demonstrated to have some therapeutic activity. It also introduced the new generation of antibiotics, chemotherapeutics and vaccines. Veterinary consumption of most of the older products soon ceased and the profession was equipped with an armoury of effective products.

At the beginning of the 1950s, there were very few canine and feline vaccines; the only antibacterials were the various forms of sulphonamides. Ether and chloroform were the anaesthetics. By the end of the decade, penicillin and other antibiotics were available together with new chemotherapeutics, endocrine agents, vaccine products and anaesthetics. Plus, new technology equipment – including x-ray machines – was seen in most practices.

An editorial in The Veterinary Record in 1951 noted the opportunities, as well as the need for specialist small animal practice, but singularly there were no suggestions as to how to help or educate the small animal practitioner.

The London-based Central Veterinary Society was the only forum available for small animal practitioners. An informal group of London practitioners had begun to meet – mostly to exchange information and ideas.

The first practical step was taken by W. R. Wooldridge, the far-sighted veterinarian who founded the Animal Health Trust. In 1947, he established the Canine Health Centre and appointed S. F. J. Hodgman as director, a recognised canine clinician and well-connected in the dog world.

The canine ‘establishment’ had not always been receptive to building a relationship with the veterinary profession. Wooldridge was also the UK representative on the World Veterinary Association (WVA) Permanent Committee: they had decided to sectionallse activities and have one devoted to small animals.

BSAVA’s beginnings

Wooldridge saw an opportunity and talked with Hodgman, who had now been joined by Brian Singleton. The rest is well-known history – Singleton called a meeting in November 1956 and in March 1957, C. E. (Woody) Woodrow was elected the first president of the now British Small Animal Veterinary Association (BSAVA), with 88 members.

The mission of the BSAVA was clearly defined as “to promote high scientific and educational standards of small animal medicine and surgery in practice, teaching and research”. It was to be apolitical (which upset some early ‘hot head’ members) and soon became affiliated to the BVA, which aided the resolution of the charity clinics issue.

In 1959, Brian Singleton headed a small British team at the WVA Congress in Madrid, and the World Small Animal Veterinary Association was created. Today, the WSAVA has a membership of some 158,000 in 98 countries.

BSAVA has never looked back. With annual congresses since 1958, together with its publications and CPD programmes, the association is now a major force in the British veterinary structure. With a membership of about 10,000, BSAVA can truly celebrate 2017, its diamond anniversary year.  

Bruce Vivash Jones, BVetSts, MRCVS, graduated from the RVC in 1951. After retiring from his consultancy business in 2003, he began studying and writing on the history of the profession and veterinary medicine.
Imposter syndrome

What is imposter syndrome and how can you tackle it?

Laura Woodward has been the surgeon at Village Vet Hampstead for over 10 years. Laura is also a qualified therapeutic counsellor and is affiliated with the ACPNL and the ISPC. She runs Laurawoodward.co.uk – a counselling service for vets and nurses.

A number of vets in counselling have said to me, "I'm a fraud, and everyone is about to find out." While fear of failure (a topic of discussion next month) is rife among our newer graduates, feeling like a fraud – or 'imposter syndrome' – is more common among those of us who are graduated a little longer and are wondering why on earth our fractures are healing, or how come we are 'getting away with it' when our cardiac failure patients are feeling great. First described by psychologist Suzanne Imes, PhD, in the 1970s, impostor syndrome occurs among high-achievers who are unable to internalise and accept their success. By definition, most people suffering from imposter syndrome suffer in silence. Most people don't talk about it.

Part of the experience is they are afraid they are going to be found out. Yet, I would estimate that 50% of my clients have experienced it at some stage of their careers.

How does imposter syndrome get out of hand?
The trigger is often perfectionism. In its mild form, as vets, a healthy degree of perfectionism provides the energy that can lead to great accomplishments clinically. Of course, this is desirable as we are, after all, looking after living beings and we don't really want to learn from our mistakes.

'Benign perfectionists', who do not suffer feelings of imposter syndrome, derive pleasure from their achievements and don't obsess over failures. 'Neurotic imposters', however, cannot appreciate their achievements as anything but a stroke of luck.

Many people who feel like impostors grow up in families that place a big emphasis on achievement; in particular, parents who send mixed messages – alternating between over-praise and criticism. This can increase the risk of future fraudulent feelings. "There can be a lot of confusion between approval and love and worthiness. Self-worth becomes contingent on achieving," says Imes.

Parents should attach the self-worth of their children to more than just good grades or medals at football. Kindness is an achievement in kids too. So are empathy, self-regulation, resilience and the ability to be self-aware of our strengths and weaknesses.

How to tackle imposter syndrome
With effort, you can stop feeling like a fraud and learn to enjoy your accomplishments.

- See a counsellor. Often, the vets and nurses affected by imposter feelings don't realise they could be living some other way. They don't have any idea it's possible not to feel so anxious and fearful all the time.
- Find ways to recognise your expertise. Teaching younger students or new graduates is an instant way to boost your confidence and realise that you have indeed got knowledge and expertise.
- Remember what you do well. Write a list of what you do well. Now write a list of what you don't (yet) do well. There, your secret's in the open.
- Talk about it. Be the person in your practice who instigates monthly morbidity and mortality rounds, where mistakes in patient care are openly discussed without blame to establish protocols to help avoid a reoccurrence. In this way, not only are you facing your own imposter syndrome head-on and thus negating its effect on you, you are helping all your colleagues secretly suffering to face their demons and rise above them.
What are the biggest health issues facing the profession?

In January, a survey will be launched to identify the main health concerns in the sector and find out what support employees would like to have in place.

Employees are an organisation’s greatest asset, so ensuring their physical and mental health is maintained helps them to perform at their best on a daily basis. Supporting staff through workplace health initiatives and providing an environment where they feel their well-being is valued can instil a culture of positivity and help to foster a more productive environment.

But what are the health issues regularly affecting staff in the veterinary sector and why? Is enough being done by employers to safeguard well-being and what do employees want to see more of in terms of support?

Aside from the everyday physical health risks that come as part of the job, there is a real need to support mental health in the workplace. According to research by the BVA, the suicide rate among vets is nearly four times the national average – double that of other healthcare professions. Findings show high rates of dissatisfaction linked to pay rates, long hours and stress. Many employers will be aware of the need to support the mental health and well-being of their staff, but often they aren’t equipped to do this effectively. To get to the root of the concerns and challenges facing the sector, Veterinary Practice is joining forces with one of the UK’s leading healthcare cash plan providers, Sovereign Health Care, to conduct a national health and well-being survey in January 2018. The survey aims to uncover attitudes in the workplace from the perspective of employers and employees, and explore the concerns surrounding health and mental well-being.

Chief executive of Sovereign Health Care, Russ Piper, said: “We hope to uncover some of the concerns and views of people working in the industry as well as highlighting the desires for how the health and well-being of staff is taken into consideration in future.”

Readers can participate in the survey via the Veterinary Practice website from 8th January. The results will be shared with readers in the new year.

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**Tips for avoiding antibiotic use in wound care**

*Using techniques in skin prep, wound lavage, debridement and topical antimicrobial dressings to reduce the use of antibiotics in wound care*

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**GEORGE HOLLIS**  
 **VETERINARY WOUND LIBRARY**  
 Georgie Hollis, BSc, MVWHA, qualified as a podiatrist in Edinburgh in 1997 and is now an independent specialist in wound management and dressing technologies. She founded the Veterinary Wound Library in 2008.

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**We** may be lucky enough to spend this Christmas with parents or grandparents who survived their childhood in the years prior to 1928. Remember, they survived an era before antibiotics.

At just 19 years old, my mother’s younger sister died of what is now a treatable strain of tuberculosis. She died isolated in a hospital where the only contact she could have with her family was from an upstairs window.

It’s a sad story. It’s sobering. We assume that this approach to contagious disease is confined to our past. It is not; it could well be our future.

We are in a fist fight to preserve the wonder drug of our generation and every patient that is prescribed antibiotics is a responsibility that threatens our future.

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**Table 1. Signs of bacterial load in wounds from contamination to infection**

<table>
<thead>
<tr>
<th>Bacterial load</th>
<th>Clinical significance</th>
<th>Signs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contamination</td>
<td>None – normal scenario. Local bacteria accidentally present in the wound, but not yet multiplying to a point that affects healing.</td>
<td>None – normal status of presenting wounds. Avoided in surgical wounds through fastidious aseptic technique.</td>
</tr>
<tr>
<td>Colonisation</td>
<td>None – normal scenario in slightly older wounds and wounds open to the air. Bacteria have colonised the wound, but are not in quantities high enough to affect healing.</td>
<td>No signs of infection. Inflammatory phase of healing may be extended and the wound may fail to progress to the proliferative phase.</td>
</tr>
<tr>
<td>Critical colonisation</td>
<td>A hypothetical mid-point where bacterial load and immune response is in stasis. Healing is likely to be halted, but there will be no overt signs of infection.</td>
<td>Traumatic wounds may fail to respond to dressings and appear to be ‘stuck’. Surgical wounds may fail to unite. No clinical overt infection present.</td>
</tr>
<tr>
<td>Local infection</td>
<td>Inflammatory changes respond to a burden of bacteria that are beginning to thrive in the wound environment. Visually apparent changes.</td>
<td>Inflammatory changes will be clear and prolonged. Exudate will be increased and may be purulent. Erythema, swelling and patient sensitivity due to increased pain is likely.</td>
</tr>
<tr>
<td>Systemic infection</td>
<td>Bacteria within the wound spread beyond the wound boundaries to affect the whole patient. Inflammatory response becomes systemic and critical.</td>
<td>As above, combined with spreading inflammation to other body systems. Inflammatory signs may ‘rack’ towards the heart. Patient shows signs of systemic illness, inactivity, inappetence, malaise and an elevated body temperature.</td>
</tr>
</tbody>
</table>

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**Infection or inflammation**

The phase of inflammation is easily recognised by redness, swelling, pain, increased exudate and the presence of slough in the wound (Figure 1).

It is a normal process that is essential for healing where neutrophils address bacteria while macrophage activity harnesses the power of proteases that break down large redundant and residual protein-rich material into a slough that can be shed naturally.

Every wound, surgical or traumatic, will be exposed to microbes from the near environment; be that from the surgeon, the source of trauma or the patient’s own cutaneous flora. The higher the volume of bacteria, devitalised tissue and debris, the longer the inflammation process, and the formation of granulation tissue will be delayed (Table 1). Based on the physiology described above, it makes sense that healing delay is down to more than just infection (Table 2).

---

**Table 2. Common factors causing healing delay and prolonged inflammation**

| Necrotic tissue – soft tissue, tendon, bone |
| Contamination/foreign body – wood, grit, hair, debris |
| Movement – vascular tissue unable to ‘anchor’ to wound margins |
| Cell transformation – tumour factors inhibit wound progression |
| Toxicity – readily available antiseptics such as chlorhexidine are toxic to fibroblasts, effectively reversing progress during the proliferative phase |
| Lack of blood/oxygen supply – contributes to tissue necrosis |

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**Veterinary Practice | December 2017**
Tips for avoiding antibiotic use in wound care

Healing delay is down to the bioburden that inhibits proliferation. Yes, bacteria will find this protein-rich environment a perfect opportunity to multiply to the point of causing infection, but such an outcome is avoidable with good wound bed preparation.

In human healthcare, antibiotic use is becoming increasingly taboo, specifically where wounds are being treated unless they are chosen specifically to target the strain of microbe present in the wound, and are likely to reach that microbe at a concentration that is effective. If not, the choice could encourage proliferation of already-present resistant strains, or at ineffective concentrations, favour the development of new resistant strains. If you do use antibiotics, consider checking the points in Table 3 first. Key points:

1. It may not be possible for systemic antibiotics to reach the wound bed at an effective concentration when there is a limited blood supply to the wound bed.
2. Devitalised tissue may be exposed to sub-optimal concentrations of antibiotic, and breeding bacteria will be more susceptible to developing resistance.
3. Local contamination does not warrant a systemic approach when local debridement and decontamination is an option.

