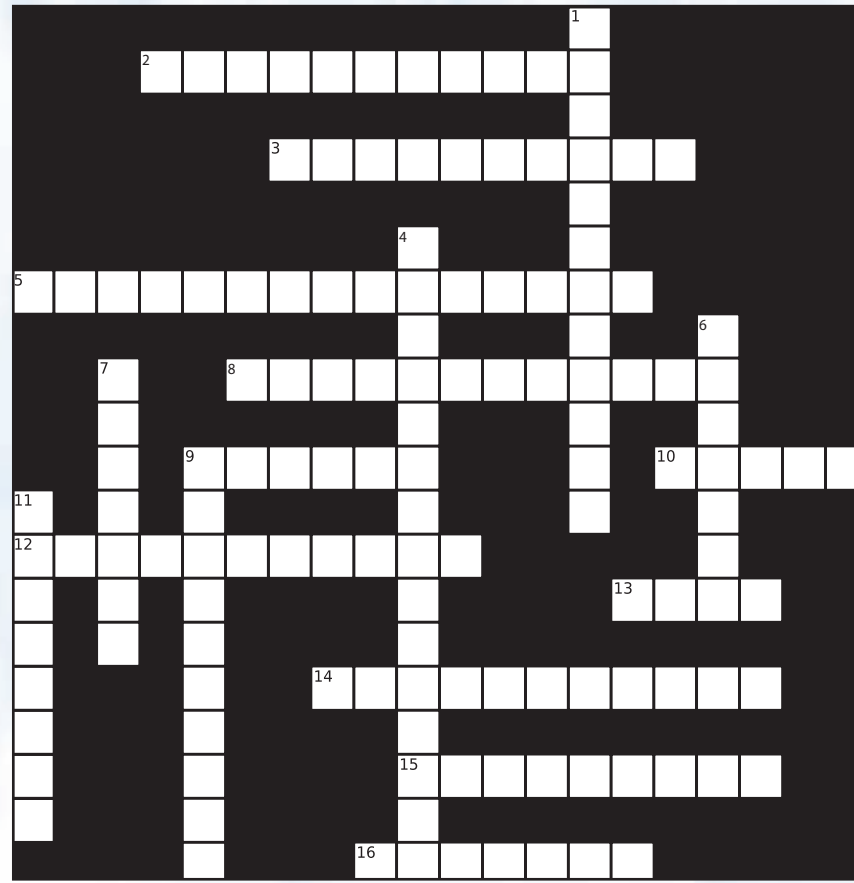




Surgery Crossword - by Richard Jerram & Alex Walker



Across

- 2 This word is used to describe multiple fragments in a fracture
- 3 A surgical incision into the kidney
- 5 This surgical technique was first described in 1985 for treatment of urinary incontinence
- 8 The type of portosystemic shunt typically identified in small breed dogs
- 9 The position of the costal vessels and nerves relative to their associated rib
- 10 Opposite angulation to valgus
- 12 What is now the gold standard technique for assessment of biceps tendon pathology
- 13 The common acronym for the predominant surgical procedure used to treat chronic otitis externa
- 14 Fusion of a joint
- 15 The cartilage physically abducted when performing a laryngeal lateralization procedure
- 16 The name of the hormone thought to play a major role in the development of perineal hernia

Down

- 1 A commonly used antibiotic of the fluoroquinolone group
- 4 A principle proteolytic enzyme found in arthritic joints
- 6 The nerve originating from spinal nerve roots L6-S1 +/- S2
- 7 Anatomical name of the entire elbow joint
- 9 The area of the brain where a lesion will often result in clinical signs of ataxia, hypermetria, and intention tremors
- 11 The small sesamoid bones located caudal to the distal femur

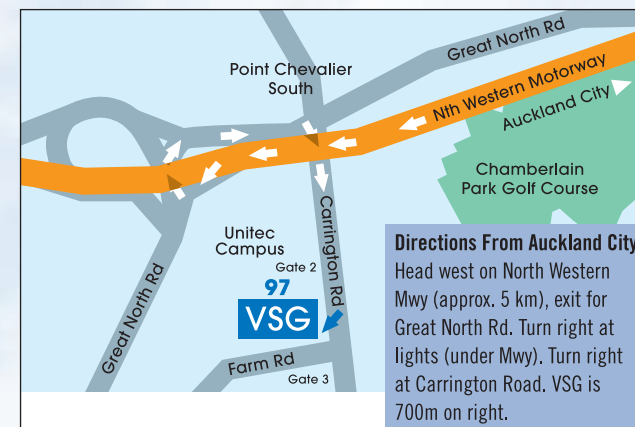
Answers available at www.vsg.co.nz from 1 May 2009. Please ensure you include your name, and clinic. All correct answers will go into the draw for a book by Dr. Terry Fossum, or a bottle of Dom Perignon.

