Veterinary **Specialist** Group

The Next Step

Issue 2. July 2005

EXPERTISE • TECHNOLOGY • COMPASSION

VSG people - Elva Hewetson

Elva is an integral part of the support staff, working at reception; meeting & greeting the clients and patients. If you have phoned VSG, it's highly likely you will have spoken to Elva.

How long have you worked at VSG?

I started at Onewa Road Veterinary Hospital in February 1998, as a receptionist. I moved from Onewa Road Vet Hospital, along with some of the other staff, into the new VSG hospital upon opening in November 2000.

What do you enjoy about working at VSG?

It's satisfying to work with an organisation that is growing day by day and being part of a focused team.

What inspired you to become a veterinary receptionist?

It was my first job when I left school in Otorohanga.
I have always enjoyed working in this field.

What do you enjoy doing on the weekends?

I love family time, entertaining or going out with friends for dinner. I also enjoy watching musical DVD's.

Tell us about your family

My husband is Alan and we have three grown up children, 1 granddaughter, and a new grandson born on the 8th of June.

What animals do you have at home?

Romeo, who is a very handsome cream Burmese cat.

What is your favourite drink?

Gin & tonic, especially on a Friday night!

And your favourite TV programme?

Coronation Street.

What holiday destination have you enjoyed recently?

Japan. Alan & I went there in 2004 to visit our daughter.
It was clean & beautiful and we felt quite safe there.

Do you have any hobbies?

Looking after my granddaughter. Baking cakes, gardening & ceramics. Running, swimming & biking. I am currently training for a triathlon. I have completed 2 marathons in the last few years.

If you won Lotto tomorrow, what would you spend the money on?

Pay off the mortgage and buy the kids a house each!

Elva Hewetson

Pfizer

Contacts

DR. ALEX WALKER Specialist in Small Animal Surgery
surgery@vsg.co.nz

DR. CHRIS WARMAN Specialist in Veterinary Radiology
radiology@vsg.co.nz

DR. MARK ROBSON Specialist in Small Animal Medicine
medicine@vsg.co.nz

DR. RICHARD JERRAM Specialist in Small Animal Surgery
surgeryrj@vsg.co.nz

DR. DARREN FRY Specialist in Small Animal Medicine
d.fry@vsg.co.nz

DR. MIKE COLEMAN Small Animal Medicine Clinician
m.coleman@vsg.co.nz

97 Carrington Road Mt Albert Auckland
Phone: (09) 845 5455. Fax: (09) 845 5456
Email: office@vsg.co.nz Website: www.vsg.co.nz
The Veterinary Specialist Group hospital is located on the Unitec campus situated between Gates 2 and 3 on Carrington Road.

Zoo patients add variety to VSG caseload

by Richard Jakob-Hoff BVMS Senior Veterinarian
New Zealand Centre for Conservation Medicine

Auckland Zoo has had a long and very beneficial relationship with the Veterinary Specialist Group vets - dating back to the early 1990's when our elephant Kashin developed an infection in one of the toe bones of her right front foot. An expert elephant trainer was imported from Australia to help train her to lie on a purpose-made 'jumbo-sized' mattress (to prevent pressure damage to muscles and nerves during prolonged anaesthesia). An experienced elephant anaesthetist came over from San Diego to lead a team of human and veterinary anaesthetists and technicians. Dr. Alex Walker of VSG led the surgical and nursing team in successfully removing the infected pieces of bone in what was only the second time such an operation had been performed anywhere in the world. Because limb amputation in heavy animals like elephants isn't feasible, this infection could have been life threatening had it progressed up the foot. Instead, Kashin - by far the Zoo's most popular animal - made a complete recovery and continues to thrive. Regular X rays of Kashin's front feet, taken by Peter Nicholson and Russell Wade of Portable X-Rays, are checked for any early signs of infection with the expert help of VSG's Dr. Chris Warman.

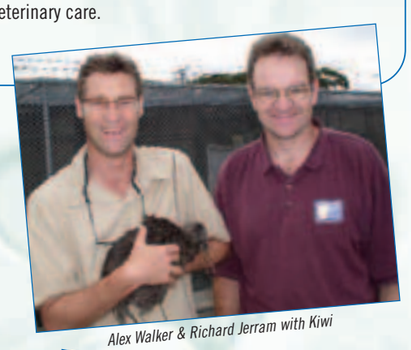
Drs Walker and Warman and, more recently also Drs. Richard Jerram and Mark Robson, have generously provided diagnostic and surgical help to the Zoo on numerous occasions since then. As well as Kashin, their patients have included an agouti with a complicated fracture of the tarsal joint, a kiwi with a deformed leg corrected by a 180° rotation and plating of the tibio-tarsus and, in association with human surgical specialists, an orangutan that has needed exploratory abdominal surgery on three occasions. All of these animals have recovered very well.