Reducing bioburden without antibiotics

Skin prep

- Skin prep of clipped area using chlorhexidine ‘scrubs’ should be at preparations of 4% (neat) using moist gauze as resistance encouraged by use at suboptimal concentrations now exists.
- Ensure all antimicrobial skin preparations are used at the correct concentrations for the purpose.

Wound lavage

- Gross decontamination can be achieved with copious lavage using plain tap water.
- Wound lavage using saline, Hartmanns, lactated ringers at a minimum of 100ml per 1cm wounds.

Debridement – surgical or mechanical

- Surgically debride to healthy margins. If in doubt, tissue can remain and the wound managed open using advanced dressings. Non-viable tissue will declare itself over the next few days for soft tissue and as much as 10 days for tendon and bone.
- Mechanical removal through use of wet to dry dressings or debridement pads (Debrisoft).

Table 3. Points to consider before relying on antiseptics or antibiotics for wound management

<table>
<thead>
<tr>
<th>Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It may not be possible for systemic antibiotics to reach the wound bed at an effective concentration when there is a limited blood supply to the wound bed.</td>
</tr>
<tr>
<td>2. Wound debris and bioburden will continue to prolong inflammation if not physically removed, regardless of infection present.</td>
</tr>
<tr>
<td>3. Use of an antibiotic or antiseptics must always be at the correct concentration for inhibition of the target species.</td>
</tr>
<tr>
<td>4. Some antiseptics may be inhibited by organic matter or may become ineffective if pre-mixed more than 24 hours prior to use. Check the label if in doubt!</td>
</tr>
</tbody>
</table>

The increasing threat of antimicrobial resistance is a ‘One Health’ priority, and rightly so. It is impacting the political agenda on a global scale and threatens every one of us.

Autolytic debridement – to encourage softening of dead and devitalised tissue

- Hydrogels (e.g. Intrasite) will soften necrotic tissue by donating moisture to the wound. A semi-permeable film or foam dressing will be required to maintain humidity so that the moisture level is maintained during one to two days’ wear. Slough and necrotic tissue will soften and be easier to remove manually.
Tips for avoiding antibiotic use in wound care

**Topical antimicrobial dressings**

- Medical-grade manuka honey aids debridement due to a high sugar concentration (around 84% ideally) while offering a broad spectrum antimicrobial effect. Its success is attributed to the combination of a low pH (3.4), and the antimicrobial effect of its natural enzymes and unique manuka-derived plant phytochemical profile.

- Silver (and many other heavy metals) can be combined with wound-friendly materials to deliver positive, antimicrobial ions at the wound bed. Dissociation of these ions in solutions enables them to bind to negatively charged microbes in the local environment and disrupt their ability to function. However, silver may no longer be immune to resistance. Reports of some species of Pseudomonas being immune to the effects of silver raises some serious concerns. Pseudomonas species being some of the most destructive in terms of wound breakdown, the thought of selection in favour of this microbe could be disastrous.

- Polyhexamethylene biguanide (known as PHMB) is a broad spectrum, wound-friendly antimicrobial that has been combined with many materials to suit the needs of the wound.

- Dialkylcarbamoyl chloride (DACC for short) is a fatty acid coating that enables irreversible binding of microbes to the fibres of the dressing so that microbial load is actively reduced and removed with the dressing; the concept of irreversible binding being one that could reduce the impact of exotoxins released by microbes that are broken down by natural macrophage activity (Cutimed Sorbact).

**Conclusion**

The increasing threat of antimicrobial resistance is a ‘One Health’ priority, and rightly so. It is impacting the political agenda on a global scale and threatens every one of us. With the threat of untreatable pandemic disease on our near horizon, we need to do everything possible to avoid unnecessary antibiotic use.

When it comes to wound management, we could be guilty of assuming infection is more prevalent than it actually is. Good wound bed preparation, debridement and the latest wound care products can help us reduce the need for antibiotic use.

If a wound ‘looks’ infected, we should ask ourselves if it really is infection, and if so, if the initial management was up to scratch. Could we have done something at an earlier stage that would have avoided what must have been an ideal environment for microbial proliferation?

Whatever we decide, the fact is we are on a collision course with resistance. Reducing the need for antibiotics for wounds today could really be all that stands between us and a last goodbye through a pane of glass.

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Can a raw diet be nutritionally complete?

Addressing concerns about parasites and the nutritional value of a raw diet

Last month, we started to discuss the differences between commercial, ‘responsible raw’ feeding and home-made diets, the latter where ingredients are primarily bought from supermarkets or butchers. This was particularly in relation to EU legislation and potential food-borne pathogens such as Salmonella. In this article, I will address some other concerns about raw feeding, beyond potential bacterial pathogens.

Though not always immediately obvious when thinking about raw feeding, parasites are a potential problem. There are stages in tapeworm lifecycles, for example, which may involve animal meat of the type typically used for pet food, and where this meat could then be consumed by a dog or cat. What can we do to ensure a raw-fed pet isn’t exposed to a higher burden of parasites than a non-raw-fed pet?

This problem can be overcome with an evidence-based freezing protocol. Raw materials can be deep frozen at -18°C for a minimum of 10 days. This freezing protocol has been shown to kill tapeworms, roundworms and protozoa that may be of concern if present in raw meat.

It is highly unlikely that a home-made diet, bought with ingredients from a regular supermarket or butcher, will have had such a protocol in place, as this food is intended to be cooked. Therefore, any parasites may still pose a risk.

Another concern often cited with regards to raw feeding is that the diet will not be complete and balanced. It has been shown in studies (e.g. Dillitzer et al., 2011) that it is very hard to get nutrition levels correct in a home-made diet, and that long-term nutritional deficiencies will lead to health problems in pets.

Companies joining the Pet Food Manufacturers Association (PFMA) agree to abide by European Pet Food Industry Federation (FEDIAF) guidelines with regards to nutrition, labelling and safety.

They must follow an evidence-based document that advises on minimum (and sometimes maximum) levels of dietary components, such as essential amino acids, essential fatty acids, vitamins and minerals.

If a raw pet food company is a member of the PFMA, you can be assured its products are complete and balanced, providing all an animal will need, from a nutritional point of view, to thrive.

Some people may ask: “Do raw bones have to be part of a complete raw diet?” While responsibly-chosen and sourced raw meaty bones may be seen by some as having dental and behavioural benefits (Marx et al., 2016), from a nutritional point of view there is no need to include them if the animal has an otherwise complete and balanced diet.

In conclusion, there are several key things to remember when advising a client on how to provide a raw diet:

1. A commercially-manufactured raw diet will almost always be more suitable for a healthy animal than a home-made raw diet.
2. Ensure the company you are buying the commercial diet from is a Defra-registered raw pet food company, meaning they must abide by EU legislation for, for example, microbiological testing of raw materials and traceability.
3. Check to see if the raw food manufacturer has a freezing protocol in place to kill parasites that may be present in raw food.
4. Ensure the company is a member of the PFMA and therefore has agreed to conform to FEDIAF standards with regards to what constitutes a nutritionally complete and balanced product.

Whether you’re an advocate of raw feeding, are completely against the idea or are neutral about the subject, it’s our duty as veterinary professionals to be able to provide open, objective advice to clients who wish to pursue it as a dietary choice for their pet, so they can do it as safely and responsibly as possible.

References


Ensuring owners keep their pets on weight loss diets over Christmas can prove challenging, but the festive season may also present some opportunities to discuss good habits.

For many, the festive season is full of opportunities for overindulgence – for ourselves and for our pets. Popular culture dictates that we should celebrate all occasions with food, but this becomes especially problematic at Christmas when the festive period can last more than four weeks, and so can the ‘feeding’ mentality.

Pets have become such an integral part of family life and together with the anthropomorphic tendencies of many pet owners, this means that often they are overindulged too. With approximately half of all pet dogs and cats in the UK thought to be overweight or obese, it is an issue that cannot be ignored. Sadly, only a small proportion of these overweight or obese pets will currently be under a veterinary-led weight management programme and, even for those that are, success is hard to achieve with high drop-out and rebound rates. Maintaining owner compliance can be a real struggle.

Poor compliance at Christmas

We know that achieving long-term weight loss is hard; it requires daily effort and a continued resolve to resist the temptation to return to old habits. At Christmas, clients are surrounded by products specifically designed to be tempting, with cat Christmas stockings and dog wine and chocolate being widely available.

Unsurprisingly, owners report a slippery slope effect, when a few extra treats lead to more treats being given in the future and possibly even the total abandonment of any dietary controls. In a recent study in obese dogs on weight management plans, the rate of weight loss slowed significantly over the Christmas period, and this coincided with an increase in the amount of additional food (e.g. treats and table scraps) consumed (King, 2017). There may be many contributory factors, including:

- Lack of time
- Visiting relatives
- Additional stress within the home
- Extra opportunities to steal food
- Increased amounts of leftover food
- Feelings of guilt from reduced attention given

Some owners accept and even perpetuate the impression that December is a time for overindulgence and so have no expectation of weight loss during this time, but can their pets take such a risk?

As obesity figures continue to rise, more worrying still is the apparent increase in the number of pets that have what we call ‘extreme’ obesity (Figure 1). While the nine-point body condition score (as recommended by WSAVA) is considered the best measure available for assessing body fat mass in general practice, it is now common to see pets whose body shape far exceeds the descriptors given for the maximum score of 9/9 (Figure 2).

A score of 9/9 is said to represent 40% above optimal body weight, but it is likely that many are at least 60% above their optimal weight (Figure 3).

For these pets, obesity is a serious life-limiting disease, significantly increasing the risk of other conditions, and will be dramatically reducing their quality of life. Can they afford to remain the same weight or even gain more over an entire month?

Studies have shown that even small amounts of weight loss can make a big difference to quality of life, with clinical improvements seen after just 6% of weight loss, a target that can be achieved within one to two months (Marshall, 2010; German, 2012). It is, therefore, important to educate pet owners that the benefits of continued weight loss will...
far exceed the momentary pleasure of giving something extra to their pet at Christmas.

How to maintain good compliance

During any weight loss programme, compromise is vital for long-term success. A programme that is too rigid or unrealistic for the owner is likely to fail. We should therefore accept the inevitability that pets are going to get something extra on Christmas day.

However, this doesn’t prevent us from helping these pets to achieve their weight loss goals. Prior planning for Christmas Day can be very useful.

If they insist on feeding a ‘Christmas dinner’ and you feel that this ritual is important to the human-animal bond, helping the client to choose foods (e.g. a small amount of lean meat and vegetables) and calculating a reduced portion of food based on daily caloric intake will help keep good control. This might even be a good opportunity for you to help the family realise the caloric content of human foods, and educate on the impact that the odd ‘slip-up’ or giving in to begging behaviour can mean for the pet.

Ensure clients understand that exceptions to the rule are only for Christmas Day and must not be extended for the whole ‘Christmas week’.

Luckily, Christmas can present some great opportunities to actively assist with weight loss. Owners can indulge their pets in other ways, gifting a new slow feeder bowl or interactive feeding toys that will keep the pet entertained and occupied, for example (Figure 4). The distraction and longer ingestion time helps prevent begging and allows the pet to feel more satisfied with its allocation of food. Additionally, they increase general activity at a time when levels may have fallen. Owners may like to reserve a larger portion of the daily food allowance, so it can be used in these toys over Christmas.

Continued weight loss will not be achieved by every pet, so it is important to let owners know that whatever has happened over the festive period, you will be pleased to help them again in January.