Congratulations to Dr Alistair Newbould of Dunedin South Veterinary Clinic, who won the prize for the Imaging Quiz in our October newsletter. Alistair has won the "Handbook of Small Animal Radiological Differential Diagnosis" By Dennis, Kirberger, Wrigley, Barr.

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A Major Ultrasound Upgrade - by Chris Warman

Towards the end of 2008, it had become apparent that the time had come to replace our trusty Philips HDI 3500. The HDI 3500 was still performing extremely well and had never missed a day's work, but with recent developments in both ultrasound machine technology and sonographic techniques in veterinary ultrasound, it was necessary that we upgrade in order to take advantage of what this new technology and information could offer our patients, our clients and ourselves. Many of the recent developments in veterinary diagnostic ultrasound can only be utilized using the latest generation of ultrasound machines. So a new ultrasound machine, a Philips IE 33 was purchased. This new machine is the flagship model of Philips ultrasound. Approximately 20 of these machines are currently in use in human facilities throughout New Zealand and this machine is only the second purchased for veterinary use in Australasia.



The Philips IE 33 is primarily used in human medicine as an echocardiography and vascular platform. With modification, it is possible to develop presets that allow the machine to be used as a shared service machine. Typically ultrasound machines in private veterinary practice are used for both echocardiography and general radiology ultrasound, i.e. are shared service machines. The staminate of the IE 33, the Philips IU 22, unfortunately is not capable of accommodating transducers for paediatric cardiology. Given that a good proportion of this practice's caseload requires the use of paediatric transducers, the Philips IU22 was not a viable option.

The Philips IE 33 represents the very latest in ultrasound technology. The machine is capable of volumetric live 3-D imaging and quantification, in addition producing exceptional two-dimensional imaging. Marked improvement in the quality of M-mode imaging, Doppler imaging and colour flow Doppler imaging can readily be appreciated with this new platform. It is possible to purchase special transducers that allow for acquisition of images in 2 planes simultaneously. The new platform carries on many of the excellent developments seen in previous generations of Philips ultrasound machines. Further development of Phillips SonoCT and XRES technologies has improved image quality and diminished the production of nondiagnostic artifacts.

Two extremely valuable features have been added to this

machine. Single button optimization of the image, known as I-SCAN, which was introduced in the last version of the Philips HDI 5000, is included on this platform. This feature means the operator only has to push a single button to optimize the imaging. This feature can be extremely useful in the training of new operators and in instances where achieving a good image quality is challenging. A second feature, which is particularly useful in veterinary imaging, is a Philips feature called I-COMMAND. I-COMMAND allows the operator

to control many of the features of the control panel by voice command and to place annotation on the monitor by voice. The hands free manipulation of the control panel is extremely useful in veterinary ultrasound as many current veterinary sonographers will readily appreciate.

The machine has also been designed with ergonomics in mind. A lightweight flat panel monitor, on a fully articulating arm, enables positioning of the panel in the best position for the individual operator. The monitor articulates independent of the control panel. The control panel itself is also extremely adjustable. The control panel can be rotated, moved from side to side, and moved up and down. The combined adjustability of both the control panel and the monitor,

easily allows for individual operators various scanning preferences, whether this be scanning whilst standing or sitting. Performing echocardiography, from a dependent position, utilizing a slot in the imaging table is well known to improve image quality in echocardiography. The ability to lower both the control panel and monitor, minimizes the need to reach up to the control panel to adjust image settings, (if not using I-COMMAND), and effectively places the monitor directly at eye-level for the operator. This last feature certainly prevents neck strain. The machine's ergonomic features minimize the likelihood of strain injuries, which generally occur as a result of prolonged scanning in non-neutral positions. Given the adjustability of the machine, most operators should be able to configure the machine to be able to scan in a more neutral position, to significantly increase comfort.