Dr. Warman regularly helps by performing and interpreting ultrasounds on species as diverse as red pandas, chimps and chameleons.

The expertise and time of all these colleagues has been provided free-of-charge, as has the use of the specialised equipment and facilities at VSG. The Zoo is deeply grateful for this generous, on-going sponsorship. The focus of the Zoo's veterinary team is disease and injury prevention and consequently the number of surgeries needing to be performed is small. However, when the need arises for particularly complicated surgeries or diagnostics we are very grateful to be able to call on the expertise at VSG. The whole team - from receptionists to veterinary nurses to veterinarians, bend over backwards to help when needed and we couldn't wish for better colleagues. Their efforts make a big contribution towards our job of ensuring the Zoo's animals receive the highest standard of veterinary care.

Chameleon

Kiwi with deformed leg



Alex Walker & Richard Jerram with Kiwi

Lion cub

Otter prepared for ultrasound

Chris Warman and lion cub at MRI

Feline Nasal Lymphoma - by Darren Fry

Nasal lymphoma is an important cause of nasopharyngeal disease in the cat and one which can be very satisfying to treat. The clinical presentation can be very similar to other diseases such as chronic rhinitis, nasopharyngeal polyps and nasal cryptococcosis as well as other neoplastic conditions such as nasal adenocarcinoma. Nasal discharge (often unilateral) is a common presenting sign but dyspnoea, epistaxis, stertor, facial deformity, anorexia, epiphora, exopthalamos and sneezing can all be seen.

While the history, clinical presentation and initial imaging studies may be very suspicious for nasal lymphoma, definitive diagnosis requires a tissue biopsy. Biopsies can be taken "blind" or preferably, with rhinoscopic guidance. Nasal flushes rarely yield a diagnosis unless large pieces of tissue are dislodged which can be evaluated histologically.

The clinical signs of feline nasal lymphoma are usually localised to the nasal cavity and there can often be an excellent response to chemotherapy. Nasal lymphoma is generally thought to carry a more favourable prognosis than many other anatomical forms of lymphoma in the cat and may indeed represent the most treatable form of feline lymphoma. However, there have been no large studies to substantiate this. Nasal lymphoma can also be very sensitive to radiotherapy but unfortunately this modality is not yet available for veterinary patients in New Zealand.

A recent prospective study of feline lymphoma by Malik et al shed some interesting light on the condition in Australia. Malik's group evaluated 60 cats treated with a multi-agent chemotherapy protocol. The overall median survival was slightly disappointing at around 4 months. However the 80% of cats that went into rapid complete remission had a median survival of approximately 6 months. Furthermore, nearly 30% of these cats had no evidence of lymphoma 2 years later and were deemed to have been "cured". Interestingly, FIV status had no impact on response to chemotherapy, a finding which gave us encouragement in treating the case presented on the next page. The take home message from the Australian study seemed to be that the major positive prognostic factor for feline lymphoma was a rapid initial response to the first few doses of chemotherapy. Once cats overcame this initial hurdle, then there was a good chance of long term remission or cure. Only a handful of nasal cases were seen in this study and so little further information could be gleaned about this specific manifestation. In addition, we do not know if the Australian data relates to New Zealand cats. However, we strongly encourage the owners of almost all cats diagnosed with lymphoma (especially nasal lymphoma) to embark on a course of chemotherapy. Once a complete remission is achieved, owners are often very keen to persevere when they see the results and realise how well their pet is feeling. If the patient does not respond well to the initial therapy, then an informed decision can be made without having to undergo further unnecessary treatment and expense.

Fortunately, Charlie Gordon, our featured feline, did achieve a rapid complete remission despite being FIV positive and showing quite severe presenting signs. At the time of writing, he is back to his normal self and we hope, heading for a long term remission or dare we say, even a cure.

Charlie

Charlie's back living the life of Riley - by Annie Wright - The Wright One

Phillipa Gordon loves cats and says her two, Charlie a Siamese and Sophie a Burmese, are treated as her children. She says both cats are an important part of her life and, until recently, they had been a healthy pair, full of fun and mischief.