Christmas is a difficult time of year when managing pet obesity, but with sufficient planning we can show owners that there is an opportunity to celebrate the festive season with their pet without compromising weight loss.

Good festive habits

- Plan indulgence and limit it to Christmas Day
- Introduce interactive feeding toys or slow feeder bowls
- Adjust the portioning of food so it can be used in play
- Be mindful of all the extra opportunities to steal food
- Ensure your owners don’t run out of pet food while the practice is shut, particularly when feeding a clinical diet

References


Georgia Woods will be delivering a webinar on this topic on 5th December. To join the discussion, visit http://vetportal.royalcanin.co.uk/
A promising start for the first VETcpd Congress

An update on small animal techniques was provided at the VETcpd Congress in Bath, with a focus on advances that are applicable to everyday practice.

Taking place in the Assembly Rooms, Bath, on 21st and 22nd September, this was the first VETcpd congress. Around 350 delegates came from throughout the British Isles, which was an encouraging start for the new annual event.

Benefits of the subcutaneous ureteric bypass
Nicola Kulendra (RVC) described how using a new device – the subcutaneous ureteric bypass (SUB) – has improved the survival rate of cats with ureteral obstruction. Ureteral obstruction is most often caused by calcium oxalate stones that cannot be dissolved chemically.

Systemic signs are vague and urinary tract signs uncommon, but in advanced cases the cat may present with hypovolaemia, bradycardia and collapse.

Untreated obstructions lead to kidney failure and the pathology may not be detected until the second kidney is compromised. If there is bilateral ureteritis, the cat may present with hyperkalaemia and severe azotaemia.

In the past, a ureteric stent may have been placed, which had a high rate of complications. Refinement of this technique led to the development of the SUB, which combines a pigtail nephrostomy catheter leading from the kidney to a subcutaneous port which connects it to a cystostomy tube.

The cat is stabilised before surgery; haematology, biochemistry and urinalysis, including culture, are performed. Ultrasound is used to assess the kidneys: the diameter of the renal pelvis must be more than 5mm. Ultrasound examination rules out cats with chronic renal failure, but an antegrade pyelogram can be used if the diagnosis remains uncertain.

Operating involves a midline laparotomy, identification of the affected kidney, placement of the locking loop nephrostomy catheter in the renal pelvis and the cystostomy tube in the bladder. Tissue glue is used for anchoring. The tubes are tunnelled in the body wall and connected to the subcutaneous port. Surgery is monitored by fluoroscopy. After the operation, fluid input and output are measured, but usually the placement of urethral catheters is avoided.

SUBs have been placed in 100 cats, with a mean survival time of 529 days. Sometimes chronic renal failure becomes significant, anaesthesia can give problems, or there may be holes or kinks in the tubes which lead to leaks or urinary tract infections. Cats are monitored and every three to six months the SUBs are flushed and haematology, biochemistry and urinalysis carried out.

Some cats regain ureteric patency. Ongoing maintenance is expensive and the owners should be aware of potential complications, but SUBs have proven a good advance on older techniques.

Treating atopic dermatitis
Dr Anita Patel runs a dermatology referral service. She explained that atopic dermatitis (AD) has a complex pathology involving both the innate and adaptive immune systems. The cytokine IL-31, which is found in skin and serum of affected dogs, causes the itch and is the target for the new drug Lokivetmab (Cytopoint). Different cytokines are involved in the chronic phase.

The aim of treatment is to control the symptoms and give the animal as comfortable a life as possible. Treatment must be affordable and manageable by the owner, so each case needs individual planning.

For acute flare-ups, use Oclacitinib (Apoquel), an IL-31 inhibitor, to suppress the itch. This treatment usually works within 12 hours. Oral and/or topical glucocorticoids are also effective. If possible, the flare factor needs to be identified and reduced or removed and the health and cleanliness of the coat needs to be supported. Watch out for infections that may be complicating chronic cases.

Oral Ciclosporin (Atopica, Cyclavance, Sporimune) can be used to manage chronic cases, but it takes four to six weeks to be effective, so other treatments need to be used in the early stages.

Allergen-specific immunotherapy aims at reducing the immunologic response; it is safe and works in 50 to 80% of cases. It can take up to 10 months to work and may need to be supported by symptom-suppressing treatments.

Coat hygiene is important. Regular shampooing can help reduce symptoms and good environmental management also plays its part. Diets such as Hill’s Derm Defense, which is a source of antioxidants, or supplements which increase Omega 3 and Omega 6 fatty acids can help support the epidermal barrier.

Dr Patel reminded us of the other factors such as flea bite sensitivity, food allergy, contact allergy and background infections such as Malassezia and Staphylococci which cause hypersensitivities. These can occur concurrently with AD and need to be recognised and treated appropriately.
Canine eosinophilic furunculosis

David Grant continues his series of dermatology briefs

Canine eosinophilic furunculosis is a disease predominantly affecting the nasal area and occasionally elsewhere. It has an acute onset and is highly responsive to glucocorticoids (Miller et al., 2013). Although the exact aetiology of the condition is uncertain, it is thought that arthropod or insect bites are most likely incriminated in many cases.

Clinical features

- Sudden onset.
- Young dogs predisposed, possibly due to inquisitive behaviour.
- Nodules, papules, crusts, ulceration and haemorrhage (Paterson, 2008) are all possible and depend on how rapidly veterinary advice is sought.
- Lesions are painful, but not normally pruritic.
- Typically affected areas include the bridge of the nose, muzzle, pinnae and periocular skin (Figures 1, 2 and 3).
- In rare cases, the ventral abdomen, chest and pinnae are involved (Paterson, 2008).
- Lesions are normally sterile with secondary bacterial infection uncommon, but more likely if veterinary advice is delayed.

Differential diagnosis

(from Miller et al., 2013; Paterson, 2008)

- Staphylococcal nasal folliculitis.
- Dermatophytosis – especially to Trichophyton mentagrophytes, T. mentagrophytes var erinacei.
- Burns.
- Nasal solar dermatitis.
- Drug eruptions.

Diagnosis

- History and physical examination.
- Rule-out of differentials.
- Cytological examination of impression smears. This is the most useful diagnostic test. Numerous eosinophils are usually present. In the later stages, there may be some degenerate neutrophils with intracellular bacteria representing secondary infection.
Canine eosinophilic furunculosis

**Clinical management**
- Systemic glucocorticoids are very effective for therapy and induce a rapid response. Topical glucocorticoid therapy, although undoubtedly potentially effective, suffers from the fact that the lesions are painful, and therapy may therefore be resisted.
- Prednisolone (1-2mg/kg every 24 hours) is administered until a response is noted (usually seven to 10 days), then the same dose is given every other day for a further seven to 10 days (Miller et al., 2013).
- Antibacterial therapy is only needed when secondary infection is detected by cytological examination and confirmed on culture. A three- to four-week course of antimicrobials effective against *Staphylococcus pseudintermedius* is recommended in these cases.
- The prognosis is excellent (Figure 4).

**Histopathological examination.** An eosinophilic infiltrative mural folliculitis and furunculosis are usually observed. There may be a mixed inflammatory infiltrate with dermal haemorrhage and collagen degeneration (Paterson, 2008). Marked dermal and subcutaneous mucinosis, and ulceration and flame figures are often noted (Miller et al., 2013).

**References**
A new technique for repairing feline symphyseal separations

Avoiding complications in the repair of symphyseal separations with the use of a wire and acrylic intra-oral splint to stabilise the rostral mandible

Matthew Oxford, BVM&S GPCert(SAS) MRCVS, is one of only a handful of veterinary dentists in the UK. He sees cases across the south of England with several clinics and at his own base at New Forest Veterinary Dental Service.

Jaw fractures are a common traumatic pathology in our domestic patients. Separations of the mandibular symphysis are seen in cats perhaps more than any other orthopaedic injury. As a fibrous union and a prominent area of the rostral face, it is at risk primarily in road traffic accidents and sometimes in high-rise falls. This article will challenge some of the well-established techniques and present the reader with an alternative and more reliable technique for repair.

Symphyseal separations account for between 11 and 20% of all orthopaedic traumas and 73% of all craniofacial injuries in cats. Visually, they can be very easy to diagnose, and the injury is often clear on conscious examination (Figure 1). However, radiographic or CT imaging of the skull is still essential as approximately a third of these cats will also have other craniofacial trauma. It is this additional craniofacial trauma that is likely to affect the outcome of surgical treatment.

The traditional technique

The most commonly-described technique for repairing symphyseal separations is to place a cerclage wire around the rostral mandible (Figure 2). This can be done by passing the wire through two large hypodermic needles placed either side of the rostral mandible. Once placed, the cerclage wire is tightened and knotted outside the skin on the ventral aspect of the mandible.

There are, however, some significant concerns regarding this repair. Firstly, the position of the wire around the rostral mandible is often close to the neurovascular bundle that emerges from the middle mental foramen. As the...
A new technique for repairing feline symphyseal separations

Once the cerclage wire is tightened, there is a significant risk of crushing this bundle between the bone and the wire, which is likely to be a source of post-operative discomfort. Secondly, as the wire passes from the oral cavity through to the submucosa and then out of the skin, the wire is easily contaminated by plaque and food debris from the oral cavity.

Thirdly, the knot ventral to the mandible is a challenge to cover and will often leave a sharp structure that can traumatise the patient and its owners or veterinary staff. Finally, and most significantly, the cerclage wire, when tightened, has the potential to rotate or collapse the mandibles, resulting in a malocclusion.

With no other injuries, the caudal articular surfaces of the mandible will counteract this rotation. But if there is a caudal trauma, this stability can be lost, and the mandibles will be compressed and rotated. This can be seen in these images:

**FIGURES 3a and 3b**: Fracture of the right condyle (red arrows) and a separation of the symphysis causing mandibular instability.

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A new technique for repairing feline symphyseal separations

two cases: in the first, skull radiography reveals a condylar fracture of the right mandibular condyle (Figures 3a and b). This destabilises the mandible, and as the cerclage wire is tightened, the right mandible becomes externally rotated (Figures 3c and d). From this, a malocclusion develops, which prevents full mouth closure.

In the second case, there is a caudal luxation of the left temporomandibular joint, which again destabilises the mandible. This time, as the cerclage wire has been tightened, the mandible has been compressed lingually and then inwardly rotated. This again results in a malocclusion,

whereby the left mandibular canine tooth is now making contact with the palatal mucosa, causing extensive damage and discomfort (Figures 4a, b, c and d).

An alternative technique

These complications can be avoided by using an alternative technique to repair the separation. Indeed, it is my opinion that this technique is altogether a more straightforward one, and a technique that is easy to achieve in general practice. This alternative technique uses a wire and acrylic intra-oral splint to stabilise the rostral mandible.

Initially, the mandibular canine teeth are scaled to remove calculus and polished lightly with a pumice polish. The tooth surfaces are then irrigated and air-dried using an air-water syringe.

The teeth are etched with phosphoric acid and a bonding agent such as Optibond is applied and light-cured.

A bleb of acrylic is then placed 2-3mm above the gingival margin on the buccal aspect of the mandibular canine teeth...
to act as a retainer (Figure 5a). Just apical to this, a figure-eight orthopaedic wire is placed around the mandibular canine teeth, knotted and tightened in light compression, with the knot then folded to sit adjacent to the distal aspect of one of the mandibular canine teeth (Figure 5b). The wire will sit on the cusps of the mandibular incisor teeth.