When these machines appear in the second hand market, at a price that would be acceptable for your practice, I would recommend that you seriously consider purchasing one if your interest lies in veterinary diagnostic imaging.

VSG® Committed To Building Relationships With Referring Vets - by Keith Bunyan, VSG® Manager

In July 2008 a sample of 20 vets around the Auckland region were interviewed by Jane Finlayson of Backbone Marketing as part of VSG®'s ongoing commitment to deliver not only excellence in patient care but also in the relationships that they have with referring practitioners.

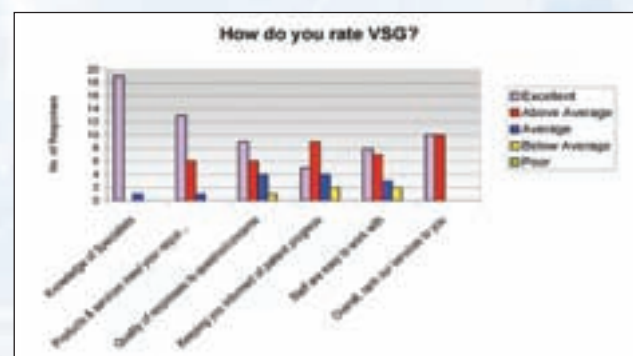
The aim was to find out the key things that were important to referring vets and how well VSG® is currently doing in terms of delivery of these things. The results were interesting and will help guide developments, staff training and decision-making for the future.

The average practice size represented was 3.4 vets - ranging from 7.5 vets down to 1.5 vets. We interviewed a mixture of practice owners and employed veterinarians. 19 out of the 20 refer regularly (1x/month or more) on average with most practices referring approximately 4x per month (including radiology outpatients).

All the respondents felt there were real benefits to having referral readily available to their practices (shown in the graph below.)



On the whole, all those interviewed spoke very highly of VSG® and the skills and expertise of the specialists.



Communication issues had arisen for many of the respondents at some point. Timeliness of patient reports and returned

calls can cause some frustration where vets wish to keep their client informed of progress. However, on the whole satisfaction in the services provided was above average to excellent.

The desire to improve has seen VSG® invest considerable resources over the last 12 months into improving the internal and external communication system. Please be patient as we work through some teething problems with the technology. VSG® is dedicated to improving this area to make things more efficient.

More information will also be provided to referring vets to help streamline the making of appointments, the referral process and reporting.

The survey showed that VSG®'s "The Next Step" newsletters are well read and most practices extensively use the referral folder and store the material well. A revamp of the referral form is in the pipeline so thanks for the many suggestions to improve this.

The Seminar Series nights, new grad nights and VetScholar participation are greatly appreciated.

When questioned about a reward structure to recognise the vets and practices that provide referral to VSG®, 85% were keen to be involved.

It was clear that rewards for veterinarians' professional growth or better customer service were the most popular way vets would prefer to be recognised. Easier and more frequent interaction opportunities with the specialists was highly valued be that via phone, email, face to face, webcasts etc.

Not surprisingly there was a strong message from the vets spoken to for VSG® to continue to focus on the big picture and keeping the service level at "excellent".

This has left us with areas to improve and others to maintain as we strive to improve the service we offer to you the referring vets. We are very grateful to the vets who gave their time to be interviewed and provide us with their valuable feedback.

More information will follow to keep you up to date with developments and changes in our customer service. In the meantime if you have suggestions on how we can improve or what we do well please send them to manager@vsg.co.nz

Willow, An Unusual Feline Leprosy Case - by Mike Coleman

Willow is a 7-year-old domestic cat who was referred to the medicine department at VSG® last April. She presented with a history of generalised swelling of the soft tissue of her face and limbs. She was also losing weight despite a good appetite. Willow had been treated with cyclosporine, an immunosuppressive for the past six years for allergic skin disease.



Willow just following surgery. Note the generalised tissue swelling of the face and limbs.

On physical examination the facial and limb swelling was evident (see photos). This was not painful and did not 'pit on pressure'. Subcutaneous nodules were palpated at the base of the left ear. A grade II systolic heart murmur was auscultated. Possible diagnoses considered at this time included vasculitis, generalised cellulitis, disease of the lymph vessels (e.g. lymphangiosarcoma), right sided heart failure and hypoproteinaemia.