Last Christmas Charlie (13) developed a dry cough which Phillipa thought could be due to fur balls as he is a perpetual cleaner. She started brushing him more often to remove the excess fur but this didn't seem to help. A few weeks later she took both cats to her local vet John Mead at Herne Bay Veterinary Clinic for their annual health check-up.

"While there I mentioned Charlie's persistent cough and John was concerned. He suggested I leave him in overnight for a chest x-ray but, when nothing showed up in the results, John thought he may have asthma. A few days later Charlie started breathing through his mouth, which sounded like an old man snoring, so I took him back to see John. He took a blood test to check out other options - a few days later the results came back showing Charlie had Feline Aids."

Herne Bay Vet John Mead says after talking with Phillipa he decided to refer his patient onto the Veterinary Specialist Group (VSG) because, while he did have Feline Aids, Charlie had a good chance of living a useful and healthy life.

"Feline Aids itself is not necessarily a death sentence for cats but it does lower their immunity to other diseases. I felt Charlie had a good chance of recovering from his breathing difficulties and so referred him on to VSG where they have the latest technology as well as specialist care."

VSG veterinarian Darren Fry took on Charlie's care and promptly arranged a series of tests, including an endoscope examination to help fully identify Charlie's problem.

"Charlie was anaesthetised and an endoscopic camera was fed into his nasal passages. This showed a fleshy mass was causing his breathing problems - subsequent tests indicated cancerous lymphoma. Darren suggested a programme of chemotherapy and this was started within days," says Phillipa.

Phillipa praises the way VSG presented the options for Charlie to her. The endoscope examination was recorded on DVD and shown to her so she was better able to understand what was going on. She had all the normal concerns and Darren talked to her about all the pros and cons. "We discussed the treatment, the costs plus the possible outcomes. Darren was positive Charlie would again enjoy a good quality of life after treatment so I felt quite confident when I made the decision to go ahead with treatment.

After the first round of chemotherapy a scan showed Charlie's tumour had reduced dramatically and he was soon breathing freely.

"Although Charlie suffered some vomiting after the first dose, he was fine after subsequent doses. He is now having chemotherapy fortnightly and with the help of appetite stimulants he is eating well and keeping his food down."

"The aftercare attention was amazing. The VSG team phoned me everyday for the first week after I took him home and then every Sunday morning for about four weeks. They said they wanted to check that all was going ok. I was most impressed with this; we don't get that service from our doctors or hospitals."

Charlie and Phillipa

Phillipa also says that she was really impressed with her own veterinarian, John Mead, through all this. "John went the extra mile and suggested the referral - he knows how much my cats mean to me. The treatment Charlie received saved his life as without the intervention and expertise of the VSG team he would have not survived."

She says because the VSG team took time to discuss all aspects of Charlie's care she felt she was able to make an informed decision about his future.

"I have never regretted it. Charlie is back to his old self and can be found napping in the hot water cupboard or reclining on the possum throw at the foot of my bed - he's once again living the life of Riley and it's all been well worth the effort."

Pelvic fractures in dogs and cats - by Richard Jerram

Pelvic fractures in dogs and cats are common, making up approximately 25% of all fractures seen in veterinary practice. Most pelvic fractures are complex and occur due to automobile trauma with injuries frequently seen in other body systems. The decision on whether to recommend surgical treatment for pelvic fractures should be based on a thorough understanding of pelvic anatomy, complete patient evaluation, and knowledge of surgical approaches and techniques for pelvic fracture stabilisation.

Concurrent Injuries

- Thoracic injuries - greater than 30% of animals with pelvic trauma will have concurrent pulmonary contusions, pneumothorax, diaphragmatic hernia or pleural effusion.
- Urinary tract injuries - one study reports a 39% rate of urinary tract trauma in dogs with pelvic injury. Bladder rupture, ureteral avulsion or urethral trauma are most common.
- Neurologic injuries - ischiatic (sciatic) nerve injury often occurs due to damage at the lumbosacral plexus or with acetabular and cranial ischial fractures. Pudendal and pelvic nerve damage can result in urination and defecation problems. Rarely, injury to the obturator, femoral, and gluteal nerves can result in postoperative gait abnormalities.
- Spinal injuries - coccygeal fractures, sacral fractures and thoracolumbar vertebral fracture/luxations are occasionally seen with pelvic trauma.
- Vascular injuries - direct branches of the iliac arteries can be lacerated and lead to profound blood loss, hematoma, and hypovolemia.