With the wire in place, further acrylic is then applied to the surface of the mandibular canine teeth, and also covering the wire (Figure 5c). The wire and acrylic, when used together, are stronger than either material used on its own. The acrylic can then be shaped with an acrylic burr to allow full mouth closure and to ensure the splint is comfortable within the mouth. The splint allows a much more controlled fixation, with accurate apposition of the separation, and because of the position of the splint it is unlikely to cause disruption to the occlusion, even if a caudal fracture is present. The splint is rigid enough to stabilise not only the symphysis, but the whole mandible with caudal fractures supported by the masticatory muscles. The splint is left in place for three to six weeks, until the separation has healed, and is then removed by simply sectioning the splint using a cutting tungsten carbide fissure burr in the high-speed dental handpiece.

This technique may be new to some readers, but it is a useful technique to master as it provides a more straightforward and reliable repair to this very common orthopaedic injury.

References and further reading
Managing ophthalmic pain

Ophthalmic pain is produced from a variety of conditions and warrants prompt treatment.

Peri-operative analgesia

Pre-medication with an opioid such as methadone provides excellent analgesia. Methadone has been demonstrated to be a superior analgesic to buprenorphine in dogs, although in cats, efficacy appears to be similar. Neither methadone nor buprenorphine cause vomiting, which may increase intra-ocular pressure.

The benefit of acepromazine in pre-medication for ocular procedures is that its long duration of effect may help to calm patients in recovery where alterations in sight may prove disorienting. Acepromazine is not an analgesic. Alpha 2 agonists in pre-medication have the advantage of augmenting opioid analgesia during surgery.

These versatile agents can be incorporated into a recovery protocol at low doses (dex/medetomidine 1-5mcg/kg) to calm patients during the recovery period. Incorporating simple pain-scoring tools can assist in decisions regarding repeated opioids during the peri-operative period.

Corneal surgery

The cornea contains a high density of nociceptors producing a marked pain response to stimuli. Topical local anaesthesia provides excellent, rapid onset analgesia. Tetracaine has a more rapid onset, but a shorter duration than proxymetacaine and results in less conjunctival irritation. Repeated single drops have been shown to provide maximal analgesia of longer duration in horses compared to flooding the cornea (Monclin, 2011).

Enucleation

In patients where enucleation is necessary, there is likely to be pre-existing pain, and consideration should be given to analgesics, such as NSAIDs, prior to surgery – preferably for several days before surgery. A retrobulbar block is a simple technique to learn and provides effective anaesthesia for enucleation.

Local anaesthetic techniques for ocular surgery

Choice of local anaesthetic depends on the onset of action required and duration of effect. Clearly a long duration of action is most desirable in surgical patients and the slower onset of action of bupivacaine may be acceptable when surgical preparation times are taken into account.

Lidocaine

- Formulation – preservative-free, single-use vial, 1% or 2% solution
- Onset – 5 minutes
- Duration – 1-2 hours
- Dose – 4-10mg/kg

Bupivacaine

- Formulation – preservative free, single use vial, 0.25% or 0.5% solution
- Onset – 15 minutes
- Duration – 6-10 hours
- Dose 1-2mg/kg

Other long-acting local anaesthetics with a similar profile to bupivacaine include ropivacaine and levobupivacaine.

Retrobulbar block

- Area desensitised – cranial nerves II, III, IV, V and VI
- Indications – enucleation
- Volume to inject 1-4ml (dogs), 0.2-0.5ml (cats/rabbits)
- Needle size 23G 1” (pre-curved needles are available from Visitec)

The block should be injected either through the eyelid or the conjunctiva. Needle insertion point is half way between...
the lateral canthus and mid lower lid.

The needle should be walked around the bony orbit with the aim to position it caudal to the globe, where the local anaesthetic solution is then deposited. This technique should be avoided in neoplasia where there is a risk that neoplastic cells may be seeded (see splash block technique).

**Peribulbar technique**

This is an alternative technique to retrobulbar block and may be more suited for providing anaesthesia for the globe in cats. A short needle (23G 1") is passed through the bulbar conjunctiva (avoiding the 12, 3, 6 and 9 o’clock positions) along the bony orbit, but unlike the retrobulbar technique, is not curved to end caudal to the globe. Local anaesthetic solution (2-4ml) is injected after aspiration.

Gentle massage of the globe should be performed following this technique to encourage spread of local anaesthetic into the intraconal space. This technique requires a larger volume than retrobulbar block to ensure sufficient spread, but avoids the risk of penetrating the optic nerve sheath.

A study by Shilo-Benjamini (2014), titled *Comparison of peribulbar and retrobulbar regional anesthesia with bupivacaine in cats*, demonstrated better deposition of local anaesthetic using this technique compared to retrobulbar injection. Peribulbar injection may therefore be a more suitable technique in the cat.

**Sub-Tenon capsule block**

This technique provides a desensitised area as for retrobulbar block, but has improved safety over the retrobulbar technique (Ahn et al., 2013; Shilo-Benjamini et al., 2013). Utilising this technique produces good desensitisation for enucleation or for corneal surgery. Skin (eyelid) sensation may not be completely eliminated though, and additional analgesia may be required for skin closure.

This method requires additional equipment and is technically more challenging than the retrobulbar method. The patient should be positioned in dorsal recumbency and a sterile prep performed. After application of topical anaesthesia, the mediadorsal portion of the bulbar conjunctiva (approximately 5mm from the limbus) is incised with tenotomy scissors, and the conjunctiva and sub-Tenon capsule are bluntly dissected from the underlying sclera. Sub-Tenon injection is performed through the incision with a 19-gauge, curved, blunt spatulated cannula. The sub-Tenon cannula often requires gentle tissue dissection as it is passed to allow it to be positioned caudal to the globe.

**Splash block**

Where neoplasia or infection is suspected, it is undesirable to seed these cells into deeper tissues.

For enucleation, although not a pre-emptive technique, the application of local anaesthetic once the eye is removed is widely practised. My preferred technique is local anaesthetic (bupivacaine) soaked into an absorbable haemostatic material placed at the surgical site (Ploog et al., 2014). Infiltration of the skin incision prior to or post-closure will improve comfort levels.

**Peri-ocular blocks**

This technique is used for desensitising the skin around the eyes. It is useful for mass removal, eyelid surgery or as part of enucleation. Eyelid infiltration of local anaesthetic post-surgical procedure may be considered for post-operative analgesia. Care should be taken to minimise post-operative swelling, which may result from local anaesthetic injection. Use of carefully-placed cold packs may prove to be useful. The nerves blocked are infratrochlear, zygomaticotemporal, frontal and lacrimal.

References


A look through the latest literature

**Effects of a *Moraxella bovis* vaccine on the incidence of pinkeye in calves**
Jonah Cullen and others, Iowa State University, Ames

Infectious bovine keratoconjunctivitis (otherwise known as ‘pinkeye’) is a cause of significant economic losses and a major animal welfare issue in calf production in countries around the world. Vaccines containing antigens expressed by the primary causal organism *Moraxella bovis* have been developed but there are concerns about the different strains of *M. bovis* found at farm level and the role of secondary pathogens such as *M. bovicula*. The authors tested a commercial *M. bovis* vaccine in 214 calves aged up to two months. They found that treatment was ineffective in protecting calves against infectious bovine keratoconjunctivitis.

*Journal of the American Veterinary Medical Association, 251*, 345-351.

**Retinal astrocytoma in a dog**
Keiichi Kuroki and others, University of Missouri, Columbia

A nine-year-old spayed female miniature schnauzer presented with a one-week history of increased redness and cloudiness in the right eye. Clinical examination revealed the absence of a menace response, dazzle reflex and direct pupillary light reflex, along with mild corneal oedema and a high intraocular pressure. A retinal neoplasm was diagnosed, the affected eye was removed, and the patient responded well. The neoplastic cells stained positively for glial fibrillary acidic protein, vimentin and S-100, findings consistent with an astrocytoma.

*Canadian Veterinary Journal, 58*, 919-922.

**Sudden acquired retinal degeneration syndrome in 93 dogs in western Canada**
Marina Leis and others, University of Saskatchewan, Canada

Sudden acquired retinal degeneration syndrome (SARDS) is a cause of irreversible blindness in dogs associated with apoptosis of the photoreceptors in the retina. The condition was first described in 1984 and despite considerable research efforts, its aetiology and pathogenesis are still poorly understood. The authors describe the clinical findings in 93 cases, which included polyuria, polydipsia, polyphagia, weight gain, elevated liver enzymes, isosthenuria and proteinuria. The mean age at diagnosis was 8.1 years and males and females were equally affected. The breeds most commonly affected were miniature schnauzers, dachshunds and pugs.

*Canadian Veterinary Journal, 58*, 1,195-1,199.

**A portable technology for measuring corneal thickness in small ruminants**
Alexander LoPinto and others, Tufts University, Grafton, Massachusetts

Measurements of corneal thickness may be useful in both a clinical and research setting and will usually involve technologies such as high-resolution ultrasound biomicroscopy or confocal microscopy. The authors describe the use of an alternative technique, spectral-domain optical coherence tomography, which has two significant advantages. Firstly, it does not require contact with the cornea and there is therefore less risk of tissue damage, and secondly, the device is portable and can be used in clinical examinations of farm animals. The study describes the collection of repeatable results in sheep, goats and alpacas.

*American Journal of Veterinary Research, 78*, 80-84.
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Improving understanding of health issues in goats

A wide variety of issues faced by dairy and pet goats were discussed at the Goat Veterinary Society meeting on 2nd November.

The Goat Veterinary Society autumn meeting and AGM was held at Taunton racecourse. David Harwood (chairman) reported that the Society has prepared a positioning paper on antibiotic use and resistance in goats, which is available on request. Closer links with the Sheep Veterinary Society have been developed to consider topics of mutual interest. An update of the BVD incident with imported cattle was presented and delegates were urged to seek details of clarification from APHA. Experiences with the management of TB testing for goats have been collated and information is available on the GVS website.

Veterinary surgeons are requested to indicate their use of analgesia in goats; a short, confidential questionnaire is available from Ben Dunstan (honorary secretary) at: bencowvet@gmail.com. The Milking Goat Association (www.milkinggoat.org.uk) has been established to further the interests of this expanding industry group.

Hoof health
A recorded presentation from New Zealand, by Laura Deeming (Massey University), provided an update of her hoof health PhD project involving the Dairy Goat Cooperative, with 72 herds supplying milk for infant formula from 45,000 goats.

Grass is grown all year round, is cut and carried to the herd and comprises 75% of the milking goat diet. The animals are bedded down on wood shavings. Concentrate nuts are fed in the milking parlour and the goats run from the barn to the parlour and from the parlour to the barn. Running goats do not appear to be lame and the incidence of lameness in a herd is greatly underestimated by farm managers. Lame goats lie down longer, eat less and produce less milk. It is important to identify all levels of lameness, not just the severe cases, with early intervention offering a better chance of recovery.

The stages of lameness are recognised as normal, mild, moderate and severe; detecting the cases between normal and mild is the challenge. These goats exhibit an uneven gait, which is detectable before limping, with shorter strides, slightly stiff joints and inward or outward swinging of the hoof. Hoof lesions are related to wet shavings from liquid dung, due to the grass diet.

Over-feeding of a total mixed ration has led to laminitis. Hoof wall separation is recorded.

The project is examining infra-red images of hooves for inflammation and x-rays, before and after trimming, with a first trim at five months of age compared to 13 months. Photographs of legs show the standing position, shape of the hoof and weight distribution. Hoof health and lameness is seen as one of the biggest problems for dairy goats and early life management has long-term impacts.

Urolithiasis in pygmy goats
The Society is inclusive of the whole spectrum of goat-keeping and James Adams (RVC) discussed the issues with urolithiasis in pet pygmy goats. The development of stones is due to trauma, infection and/or limited access to water. Infections lead to an increase in pH in the bladder and lack of urination causes mucoproteins to accumulate. Bullied goats are not happy to stand and urinate. The speaker emphasised that goats do not need good grass or a grain-based diet and the availability of rain water is better than high-calcium mains water.