Ground Breaking Cancer Vaccine in Use at VSG®

Advancements in cancer treatment occur at regular intervals, but sometimes it is hard to see how they can be applicable to our patients in New Zealand. One of the most exciting developments in recent years is the new Canine Melanoma Vaccine developed in the USA as a multi-centre effort and now marketed by Merial. The vaccine is a treatment for the cancer, not a preventative, and in the USA has shown almost miraculous benefits in some dogs with metastatic melanoma. Through the herculean efforts of Dr Maureen Forsythe at Merial, we now have access to this vaccine and have treated our first dog. Dr Mark Robson is the recognised



Willow in February 2009

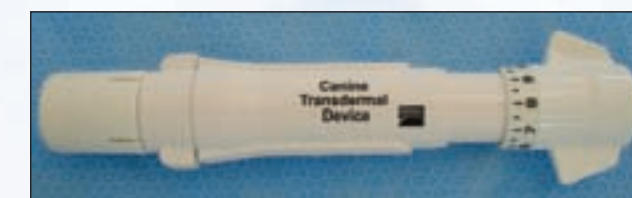
A complete blood count showed a mature neutrophilia with Doehle bodies in 50% and monocytosis. A biochemistry profile showed mild, non-specific changes only. A Feline Leukaemia Virus and Feline Immunodeficiency Virus test were both negative. Thoracic radiographs and echocardiography were unremarkable. Fine needle aspiration of the nodules by the ear and swollen tissue was performed. Cytology of the nodules showed pyogranulomatous inflammation with evidence of mycobacterial organisms.

We anaesthetised Willow for resection of the nodules and biopsy of the abnormal tissue. This was taken from one of the hind legs. Histopathology confirmed mycobacteriosis in both the nodules and the generalised thickened tissue. A PCR test confirmed *Mycobacteria lepraemurium* infection.

The cyclosporine was discontinued and long term therapy with anti-mycobacterial antibiotics was started. Willow slowly but steadily improved (see photo). 8 months later the mycobacteria was still not completely cleared with one small lesion left on her ear. This has now almost completely resolved.

Systemic *M lepraemurium* is rare. In this case I strongly suspect the long term immunosuppression from the cyclosporine contributed to the generalised infection.

specialist authorized to manage the vaccination course (in the absence of a Board certified oncologist in NZ) and the vaccine must be administered with the specially-designed transdermal applicator (pictured). If you have a patient that may be a candidate for this vaccine, please contact Mark.



Meet The Surgery Team

Mike has only been with us for a short time, but we have discovered his Achilles heel for "Apples". He currently owns one iTouch, one iBook, three iPods, and come on no one else in the building needs an Apple desktop just because it has better Skype quality!

Helen in our import from the mother land. She still can't pronounce Waiheke Island properly; it sounds more like why-heee-keee. That's alright; at least she can say Christchurch. FYI she was formerly a ballerina, as well as a flight attendant, so we are very proud to have her.

Melissa is a great story teller, we have heard so many in-depth stories about her tree climbing turtle, the love bird that didn't love but attacked, however, not on command. Martini the she-bunny who just had babies, Yogi the mini pony who's just two inches short of being a real one, and Foxie Brown, the dog who loves the spa pool. There's more, but alas not enough room on the page!

Sharon loves rabbits, she has one of her own named Aloo - it means potato. She loves small fluffy things that you can carry in your handbag and you can squish your face up against.....and then the occasional grumpy 60kg Rottweiler just because she likes the challenge.

Jess is expecting her very own mini me shortly. She's our sensitive girl; she loves hugs but not too hard, massages but not real ones as she's ticklish. Her favourite shoes are Crocs, even though they make her trip over, but she always recovers well.

Jemma is our recent addition. She's our little sporty spice who loves to play soccer, netball, and even has her own

little running group. She also owns 2 guinea pigs named Harold and George who get to come to work when they are lacking in their monthly dose of being squeezed and hugged constantly.

Alana loves putting clothes on her dog. He has his own wardrobe at home where he can choose from a well knitted Argyle pullover in winter to having an awesome emo T-shirt showing his bones in summer. If you want to see him as Spider Man, he can do that too. I wonder why he thinks he's a REAL boy? FYI he loves kittens, but not other dogs thank you very much.

Alex is our wizened veteran; he loves wine, foot tapping to the beat of his drums and planting trees up in Matakana. If you're interested in some Latin dancing, he can show you a move or two.