Initial Management

As most pelvic fracture patients are experiencing severe pain, analgesia may be necessary for complete orthopedic and neurologic examination. The physical examination of the traumatized patient should be thorough with special attention to thoracic auscultation and abdominal palpation. A lateral thoracic radiograph is indicated in all cases. Abdominocentesis, urinary catheterization and a hematocrit may be required.

Radiographs of the pelvis can generally wait until early assessment and necessary emergency treatment has been completed. Due to the level of pain and required patient positioning, pelvic radiographs are best performed under general anesthesia.

Pre-op VD ilial fracture and SI luxation

Treatment of Pelvic Fractures

Fractures can be grouped into three broad categories:

1. Those that can be managed conservatively. Stable fractures that do not involve the acetabulum or compromise the pelvic canal diameter such as unilateral ilial fractures, most fractures of the pubis and ischium, and unilateral sacroiliac separations can be managed with 4-6 weeks of strict cage confinement. Adequate analgesia and nursing care are imperative. In my opinion, conservative management of even stable fractures in large breed dogs can be unrewarding and surgical treatment is recommended.
2. Those that have a better prognosis if treated surgically but can be managed conservatively. Unstable fractures that do not involve the acetabulum such as bilateral sacroiliac separations, bilateral ilial fractures can be managed conservatively for financial reasons. The owner must be warned that long-term complications such as lameness, osteoarthritis and constipation can occur. Surgical stabilisation results in a more rapid recovery with fewer complications in these patients.
3. Those that should be treated surgically to avoid complications. There are four main reasons for strongly recommending surgical stabilisation of pelvic fractures in both dogs and cats:
   a) Fractures involving the acetabulum. Conservative treatment of even caudal acetabular fractures has been shown to result in severe degenerative joint disease.
   b) Fractures that involve bilateral weight-bearing structures. E.g. ilial fracture and contralateral sacroiliac separation.
   c) Fractures that are narrowing the pelvic canal diameter by greater than 40%. A typical fracture would include a displaced sacroiliac separation with an ipsilateral cranial ischial fracture.
   d) Pelvic trauma suspected to have ischiatic or sciatic nerve entrapment that is causing severe pain.

Post-op radiograph of repair

Flynn's racing around after pelvic fracture - by Annie Wright - The Wright One

Sue Murray from Kati Kati says she recently had one of those horror moments when she accidentally drove over and seriously injured one of the family's four dogs.

"We live out in the country so the dogs have a large area to run around in and they usually stay well clear of our vehicle. They are quite used to us coming and going but on this day Flynn, our beautiful gold and white Border Collie, got too close and I drove over him. When I heard his scream I knew something awful had happened."

Sue says while there was no blood Flynn was obviously hurt so there was no time to muck about. After a couple of frantic calls for help she managed to lift him into the car, organise her two young children and set off to her vet Tony Austwick at Tauranga - Kati Kati Veterinary Services.

"At this stage we didn't know exactly what Flynn's injuries were as he had no open wounds but, after Tony had administered morphine and x-rayed him, the news was bad. Flynn had a pelvic fracture and it would be a big job to get him well again. Tony said while he could perform the operation he wanted to refer Flynn to the Veterinary Specialist Group (VSG) at UniTec in Auckland who have the latest state of the art equipment and expertise on site."

Tony Austwick says Flynn presented with multiple fractures to his pelvis and, while he could have operated on him, he felt Flynn's injuries were outside the capabilities of the clinic.

"Flynn is such an athletic dog and Sue had said right from the start that she wanted to ensure any operation would mean a complete recovery for him. As a vet you always have to know where your limits are and while we can do some surgical repairs here; in this case the injuries were too complex."

Tony says he had no qualms about referring Flynn to the Veterinary Specialist Group (VSG) as if they could not help him then nobody could.

After discussing their options Sue decided that Flynn needed the very best in care if he was going to recover well and lead a normal life. He had already shown promise in obedience competitions after being placed fourth in the beginners section at the National Dog Show so nothing short of a full recovery would suit him.

"We wanted Flynn to be able to lead a full life and not be limping around always struggling to keep up with our other dogs - he is that sort of bouncy, full of life dog. If we couldn't get him back pretty much back to full health then we would have to make a decision as to his future."

She says taking Flynn to VSG for a consultation was an emotional time as she didn't know what the outcome would be but from the moment she stepped through the door the team there were amazingly supportive to both owner and dog.