Small male goats suffer from trapped stones within the S-shaped sigmoid flexure behind the testicles while large goats suffer stones nearer to the prepuce. Early signs are bloating, being off food, failure to urinate and outstretching of the body. A pygmy goat has a small bladder (5cm). Tube cystostomy can be successful, but it is necessary to keep the tube clear of mucus. A poor prognosis can be anticipated with small goats that have a stone in the urethra and also goats with an excessively high creatinase reading. Larger goats have a better prognosis, but surgery needs to take place within two days. The advice to veterinary surgeons considering surgery is ‘don’t sit on it’.

Poisoning by plants
Nicola Bates highlighted the experience of the Veterinary Poisons Information Service, which has records of 272 goat...
incidents. Direct poisoning by plants makes up 58% of the cases, with agrochemicals sprayed on plants and then the plants being eaten accounting for 32%. Hedge clippings are a recognised poisoning risk.

Grayanotoxin from rhododendron and azalea lead to hyposalivation, regurgitation and abdominal discomfort within six hours of ingestion. The goats may recover, but subsequently die from pneumonia.

This year has been a good cropping year for berries; cherry laurel (cyanogenic glycosides) together with yew (taxane alkaloids) can cause sudden death within a few minutes. Ingestion of leylandii (Cupressus sp.) leads to convulsions and sudden death. There are few antidotes available with activated charcoal, pain relief and rehydration recognised as beneficial in mild cases. Intravenous lipid has been shown to be effective if used quickly, but more information and an assessment of cost and practicality are awaited.

Triage advice to goat-keepers is available via www.animalpoisonline.co.uk and the VPIS offers a 24-hour support service for veterinary surgeons.

Goats as pets
Margit Groenevelt related her experiences of treating the goat that is really the family dog. Many owners are inexperienced and feed inappropriate diets, have small permanent pasture grazing (endoparasites an issue) and the goats often have overgrown and deformed claws.

Tooth problems are noticed when the goat stops eating roughage or hay and loses weight. Arthritis in the shoulder joints of older goats requires soft standing and a warm bed in winter with meloxicam or aspirin.

Although a clinical examination of the family goat is the same, owners are prepared to pay for additional diagnostics and to discuss treatment options with the examining vet, a similar procedure as with a pet dog owner.

Margit discussed the regulations for the use of antibiotics in the Netherlands, where the impacts of veterinary treatment plans and health plans are having a beneficial effect with a targeted approach. Goat-keepers are not included within the programme, but voluntary use of the principles is expected.

Johne’s-free goats
Farmers supplying goat milk to one creamery are being urged by the milk buyer to have Johne’s-free stock and MAP (mycobacterium avium paratuberculosis)-free milk. Matt Pugh from the Belmont Farm and Equine Group described their practice experience with an ongoing study of 15 herds that have a history of Johne’s control by vaccination alone.

Tests on the dung of 545 animals, by Elisa and pooled PCR, showed that from 10% to 100% were MAP-positive, indicating that vaccination alone is not a successful policy.

The work to date has raised practical questions including: how does the immune status vary in relation to the MAP challenge? How do other disease challenges influence the immune response? Is a screening process needed? Goat Johne’s is different to cattle Johne’s, with more false negatives in goat PCR. Kid snatching is more difficult than calf snatching due to practical management and staffing issues. The aims of the farmer and the milk buyer are not the same, with the farmer looking for better production and herd health and the processor infection-free milk.

It is recognised that pasteurisation neutralises MAP and that freedom from disease is sought for human health security. The presence of the organism in milk is a function of on-farm hygiene and the veterinary practice is seeking a way forward that satisfies all parties.

The kid tracker project
Caroline Rank, from the same practice, gave an update of the kid tracker project involving nine commercial goat farms with the aim of establishing key performance indicators. To date, the information shows that there is considerable individual variation in colostrum quality, with a range of 17% to 100% of samples testing as adequate. Those with adequate colostrum intake showed a 12% incidence of pneumonia with the inadequate colostrum group having a 31% incidence. The individual farm pneumonia incidence is from 1% to 66% of animals. The herd incidence of scour was from 8% to 32% and there was a variation in kid mortality from 9% to 17% with a loss of a significant number of kids in the pre-weaning stage. Pre-weaning growth rates varied from 100 to 382 grams per day and post-weaning 23 to 340 grams per day. The reasons for these variations are of concern and it is hoped to track the lifetime impact on fertility and production as adults.

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Influencing farmer behaviour

At the BCVA Congress, Helen Higgins asked if vets could do better at communicating with farmers

Helen Higgins, from the University of Liverpool, spoke in the business stream of the BCVA’s October congress about the role vets play in influencing farmer behaviour. She spoke about common mistakes and made suggestions to enhance the chances of veterinary advice being taken on board at the farm level.

“There’s a big difference between knowing what we should be doing and doing it in reality,” Helen began, noting that there is a gap between knowledge and implementation. Farmers are often very knowledgeable, just as most of the British population are aware that they should eat a healthier diet and drink less alcohol, but for many this knowledge doesn’t translate into change.

Helen suspects she isn’t alone in feeling frustration having given farmers advice, and realising that the farmers haven’t taken it.

To help tackle this issue, she described a framework – a stage model – that is adapted to a farm context. The model was designed to help vets recognise the various stages that form the pathway to change.

The pathway to change

At the starting point, the farmer has absolutely no intention of making any changes. Through the first stage, they can be guided to a point where they genuinely want to start trying to do something. At the second stage, they must make a start. And at the third stage, they must keep on acting over time. “The factors that come into play are different at different stages,” explained Helen. “Some things will be important throughout, like excellent communication skills, but there are specific things that are more important at different points.”

Assuming that farmers are at the point of genuinely wanting to do something when in fact they are at stage one is a common mistake. Helen recalled going onto a farm and seeing a problem; she would report that to the farmer and have a lot of discussion about it. Assuming the farmer knew they had a problem and wanted to do something about it, she would come up with a plan of action, work out the costs, report it to the farmer and have numerous conversations with them about the cost benefit.

If the cost benefit was overwhelmingly in favour of acting and that farmer didn’t act, Helen would start to believe they were behaving irrationally and become frustrated. She explained her train of thought: “If the economic argument is so overwhelmingly in favour of change and that doesn’t motivate them, nothing will.” So, she would give up on the active approach.

But, she explained, she now realises that she was making lots of assumptions – “Just because you’ve told somebody they’ve got a problem doesn’t mean to say that they’ve perceived that problem in the same way that you do… Do not underestimate the power of the human mind – if you don’t want to hear something, you won’t hear it.”

Involve farmers in the process

The ownership of change is about creating opportunities for farmers to explore and realise their problem, and allowing them to be a partner in generating ideas for possible solutions. Allow them to be part of the process rather than just telling them what the answer is, Helen advised, particularly when they haven’t asked for your advice in the first place. “Asking open questions is very key – you’re forcing farmers to think about it – the pros and cons of the situation, what the issues are, how much of an economic impact it might be having,” she said.

“Even if you have a farmer who truly perceives the case in the same was as you, they won’t always automatically want to do something about it”, Helen said. She listed some potential reasons – perhaps they don’t feel it’s their responsibility, or there isn’t enough social pressure on them: “If everybody has the same problem and nobody else is doing anything about it, why should I?” Or they perceive the problem, but they don’t think they can change anything.

Vets can be part of the problem

Drawing from personal experiences, Helen highlighted that vets can become part of the problem: “We build up impressions of farmers over time and get frustrated, we believe they’re
never going to change and label them as a ‘difficult’ farmer.”

She highlighted the issue of ‘leakage’ – a term used to
describe the influence body language can have if it doesn’t
match up with what a person is saying: “You may be
subconsciously giving them signals that you don’t really
think they can do this... As a starting point for implementing
changes on-farm, you’ve got to go onto the farm with a
fresh, open mind, believing in what they can do.”

Farmers should also be given all the options – be aware
that you may subconsciously be withholding options
because you don’t believe the farmer will be interested in
them. Farmers should be given the option to work toward
new goals they may never have thought about before,
Helen said. When explaining the options, avoid making
assumptions and always ask the farmer questions.

Disappointment can be
avoided by managing
expectations; if the action
is going to take more
time, have an honest,
frank discussion about it

A final point close to Helen’s heart was not to bias
veterinary colleagues. “Don’t talk negatively about your
clients to colleagues; language is important,” she stated,
noting that new graduates particularly can be very
impressionable. “Just because you have a bad relationship
with a client doesn’t mean your colleagues will too,” she
said; new colleagues with a fresh outlook can be in a good
position to initiate change.

If it’s easy to do, get it done
At the second stage, money may come into the equation,
but it depends on what is motivating the farmer. Helen
highlighted the hassle factor – get things that are easy to
do done: “Put yourself in [the farmer’s] shoes and think how
you can make the job as easy as it possibly can be.”

Disappointment can be avoided by managing
expectations; if the action is going to take more time, have
an honest, frank discussion about it. Helen noted that it is
crucial to follow things through and be eyes-on to make
sure the action is successful. If the farmer tries to make the
change and it fails, they may just assume it will never work.
Don’t give up; try to find out why it didn’t work.

Keep an open mind
It’s essential to believe people can change and remember
that how receptive a farmer is to changing may change over
time with their situation. Helen’s take-home message was a
simple one – keep an open mind and assume nothing.
Liver fluke is on the rise in sheep, but with increasing resistance to triclabendazole, what is the best course of treatment?

**Douglas Palmer**

VETERINARY ADVISER, NORBROOK

Douglas Palmer, BVMS, MRCVS, graduated from Glasgow in 2002 with a merit for Large Animal Clinical Studies. He joined Norbrook Laboratories (GB) as the veterinary adviser for the northern UK in 2015.

The incidence of liver fluke (Fasciola hepatica) infections in sheep has been rising steadily over recent years, and these have spread into parts of the country traditionally considered to be fluke-free.

Liver fluke has a complex lifecycle involving life stages within the mud snail (Galba truncatula). This snail is not active in the cooler months of the year, so there will be periods with no new infective life stages (metacercariae) deposited onto the pasture. When the infective life stage is consumed by the sheep, this migrates to the liver and the immature liver fluke spend a period migrating through the liver parenchyma.

When significant numbers of these are consumed, migration through the liver in sheep leads to acute fasciolosis over the following weeks. Acute fasciolosis is characterised by sudden death, while others in the group may appear weak, dyspnoeic and have pale mucous membranes. Some sheep may have enlarged, painful livers with ascites and may be reluctant to move. Once cooler weather arrives, the mud snail will no longer be active and there will not be any fresh metacercariae on the pasture.

**Treatment of liver fluke**

The flukicides available do not all kill liver fluke at all stages of their development within the animal. There is only one active ingredient available that is effective against all stages of liver fluke: triclabendazole.

However, historical over-reliance on this flukicide has contributed to resistance development in F. hepatica, which has been confirmed repeatedly in the UK, particularly in sheep-rearing areas.

When choosing a product, the time of year and which stages of fluke are being targeted should be taken into consideration. For example, when sheep are likely to be at risk of acute fluke disease, caused by ingestion of a huge number of immature stages in late summer, and their subsequent migration through liver tissues, a product targeting younger fluke should be considered.

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No flukicide offers a persistency of action and so in high-risk areas, treatments will need to be rotated and possibly repeated throughout the year.

Later in the season, active ingredients which target older fluke should be used. It should always be borne in mind that no flukicide offers a persistency of action and so in high-risk areas, treatments will need to be rotated and possibly repeated throughout the year.

Pasture management is also important. Fencing off wet areas of fields, or draining these effectively, can prevent sheep being exposed to high numbers of metacercariae. Long-term, planting trees in these wet areas may reduce the number of snails present as the algae they live off need sunlight to grow. It has also been suggested that birds, such as ducks, will consume these snails, and this may aid control of liver fluke disease.