Richard is a keen athlete, he enjoys running with his much loved Catahoula Leopard dog named after some yummy spicy cheese dip. He recently tried mountain biking in the dark but he's decided it's much too dangerous when you're 6' 5".



Melissa, Mike, Helen, Sharon, Alex, Alana, Richard, Jess, Jemma (inset)

Meet Our New Surgeon - Mike King, BVSc, MS, Diplomate ACVS



Mike graduated from Massey University with a Bachelor of Veterinary Science in 2000, and went on to complete a one year surgical internship at Franklin Veterinary Services in Papakura. He was then accepted into a year-long Small Animal Medicine and Surgery internship program at the Virginia-Maryland Regional

College of Veterinary Medicine, Virginia Tech, in the USA. This resulted in Mike being selected to begin a three-year Residency and Masters Degree program in Small Animal Surgery at Virginia Tech, where he was exposed to a wide range of cases in Orthopaedic, Neurologic and General surgery. During the residency Mike had the opportunity to be trained by twelve different board-certified specialist

surgeons, as well as working with specialists in nine other veterinary disciplines. He also completed and successfully defended a Masters thesis on feline kidney surgery and published several research papers in veterinary surgery journals.

At the completion of his residency in 2006, Mike stayed on as a surgical instructor at Virginia Tech and in February of 2007 passed the American Veterinary Surgical Board Certification examination to become a Diplomate of the American College of Veterinary Surgeons.

After a year in London as a referral surgeon, Mike returned to his home town of Auckland in November of 2008 to join the VSG® team.

Mike has interests in all areas of Small Animal Surgery, but particularly in urinary surgery, wound management and reconstruction along with oral and facial surgery.

The Pfizer Internship At Veterinary Specialist Group



VSG® in conjunction with Pfizer New Zealand are pleased to welcome Dr. Elyshia Hankin as the 2009 Pfizer Intern @ VSG®. Elyshia completed her veterinary degree at Massey University in 2008. Following the completion of her twelve-month internship she hopes to pursue further clinical specialist training through the North American residency program system.

The Pfizer Internship has in the past been offered to new graduates of Massey University annually and is a fixed twelve-month position from December to December of the following year. In the future the position will also be open to vets who have graduated in the last 2 years. The position offers concentrated, supervised, in-hospital training through services in small animal surgery, internal medicine and diagnostic imaging. Pfizer New Zealand has been a key contributor to the success of the programme.

The objectives of the programme are:

1. To prepare the intern for postgraduate specialist training (internship, residency, research) at university teaching hospitals overseas.
2. To provide the intern with an opportunity to develop an understanding of the clinical management of challenging small animal medicine and surgery cases.
3. To allow the intern to learn professional publication and presentation skills.
4. To provide the intern an opportunity to develop skills in client communication, medical record keeping, and literature review.

The intern has no primary case responsibility but works alongside the specialist during the admission of complex cases referred to the Veterinary Specialist Group hospital. During the year, the intern will develop the clinical skills required to assess, diagnose, and treat these patients with the opportunity to refine fundamental skills including catheter placement, blood collection, fluid therapy, anaesthesia management, analgesia, transfusion medicine, and the acquiring and interpretation of imaging studies and clinical pathology.

If an animal proceeds to surgery, the intern is scrubbed in as surgical assistant, getting first-hand experience of general surgical principles and specific techniques. The monitoring, management, and care of hospitalised patients are a major part of the intern's duties that extend to weekends and after hours.



VSG® Rewards Coming Soon

As a result of the survey carried out last year VSG® Rewards will be launched over the next few months.

The aims of this programme are to recognise and thank you for the referral of your patients to VSG® and help us continue to grow mutually beneficial relationships with you.

Respondents in the survey clearly reflected a desire for professional development as well as more access to VSG® Specialists. As a result the types of rewards will include:

- Phone consultations
- Professional development visits to VSG® e.g. follow a case or attend a particular procedure (vets or nurses)
- Textbooks
- Pro bono consultations for clients
- Pro bono imaging interpretations
- Seminar Series DVDs
- VetScholar credits

The first step in the process will be ensuring everyone is registered. VSG® will be sending a registration pack to all referring practices. The rewards will be based on both individual vet referral and the practice as a whole so each veterinarian will need to register so keep an eye out for the forms in the practice. Points will begin accumulating from 1 June but you need to register to claim rewards.

More soon...