"They looked after us both and veterinarian Richard Jerram was phenomenal. He x-rayed Flynn and told us what the repair procedure would be - he covered the operation as well as the post operative care required, the possible costs and the expected outcomes for Flynn long term. He was confident we could expect a 95% recovery at the very least."

With this information Sue decided to go ahead with the operation and, while Flynn came through well, the tricky matter of post operative care had to be carefully managed. He had to be restrained from moving around too much so his pelvic bones could heal and knit together again - Sue says this was easier said than done.

"We had to support his hind quarters in a sling arrangement and keep him contained in a 3m x 3m space to keep him off his hind legs. Poor Flynn got quite depressed at this stage but daily calls from the VSG team really helped us and their support and advice continued right up to the time he was declared fit and healthy again."

She says Flynn is once again back to full health with no noticeable indicators he has been through the trauma of a pelvic fracture. Sue puts his full recovery down to the exceptional care and expertise of the VSG team.

"I can't speak highly enough of both Richard Jerram and the VSG team and in fact if I had an orthopaedic injury I'd consider consulting Richard Jerram myself - I'd trust him to sort my health out as well. Flynn is now back to his old self and is racing around with the other dogs and getting up to all his old tricks."

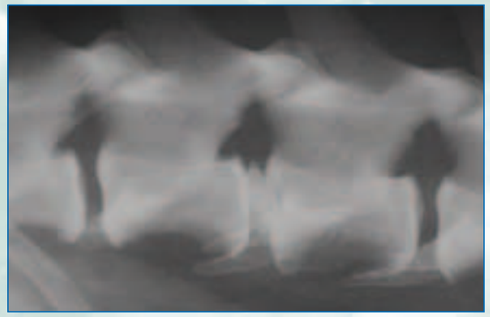
Spinal radiology: an approach - by Chris Warman

Not every patient presented with obvious spinal cord disease needs spinal radiology. The decision on the necessity for spinal radiology needs to be made following complete clinical and neurological examinations. There is little value in imaging the cervical spine when the neurological findings are indicative of a lower motor neuron lesion involving the hindlimbs. Similarly, there is little value in radiography of an acutely paralysed Dachshund when the clinician is unwilling to perform either lumbar or cisternal myelography and where the practice does not have a clinician capable of performing decompressive surgery. The clinician in the above instance already knows with a high degree of certainty that the clinical signs are due to a Type I intervertebral disc protrusion and knows definitive treatment for this patient lies outside the skill set of the practice. Performing a survey study without progressing to contrast radiography and definitive treatment is likely to result in a significant delay in the commencement of an appropriate treatment plan should the patient be referred. Additionally, when the patient arrives at a referral institution, either heavily sedated or recovering from anesthesia, an accurate neurological examination is near impossible and valuable prognostic indicators can be masked by drug therapy.

A complete spinal series from the cervical through to the lumbosacral region is typically a time-consuming process and often unnecessary. The neurological examination should have allowed the lesion to be localized and this region becomes the focus of the radiographic study. There are two major advantages in restricting the number of radiographs in any survey series. One, the radiographer can concentrate on producing the appropriate quality images of the region of interest. Two, the clinician interpreting the radiographs can focus their attention on a small number of radiographs from which there is likely to be a higher diagnostic yield.

It is frequently stated in veterinary imaging texts that meticulous positioning is critical in imaging the spine. It is also critical that a meticulous examination is obtained to maximise the diagnostic value of the radiographs produced. It is important to sit down and get comfortable in order to read the radiographs. Review the radiographs on a light box. Orientate the radiographs correctly on the viewer and do this consistently. Have a hot light available. A hot light is extremely advantageous when looking for subtle intervertebral disc calcification and dorsal protrusion of disc material into the spinal canal. Always reevaluate the radiographs, particularly if the radiographs were initially evaluated when wet. Subtle lesions often become apparent on dry radiographs that were not obvious when they were wet.

Evaluating spinal radiographs can be challenging. The complexity and number of spinal structures within the images requires a great deal of concentration from the reviewer and a thorough understanding of the radiographic anatomy. It is critical that the clinician is aware of anatomic variability that exists in the normal spine and having access to both a radiology atlas and an anatomy text is mandatory when evaluating spinal radiographs. When evaluating radiographs of the spine it is important to evaluate small segments at a time. I evaluate the spine in “segments of three”, restricting comparison to the immediately adjacent comparable spinal structures.