A major concern is what might happen to the incidence of acute fasciolosis and the ability to control the disease if resistance continues to rise.

The use of triclabendazole for acute fasciolosis cannot be avoided; however, where possible, it is advisable to use alternative flukicide drugs where early, immature fluke are unlikely to be causing a problem.

References are available on request.
How to avoid common pitfalls in the pre-purchase exam

How can vets avoid equine negligence claims when conducting pre-purchase examinations?

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

Jonathan Pycock
BEVA PRESIDENT

The sale or purchase of a horse or pony appears to be a simple business transaction in the eyes of many prospective purchasers (and sellers). Often it involves considerable sums of money, high emotion and unrealistic expectations. It is important that we as veterinary surgeons do not promise too much of pre-purchase examinations (PPEs). Modern consumer society dictates that if disappointment follows, or something goes wrong, someone must be to blame.

Invariably, the veterinary surgeon is the alleged culprit. This is despite the fact he or she has only had one opportunity to examine the horse before giving an opinion. So often the seller, who may have known the horse well, proves to be beyond the law because the purchaser has sent his expert (i.e. you) to examine the goods on his or her behalf. The reputation of the ‘expert’ adviser, be it friend, instructor or yard owner, who recommended the horse as suitable for the purchaser also remains untarnished.

All vets performing PPEs are at risk of a claim being brought against them; reputation and experience do not provide immunity. It is a tribute to our profession that claims are not more frequent. This is in no small part due to the excellent design of the approved PPE certificate, which is supported by BEVA, RCVS, VCI and Veterinary Ireland.

It is estimated that between 30,000 and 40,000 PPEs are carried out each year in the UK and Ireland. Almost half of all equine negligence claims involve a PPE; in 2016, 143 negligence claims were handled by the VDS, of which 64 involved a PPE.

Communication is key

As with many aspects of veterinary practice, communication is key. The booking-in procedure for a PPE is very important as it enables early discussion about the process and any concerns the prospective purchaser may have. It’s also advisable to email the blank certificate and guidance notes to the prospective purchaser in advance to show what is the seller’s responsibility and what is unable to be verified by the veterinary surgeon performing the PPE. There have been several claims made to VDS intimating procedures such as pregnancy diagnosis and height measurement should form part of a routine PPE.

Remember that we are being employed by the prospective purchaser to protect their interests. Our primary responsibility and duty is owed to the purchaser. The only duty we owe to the seller is a responsibility to conduct our examination in a reasonable manner so as not to damage the horse or injure the handler.

In the final analysis, you are certifying that the horse has been examined and that you have recorded your findings and reported them fully.

You are assisting your client to decide whether to purchase the horse. You are not, and cannot be, expected to give any guarantee of the animal’s future usefulness or athletic/competitive success.

Lame allegations

Around 25% of PPE claims arise because lameness is noted by the purchaser (or their vet) soon after taking possession of the horse. Not infrequently, it is alleged the horse must have been lame at the time of the examination! Often our ability to defend such claims is dependent upon the veterinary surgeon involved being able to demonstrate that a thorough and detailed examination of the horse’s musculoskeletal system and gait was completed. This is much easier to do when the examination has followed a standard protocol and the results of the examination have been clearly documented.

There has been a decline in PPE claims involving dental issues, with a drop from 5% to 4% over the past 10 years. Nonetheless, a considerable body of opinion suggests that the PPE should include a more complete oral examination involving a speculum.

At the 2017 BEVA congress, there was an important debate on whether the PPE should include a complete oral examination. In response, BEVA has set up a working party consisting of experienced equine practitioners from the UK and Ireland along with an equine claims consultant from the VDS to look at this subject in detail. Watch this space for a full report on their findings.
Expert advice on wolf tooth extraction

In the first of a new ‘ask the experts’ series, Kieran asks equine vets with dental expertise about the removal of wolf teeth

KIERAN O’BRIEN
After a long stint as a lecturer and clinician at Bristol University, Kieran O’Brien, MA, MV(B) (Hons), PhD, MRCVS, now works at Penbode Equine Vets on the Devon/ Cornwall border.

ALTHOUGH supporting scientific evidence is lacking, horse owners attribute all sorts of behavioural and equitation issues to the presence of ‘wolf teeth’ (Triadan 05) in their horses’ mouths. Removal of these teeth is therefore a commonly-requested procedure in equine practice. Here, we ask Pete Ravenhill and Sam Hole, two veterinary dental experts, about issues that can arise during removal.

What is your practice’s approach when asked to sedate a horse for wolf tooth removal by an equine dental technician (EDT)?

Pete Ravenhill We will only sedate for qualified and current BAEDT members, and our vets must provide direct and continuous supervision. The EDT must only perform Category 1 and 2 procedures (blind wolf teeth are Category 3). I encourage all our vets to nerve-block as well as sedate these cases for an EDT.

Sam Hole The client and the horse must be registered with the practice. The EDT should be known to the practice, ideally have contacted the practice regarding the case in advance of the appointment, and be a current member of the BAEDT. The wolf tooth may be removed if erupted, and in a ‘normal’ position and under the direct and continuous supervision of the vet in attendance.

What is your usual sedation and anaesthetic regime for removal?

Pete Ravenhill I sedate with iv detomidine and butorphanol, and then nerve-block both sides using a human dental syringe and one to two cartridges of lignocaine/adrenaline each side. I block palatal and buccal to each wolf tooth, i.e. two blebs.

Sam Hole I use a mixture of an alpha-2 agonist (routinely detomidine) and an opioid (routinely butorphanol) intravenously, pre-operative analgesia using a non-steroidal anti-inflammatory drug (routinely phenylbutazone) and regional anaesthesia. For maxillary wolf teeth, I use an infra-orbital block, a greater palatine block and local infiltration, and for mandibular wolf teeth I use a mental block and local infiltration.

Do you believe some wolf teeth can only be removed by fracturing them?

Pete Ravenhill Some wolf teeth are extremely fiddly to extract and in some cases, fracture of the tooth is inevitable.

Sam Hole Yes, but only a very small number, which are usually in mature horses or wolf teeth which are worn or diseased. In these cases, the root may be ankylosed or fused to the supporting bone.

If the tooth fractures during removal, do you believe it is essential to remove the remaining fragment(s)?

Pete Ravenhill Yes. I always curette out the alveolar socket afterwards with a simple spoon curette and ensure all fragments of tooth root and bone are removed. I check the socket with a mirror to ensure a smooth socket.

Sam Hole The goal should always be to extract the complete tooth; however, sometimes this may not be possible, especially in mature horses or worn wolf teeth. An attempt should always be made to extract the retained root, but if the retained root is healthy and well below the alveolar crest, it may be left in situ as it is unlikely to cause complications. However, the owner should be informed and the complication noted on the horse’s dental chart.

Have you ever seen any complications following wolf tooth removal?

Pete Ravenhill Tooth and bone fragments retained in a socket or just in the gingiva causing local bitting pain, inflammation or bleeding when probed. I have seen one case of palatine artery rupture.

Sam Hole Many, including delayed healing, retained roots, foreign body retained within the alveolus, alveolar infection and sequestration, and nasal fistulation.
Have you ever seen large wolf teeth in horses that caused no apparent biting/equitation problems?

PR Yes, but usually in disciplines not requiring a large degree of ‘bit contact’ or if very simple snaffle bits are used, e.g. in thoroughbred flat racing compared to dressage/polo. I examined a TB mare that had won the French 1,000 Guineas and she had enormous upper wolf teeth. But my personal policy is to remove all wolf teeth at first dental check.

SH Yes, but these are ‘normally’ positioned maxillary wolf teeth rather than displaced, blind or mandibular wolf teeth.

Have you ever caused haemorrhage from the palatine artery? What is the best way to deal with this?

PR I have not caused it myself, but have dealt with a case that was admitted to an equine hospital due to palatine artery rupture at wolf tooth removal. You have to apply pressure until bleeding stops. The artery is very difficult to ligate due to the position of the artery tucked against bone. In this case we sutured a temporary gauze stent across the affected area.

SH Yes, but only twice in 20 years, which isn’t too bad! Maintain adequate sedation, raise the head and apply digital pressure using medical gauze for five to 10 minutes, then place the horse in a quiet, deeply-bedded stable with the head elevated until the haemorrhage stops and the sedation has worn off.
There are many possible causes of neck pain in horses; diagnosis is key to successfully managing the condition.

Neck pain is recognised in juvenile and adult horses and can have a variable aetiology, ranging from a single traumatic incident to chronic degenerative arthritis, or a combination of both.

The clinical signs can range from mild, performance-limiting stiffness to intense pain and muscular spasm. Neck pain may also be transient and can be misinterpreted by owners, making recognition difficult if the horse is not exhibiting signs of pain when examined. Additional clinical signs can include ataxia, forelimb lameness, patchy sweating and muscular atrophy.

The key to the successful management of neck-related conditions is an accurate diagnosis, but this can be challenging due to the complex anatomy, the lack of localising signs, and the inadequacy of 2D imaging techniques. Recently, the development of advanced imaging techniques such as computed tomography has allowed 3D imaging of the entire neck; this will vastly improve our ability to diagnose and treat neck pathology.

Dealing with a suspected fracture
In cases with acute onset severe pain, a cervical fracture should be considered as a potential diagnosis, particularly if a traumatic event has been witnessed, and the horse managed appropriately.

Horses with fractures of the vertebrae should be confined and provided with adequate analgesia; manipulation of the neck and gait analysis should be kept to a minimum. These horses should be kept in a calm environment and should not be tied up or excessively restrained as they may be liable to panic and exacerbate their injuries.

Survey radiography, including laterolateral, dorsoventral and oblique projections is performed, but even good-quality radiographs may fail to identify some fractures. If a fracture is suspected, but cannot be identified radiographically, then nuclear scintigraphy may be of benefit.

CT is the imaging modality of choice, but requires general anaesthesia to image the entire neck, with an inherent risk of fracture deterioration during recovery.

Both conservative and surgical management may be appropriate, depending on the fracture configuration. Conservative management is often appropriate and has the advantage of being cheaper and without the risk of recovery from general anaesthesia.

Conservative therapy can be surprisingly successful, even for severe fractures if the degree of ataxia does not lead to recumbency (see Figure 1). Owners should be warned that this can occur many weeks after the injury, particularly when the stabilising muscle spasm subsides.

As diagnostic imaging of the neck – and in particular the articular process joints – improves, so will the therapeutic options available.
Recently, the use of plate fixation of cervical fractures has been described and could be considered for suitable cases, particularly now that locking compression plate technology is widely available.

Managing chronic cases

Chronic cases undergo a similar process of investigation, but with an initial detailed clinical examination, neurological examination, gait analysis and ridden assessment if appropriate. Passive and forced range of motion tests give an indication of pain or stiffness, noting any left/right asymmetry. Radiography, ultrasonography and nuclear scintigraphy are routinely employed imaging modalities and can be rewarding in many cases.

In cases where a diagnosis is not achieved, CT scanning is now an option and provides superior 3D imaging of the region (Figure 2), but further work is needed to assess the clinical significance of imaging findings.

Type I cervical vertebral malformation resulting in dynamic cord compression in the mid-cervical region is usually associated with ataxia rather than neck pain. However, Type II cervical vertebral malformation associated with arthritic enlargement of the articular process joints may lead to neck pain and lameness in addition to a degree of ataxia secondary to cord compression.

When a compressive lesion is identified, surgical stabilisation through the use an intervertebral kerf cut cylinder or ventrally-placed locking compression plates may be indicated, with a reported success rate of approximately 50-60% when assessing improvement in neurological grade alone.

The pain-relieving effects of intervertebral stabilisation in these Type II cases is poorly-described, but anecdotally, discomfort may be reduced once stabilisation is complete.

Diagnosis and treatment of arthritis

Arthritis of the articular process joints is a significant cause of neck pain, presenting with a variable degree of discomfort. These cases can be diagnostically challenging as there is considerable variation in the appearance of the joints in clinically normal individuals, making positive identification of pathological joints difficult.

Management of facet arthropathy has traditionally involved intra-articular medication with corticosteroids, and this remains the mainstay of treatment for most cases. Medication is performed under ultrasound guidance and the use of a biopsy guide can be helpful to maintain probe position relative to the needle (Figure 3).

Horses are confined for 48 hours and then field-rested for a further week before resuming light training. Medication can be repeated depending on the duration of the response.

As diagnostic imaging of the neck – and in particular the articular process joints – improves, so will the therapeutic options available. Arthroscopic examination of the facet joints has been described in a cadaver study and three clinical cases (Pepe et al., 2014) and this may allow removal of osteochondral fragmentation or the debridement of cartilage lesions.

Cervical epiduroscopy has also been described (Prange et al., 2011), primarily as a diagnostic tool to locate sites of cord compression, but the technique has recently been used to deposit corticosteroid around the dorsal nerve roots of a horse with forelimb lameness which had stopped responding to medication of the articular process joints.

References


“Is there a scientific reason for wearing a bow tie? Of course”

W orking out what Christmas present to buy me at this time of year is not difficult. Anyone who’s been on my website or seen the picture always attached to this offering will know that bow ties are, one might say, my signature dish! I’m up to 165 of them now, but a new one is always welcome! People sometimes ask me how and when I started wearing them. The answer is teenage rebellion. My mum always wanted me to dress casually in a T-shirt and jeans, but I always wore my shirt done up to the top with my tie neatly tied even in the summer when school said we could ‘dress down’, as it were.

And so, on the first day of my gap year, working in London, I went to a gentleman’s outfitters (as they were called in those days) in Jermyn Street just off Piccadilly, and bought my first bow tie. A blue and white spotty one it was, just as worn by Sir Winston Churchill or Sir Robin Day for those of you who might remember the interviewer to beat all political interviewers – the ‘Grand Inquisitor’ from back in the 1970s. Not that I was wearing one to emulate either of those gentlemen, though I must admit I held them both in high repute. I guess I just wanted to be different.

Many of my school friends wanted to be different too. They, whether as mods or punks or rockers, wanted to be different from the image their parents wanted them to fit, but to be the same as everybody else in their group. I didn’t have a group, it has to be said, but wanted to be different from everyone else. And so it has continued.

Even Matt Smith as Dr Who telling the world that ‘bow ties are cool’ didn’t turn them into a must-have fashion accessory, although my three sons were delighted that their dad turned from being ‘just plain weird’ to being somewhat of a trend-setter! Well, maybe that is going too far. They have to be self-tie of course – I couldn’t wear a clip on!

What of vets wearing bow ties? Those of you who are Cambridge graduates from the 1980s and before may well remember dear Donald Steven who always wore a bow tie. He had a wonderful ability to draw, from line diagrams in anatomy to a most wonderful mural, painted when he was a student at the vet school in the 1950s – it is still there on the wall of what is now the ladies’ too.

Is there a scientific reason for wearing a bow tie? Of course – you wouldn’t expect my attire to be anything other than scientifically justifiable, would you?! Dr Steve Nurkin of the Hospital Medical Center of Queens New York published his study, ‘Is the clinician’s necktie a potential fomite for hospital-acquired infections?’ at the General Meeting of the American Society for Microbiology in 2004. He found that one in four ties carried *Staphylococcus aureus* and one in eight harboured other hospital-acquired bacteria, such as *Klebsiella pneumonia, Pseudomonas aeruginosa* and *Acinetobacter baumanii*. Andrew Frei followed that up in 2015 with a paper, ‘Bow tie or no tie: a rule to reduce healthcare-acquired infections’ in the *Journal of Community Hospital Internal Medicine Perspectives*, showing that bow ties hold no such hazards. It’s nice to know my dress sense is backed up by well-researched hard science! Happy Christmas!

You wouldn’t expect my attire to be anything other than scientifically justifiable, would you?!

About David

David Williams, MA, MEd, VetMD, PhD, DEC AwBM, CertV Ophthal, CertWEL, FHEA, FRSB, FRCVS, runs the ophthalmology clinic at Cambridge University Veterinary School and teaches at St John’s College in Cambridge, where he is a Fellow. He has interests in animal welfare and veterinary ethics, is a diplomat of the European College of Animal Welfare and Behaviour Medicine, and is currently studying for a doctorate in education.
Where will non-UK EU workers stand post-Brexit?

A look at the government’s proposals reveals the potential impact of Brexit on EU citizens in UK veterinary practice

BBC report at the end of July summed up what many in the profession know – that the UK veterinary profession is very reliant on overseas workers, especially from the EU. According to the report, the Lords EU Environment Committee said it was concerned that 90% of slaughterhouse vets were EU nationals and it was vital they stayed in the UK after Brexit.

No one knows what is going to happen post-Brexit or what the exact employment or migratory landscape will look like. However, practices do need to give the situation some thought. Government, at the time of writing, has taken two steps towards finding a solution – a paper offering proposals on what it sees as a workable outcome and an assessment of the value of migratory workers.

The paper

The government paper, published at the end of June, discussed proposals to allow EU citizens living in the UK to stay beyond Brexit in the expectation that UK nationals living across the EU will be treated in the same way.

Naturally, for any policy on immigration to work, there must be a cut-off date – which the government is terming ‘the specified date’. This will be somewhere between now and the date of the UK’s actual withdrawal from the EU. Assurance has been given to Irish citizens that the Common Travel Area arrangements between the UK and Ireland will be protected.

It's being proposed that EU residents in the UK will continue to enjoy the rights they presently have under EU Treaties, but after the UK has left the EU, there will be new rights created under UK law. In essence, EU citizens will have to apply for their residence status.

Under the proposed UK law, qualifying EU citizens (those EU citizens who have been resident in the UK for a period of a continuous five years) will be able to apply for ‘settled status’ (indefinite leave to remain under the Immigration Act 1971) if they are still resident in the UK. If an EU citizen has already been resident in the UK for a continuous period of five years before the specified date, they will be eligible to apply for permission for settled status.

If an EU citizen already has a document certifying permanent residence in the UK, this will not be automatically replaced with a grant of settled status.

Where an EU citizen wants to apply to become a British citizen, they must show they have permanent residence in the UK with a certifying document. But what application can an EU citizen make to remain in the UK if they arrived in the UK before the specified date, but have not yet been resident for five years?

Here, the government has stated they will be allowed to stay in the UK until they reach the five-year point, but then they will need to apply to the Home Office for a temporary residence document to remain in the UK once it has left the EU. It’s proposed that EU citizens will have a grace period between the moment free movement ends and the time they can obtain their residence document – which looks likely to be up to two years.

Free movement rights

Anyone who arrives prior to the UK’s withdrawal from the EU, but between the specified date and the date the UK leaves the EU, will continue to exercise free movement rights up until the UK leaves the EU. From then on, the grace period will apply. If the specified date is set at the date of the UK’s withdrawal, new post-exit arrangements would automatically apply to EU citizens and their family members who arrive after that date.
Clearly, EU citizens who want to live in the UK after the UK has left the EU, and after the grace period has expired, will have to comply with future immigration controls in place at the time.

Family members of EU citizens who arrived in the UK before the specified date, who come to the UK after it has left the EU – for example a future spouse – will be subject to the same rules that apply to non-EU nationals joining British citizens. At present, these rules state the British citizen must earn at least £18,600 to bring their spouse to the UK or meet the other ways in which the financial requirement can be met - for instance through savings.

Those employing EU citizens will see no change to the rights and status of their employees. It is only after the UK leaves the EU that EU citizens will need to apply for documentation to prove they have permission to work legally in the UK. Similarly, employers will have to ensure they make checks on the right of EU individuals to work here. The government says it will engage closely with businesses and others on how they will be affected.

**Assessment**

At the end of July, the government commissioned an assessment of the costs and benefits to the UK of EU migrants. Surprisingly, the outcome is expected to be published in September 2018, some six months before a scheduled Brexit. At the same time as announcing the assessment, the government said it’s legislative plans for controlling migration would be revealed in a white paper later in 2017 with an immigration bill to follow in 2018.

There do appear to be mixed messages. Speaking in Sydney at the time, Foreign Secretary Boris Johnson said he was unaware of the commissioned report, adding that immigration had been “fantastic for the energy and dynamism of the economy”, but “that doesn’t mean that you can’t control it”. But Immigration Minister Brandon Lewis, at the time the assessment was announced, said it was a “simple matter of fact” that EU free movement rules would end and a new system would be in place by spring 2019.

These are the UK government’s proposals which will form the basis of its position when negotiating the issue with the EU. There is no certainty at this stage that these proposals will be accepted.

**The view of the profession**

A spokesman for the RCVS, alongside the BVA, says the two organisations are lobbying the government. They’re stressing the contribution made by non-UK EU veterinary surgeons in fields such as clinical practice, academia and, in particular, public health and meat hygiene where upwards of 80% of the workforce are from elsewhere in the EU.

“Our first Brexit principle,” said the spokesman, “is that ‘vital veterinary work continues to get done’. This is why we would like to see firm guarantees given to EU citizens registered here as veterinary surgeons that they will continue to be able to live and work in the UK indefinitely after Brexit, otherwise we could be facing potential workforce shortages.”

He added that after Brexit, the RCVS would also like to see veterinary surgeons from the EU prioritised for UK work visas or the equivalent.

Brian Faulker, SPVS president, says his body recognises the veterinary profession’s huge dependence on non-UK workers: “SPVS supports the work done by BVA and other veterinary organisations in trying to draw to government’s attention how dependent the UK veterinary profession is on European colleagues.”

He’s concerned that any barriers to that movement are likely to reverberate “all the way down the consultation room as well as on farms, and horse yards, affecting animal welfare, client service as well as veterinary well-being”.

The BBC report is available at: [www.bbc.co.uk/news/uk-politics-40703369](http://www.bbc.co.uk/news/uk-politics-40703369)
"Should the practice put written contracts for employment in place?"

Employees must receive written terms and conditions of employment within two months of employment. These details are set out in the Employment Rights Act 1996 (section 1): names of employer and employee; date employment started and continuous employment (these may be different if the employee was previously employed by an associated employer, or if they joined the practice by way of an acquisition which protected their length of employment); pay, calculation method and pay intervals; hours of work; holiday entitlement and pay; sickness absence provisions; job title/brief description of work; notice periods (for employer and employee); place(s) of work; if not a permanent role, the period it is expected to continue; any collective agreements; pension entitlements; disciplinary and grievance procedures (or where to find them, as they are commonly detailed in a separate document); and information if expected to work outside the UK for more than one month.

A formal contract is not required; an offer letter will suffice. Terms should be signed by the employee as evidence of agreement. Without a signed contract, that the employee turned up for work, performed their duties and received pay will usually evidence they accepted the terms. Failing to set out terms and conditions in writing exposes the practice to disputes and gives rise to Employment Tribunal claims of failing to provide section 1 terms, attracting an award of up to four weeks’ pay.

Employers can include other important terms in the contract: use of confidential information of the practice and restrictions on other work interests during and after employment, such as a prohibition from soliciting customers and poaching colleagues for a defined period after leaving.

The benefit of detailing these restrictions in a contract is that the law will not imply any more than basic duty to act in good faith into the employment relationship, so if the practice has key client and staff relationships to protect, restrictive covenant clauses are essential, and the way to record them is in an employment contract.