Mineralised lumbar invertebral disc

Hour glass compression of myelogram contrast column

Professional Presentations

Although VSG is a commercial business, we feel that we still have an obligation to contribute to veterinary learning & research. Three times a year we provide a continuing education evening to local veterinarians and our specialists regularly present topics at local, national and international seminars. The following is a list of these presentations.

Robson MC. Renal failure in cats. Northland Branch NZVA. June 2002.

Jerram RM. Neurology simplified: The neurologic examination and lesion localization.

- Auckland Veterinary Society, Auckland, New Zealand. March 14 2002.
- Northland Branch NZVA, Whangarei, New Zealand. June 12 2002.
- Wellington Branch NZVA, Wellington, New Zealand. July 10 2002.
- Otago Branch NZVA, Mosgiel, New Zealand. September 12 2002.
- Southland Branch NZVA, Invercargill, New Zealand. September 13 2002.
- Taranaki Branch NZVA, Stratford, New Zealand. November 5 2002.
- Canterbury Branch NZVA, Christchurch, New Zealand. March 12 2003.
- Waikato Branch NZVA, Hamilton, New Zealand. December 7 2004.

Walker AM. Biological osteosynthesis - concept and application.
Omentalisation of the thorax for treatment of idiopathic chylothorax in the dog.
Surgery Chapter of the Australian College of Veterinary Scientists. Gold Coast, Queensland, Australia. July 5 2002.

Jerram RM. Surgical oncology: Principles and practice.

- Auckland Veterinary Society, Auckland, New Zealand. March 21 2003.
- Northland Branch NZVA, Whangarei, New Zealand. June 10 2003.
- Bay of Plenty Branch NZVA, Tauranga, New Zealand. August 14 2003.

Robson MC. Advances in small animal medicine. Auckland Veterinary Society, Auckland, September 2003.

Walker AM. Elbow dysplasia. Boehringer Roadshow, Auckland, New Zealand. October 2003.

Coleman MG. Uremia and uremic syndrome. Auckland Veterinary Society, Auckland, New Zealand. November 2003.

Sutherland-Smith J. Ectopic ureters. Auckland Veterinary Society, Auckland, New Zealand. November 2003.

Walker AM. Advances in small animal orthopaedic surgery. Auckland Veterinary Society, Auckland, New Zealand, February 2004.

Jerram RM. Gut wrenching cases. Surgical Symposium, Taupo, New Zealand. April 23 2004.

Jerram RM. Lame excuses - more case studies. Surgical Symposium, Taupo, New Zealand. April 24 2004.

Warman CGA. Radiology of the urinary tract. NZVA Conference 2004, Christchurch, New Zealand. 27 June 2004.

Warman CGA. Ultrasound of the urinary tract. NZVA Conference 2004, Christchurch, New Zealand. 27 June 2004.

Jerram RM. Cutting the waterworks - general surgery of the urinary tract. NZVA Conference 2004, Christchurch, New Zealand. 27 June 2004.

Jerram RM. The piddling puppy - management of ectopic ureter. NZVA Conference 2004, Christchurch, New Zealand. 27 June 2004.

Robson MC. Feline renal transplantation - are we playing God. NZVA Conference 2004, Christchurch, New Zealand. 27 June 2004.

Walker AM. There’s a hole in the bucket, dear Liza! - urethral trauma in the cat. NZVA Conference 2004, Christchurch, New Zealand. 27 June 2004.

Robson MC. Give me some water! - practical aspects of fluid therapy in renal failure. NZVA Conference 2004, Christchurch, New Zealand. 27 June 2004.

Jerram RM. Making a local call: local analgesic techniques in dogs. ACVS Veterinary Symposium, Denver, Colorado, USA. 8 October 2004.

Jerram RM. Management of canine osteoarthritis. ACVS Veterinary Symposium, Denver, Colorado, USA. 8 October 2004.

Fry D. Diagnosis of portosystemic shunts in dogs and cats. Veterinary Information Network. VIN/ACVSc Rounds. 29 January 2005.

Jerram RM. Making a local call: local analgesic techniques in dogs & management of canine osteoarthritis. Canterbury Branch NZVA, Christchurch, New Zealand. 7 February 2005.

Jerram RM. Whatever happened to James Herriot? Massey University Final Year Veterinary Student Class, Palmerston North, New Zealand. 23 March 2005.

Jerram RM. Rebuilding the box: Decision making and management of pelvic fractures in dogs and cats. Auckland Veterinary Society, Auckland, New Zealand, 5 May 2005.