To put a question to a legal expert, email Jennifer. parker@5mpublishing.com. For specific questions on this topic, email Stephenie at smalone@hcrlaw.com
Changes to data protection rules

How should practices prepare for the May 2018 changes to the General Data Protection Regulation?

We're all going to have to change how we think about data protection. This is the key message the Information Commissioner, Elizabeth Denham, made clear earlier this year when she referred to the implementation of the European General Data Protection Regulation (GDPR), which will take place on 25th May 2018 and apply to all businesses. The GDPR will have a major effect on how veterinary practices should manage data.

The GDPR will provide harmonisation of data protection law across the member states of the European Union. This will allow EU citizens to understand how their data are being processed and, if necessary, raise a complaint, which can take place in any EU country. The purpose of the new legislation is to bring greater accountability and transparency to businesses that hold personal data.

The GDPR will affect your practice if it holds, uses and maintains individuals’ data. For instance, if it:
1. maintains employees’, suppliers’ or any other individuals’ data on its IT systems and paper records (including payroll)
2. sends updates or marketing correspondence in any format to clients or any prospective clients

How to ensure your practice is compliant

Key decision-makers within a veterinary practice must be aware that the current data protection law is changing to the GDPR and staff should be aware of their rights and responsibilities. Practically speaking, this may involve appropriate training and, on a higher level (if your business has more than 250 employees), some practices may need to hire or instruct a data protection officer to help advise the practice. In addition, your practice must document the personal data it holds. This means it should be aware of where the data came from, where they are kept and who they are shared with. The GDPR requires businesses to maintain records of these activities. It may therefore be necessary for your practice to organise an information audit to ensure compliance. Data processing that could put data at risk may need to undergo a Data Protection Impact Assessment to help the practice identify the most effective way to comply with the new requirements.

The GDPR also requires businesses to give individuals further information on the data it holds. In addition to giving its identity and explaining how it will process an individual’s data (usually done through a privacy notice), under the GDPR, it needs to explain:
1. its lawful basis for processing the data
2. its data retention periods
3. to individuals that they have a right to complain to the Information Commissioner’s Office if necessary

Individuals have a number of rights under the GDPR, including:
1. the right of access
2. the right to rectification
3. to erasure
4. to data portability
5. the right to object
6. the right to reject profiling

What are the consequences of failing?

The Information Commissioner’s Office (ICO) will be given considerable power when it comes to fining organisations that breach the GDPR. The maximum fine will rise to 4% of global annual turnover or €20 million, whichever is the greater, from the current maximum fine of £500,000.

Fines are being issued on a more regular basis; Elizabeth Denham stated earlier this year that "last year we issued more than £1 million in fines for breaches of the Data Protection Act, so it’s not a power we’re afraid to use".

What will happen after Brexit?

The government has confirmed its intention to bring the GDPR into English law, and that this would not be affected by Brexit. Post-Brexit, while we are unable to comment with any certainty, the intention is that the GDPR framework will be amended as is deemed necessary.

If you have any queries regarding compliance or the steps your practice may need to take to be ready, contact the CooperBurnett team on 01892 515022.
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In partnership with ESVPS and Harper Adams University
The four key asset classes

How to use the four main asset classes to build a diverse investment portfolio

**Equities**
Company shares, or equities, are what people often imagine when they think about investing. Buying shares is essentially buying a piece of a company. Companies offer shares to raise money. The value of shares can grow and offer investors an opportunity to benefit from the profits of a company – either by means of dividend payments, growth in the share price or a combination of the two.

Shareholders receive money on a regular basis, known as a ‘dividend’, which is a portion of the company’s profits. It is up to the company to decide how much profit to distribute as dividends and how much to retain to fund growth and expansion. Just as a share price can go up or down depending on, for example, how well investors believe the company is doing, dividend payments can go up and down or be stopped altogether. Regular dividend payments are often considered a sign of company strength.

**Property**
For many, investing in property means buying a home or becoming a landlord. Buying property involves large, upfront sums of money for a deposit and buying and selling costs. It is difficult to retrieve the money quickly if it is tied up in property. For those who want to invest without owning a property, investing in real-estate funds can be a solution. Many of these invest in commercial property, ranging from shopping centres to industrial estates and so on. There are many types of property funds, including real-estate investment trusts, shares in listed property companies, property investment trusts, and property unit trusts. Real estate can be a good way to produce income because the properties can be rented out to provide a regular income. As managers of property funds invest in many properties, this spreads the risk of a development not being finished or a property not having any tenants.

**Bonds**
Investing in fixed income usually means investing in bonds – a type of IOU issued by a government or company in exchange for a loan from investors.

Bonds are issued when a company or government wants to raise money. They are normally designed to pay regular interest (a ‘coupon’) and return the original loaned amount at a set date (a ‘maturity date’). The UK government issues bonds, more commonly known as gilts. Gilts are generally considered one of the safest types of bond because the government is not expected to default on the loan. As a result, you can expect interest and your original investment back. Bonds are often graded depending on how likely it is an investor will receive their interest and money back.

There are independent rating agencies (such as Moody’s and Standard and Poor’s) that try to calculate the risk and grade bonds in line with this, usually using a lettering system: AAA is the highest credit rating, moving down through AA, A, BBB and so on. The lower the credit rating, the greater the risk of the company defaulting and not honouring its debt. Lower-rated securities must attract investors by offering higher coupons (or rates on return).

**Alternative investments**
We use the term ‘alternative investments’ to describe investments that are not company shares, traditional bonds or traditional property investments, or cash.

Examples of alternative assets include commodity investments (such as gold), absolute-return investment funds (designed to make money in all market conditions) and infrastructure investments (for example, linked to building for housing, hospitals and schools).

Alternative does not necessarily mean higher risk. We consider some alternative investments to be higher risk, like commodities that have highly-volatile price movements, but others as being lower risk and among the expected lowest-risk funds we may hold in our portfolios.

Alternative assets can have a low correlation (their price may not move closely in line) with more traditional asset classes such as company shares and bonds. This immediately highlights a potential attraction of these assets within a well-diversified portfolio.
What’s been good about today?

How does this question make you feel? Energised and thinking about all the good things that happened, or slightly numb and empty? Are you able to recall a list of things that you or the team did that you know made a difference? Or are you thinking, “there was nothing good about today”? Do you even add the subtext, “there never is, it’s always like that”?

You came into the profession to make a difference. You care deeply about the animals in your charge as well as wanting to meet the ever-increasing expectations of their owners. Despite trying your best, there are clinical challenges you can’t solve and owner expectations you can’t meet. Sometimes you know you could help, but don’t have the consent to do so. Sometimes you wish you had more knowledge, more experience, and more time.

You face death and suffering almost daily; you don’t get many real highs, but there are plenty of lows, and these chip away at the back of your mind. Quickly, this becomes the story you tell yourself; your brain ignores all the not-so-bad and the good bits. You start to create new beliefs about your clients, yourself, your patients, and your profession. Is this really what you want to believe?

Let’s go back to today, or a day recently that left you feeling awful. If possible, take a pen and paper and make some notes. What did you do well? Think about all the lives you touched; your patients, your clients and your colleagues. What were the moments when you knew you did a good job? What skills did you use? What were your strengths during the difficult bits? What difference did you communicate well with? What difference did it make? What have you learnt? Keep digging for those good bits, however small and insignificant they may seem.

Active reflection has very real benefits

What did the team do well? Think about how people were interacting with each other, with clients and patients. What were the moments where everybody was performing at their best? What felt good? Who stepped up? What difference did it make? What have you learnt?

How often do you stop to reflect?

Our clients regularly tell us that one of the benefits of coaching is pressing pause and taking time to reflect and put life back into perspective. It helps them to recognise what they are good at, the difference they have made, and helps to separate out the facts from the tangle of thoughts and emotions in their heads. Active reflection has very real benefits. It creates positive feedback loops in our brains, which help us to stop the creation of limiting beliefs; we are actively choosing to create a different narrative, a different lens through which we view the world. It increases our mental flexibility and strengthens our personal resilience. We acknowledge what hasn’t gone well, but focus on what worked, what we’ve learnt and what we’d do differently.

Think back to the day you picked in the exercise. How does it feel now? What do you now believe about it? What would be the impact of taking a moment each day to reflect personally and within your team? How could you do that?

You came into this profession to make a difference, and you do, every day. Take time to stop and reflect on the animals you care for, the people you help, your skills and strengths – what makes you uniquely you. You can always be better, but remember how good you already are.
“Looking forward to the new year and beyond, I think an employment crisis is on its way”

Over the last two months, we have heard from a school-leaver and a vet student about what they expect and want from the profession; their responses seemed quite reasonable and should be met by a career in practice. So why are there so few vets available for employment? Where are all the vets? This question has been brought into sharp focus for me and some colleagues in other practices as we have been recruiting for new vets. SPVS have also recently released a survey on this subject. There have been many proposed factors.

Let’s get it over with – the Brexit effect. Whether we are in or out of the EU will not ultimately affect who we can employ, as long as they are RCVS-registered and no resident vet can be found for the job. Being in the EU or out of it is not so much of a problem, but what is a huge problem is the massive levels of uncertainty about it all. EU citizens will be much less likely to take the risk of moving until it is all sorted. Couple that with the drop in the exchange rate, and for the next few years we will be seeing a big reduction in EU nationals willing to move in.

What about the UK’s traditional source of vets when things get tight – i.e. the Aussies and Kiwis? I imagine the exchange rate will be a factor. I received this message from a locum agency in New Zealand:

“afraid same predicament over here... just screaming out for vets and not the usual influx from overseas anymore sadly... It is a bit of a mystery where all the vets are as they still seem to be churning out of the universities, but I have been desperately short all year! If by some strange chance I do hear of anybody, I will be sure to get back in touch.”

So, the lack of vets is not just a UK problem. But how bad is it out there trying to recruit? Here are a few figures and quotes from the SPVS 2017 recruitment survey:

- Half of the businesses responding did not have a full complement of veterinary surgeons
- 28% of these reported a severe effect on their ability to cover out-of-hours (OOH) work
- 62% of applicants had come from outside the UK
- 22% of respondents had found it easy to recruit a suitable applicant
- Approximately 5% of businesses had received no applications at all for advertised posts
- 31% had failed to recruit a suitable candidate at the time of responding
- An unwillingness to do OOH work was the commonest reason for candidates rejecting an offer

Where are all the vets?

Please send your answers to garethcross@hotmail.com, but in the meantime here is a list of possible factors. Brexit is keeping some away as discussed. Increasing part-time work is diluting the productivity of the overall workforce. Large numbers of vets are leaving the profession at a young age. There are also more practices around in the cities due to OOH providers allowing small practices to exist and corporates setting up new practices at a fast rate. More smaller practices serving the same client base means further dilution of the workforce.

Looking forward to the new year and beyond, I think an employment crisis is on its way, and for the practices from the SPVS survey who can’t find a vet, it’s already here. It is coming to the big corporates – approximately 70% of the UK vets applying for our practice’s job were corporate practice employees trying to escape corporate employment. It is coming to rural practices who do their own OOH and it is coming to the big corporates – approximately 70% of the vets applying for our practice’s job were corporate practice employees trying to escape corporate employment. It is coming to the big corporates – approximately 70% of the UK vets applying for our practice’s job were corporate practice employees trying to escape corporate employment. It is coming to the big corporates – approximately 70% of the UK vets applying for our practice’s job were corporate practice employees trying to escape corporate employment. It is coming to the big corporates – approximately 70% of the UK vets applying for our practice’s job were corporate practice employees trying to escape corporate employment.

Whether we are in or out of the EU will not ultimately affect who we can employ, as long as they are RCVS-registered and no resident vet can be found for the job.

ABOUT GARETH

Gareth Cross, BVSc, MRCVS, graduated from Liverpool vet school in 1998. Gareth is now a director of a small animal practice in Devon, where he began working in 2003.
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