BSAVA Congress 2013

It was a busy Congress for Willows this year, with hundreds of visitors coming to see us at our stand at the NIA. It was a great opportunity for all the Willows staff involved to catch up with old friends and colleagues, as well as meeting many new faces.

Congress prize winners!

During the four days of Congress we ran three highly popular competitions involving either manual dexterity or brain power.

Our laparoscopic sugar cube stacking competition was won by veterinary nurse Gemma Stewart from the Oak Tree Veterinary Centre, who wins an Apple iPad for stacking 10 sugar cubes in 2 minutes. The joint prosthesis shape sorting competition was won by veterinary surgeon Dominic Johnson of the Forest Veterinary Group who sorted the hip, elbow and knee prostheses into their relevant compartments by touch alone in an amazing 3.4 seconds! Dominic is also the lucky winner of an Apple iPad.

The Oncology Quiz winners were Karen Gasser, Rosie Bathgate and Helen Pratt in the veterinary section and Lorna Kemble, Annabel Heaton, and Christie Lewitt-Smith in the nurse section. The vets each win a BSAVA Manual of Oncology, whilst the nurses receive a BSAVA Nursing Manual.

Willows charitable donations at Congress

Throughout BSAVA Congress this year, delegates were encouraged to take a voting token each time they had a cup of Willows sponsored tea or coffee. They placed their token into one of three collectors, each being assigned to a different charity. The proportion of tokens for each charity was then used to determine their share of a £5,000 donation from Willows Referral Service. The nominated charities were The Cinnamon Trust, Guide Dogs for the Blind and PetSavers.

All three charities are deserving causes doing wonderful work for animals and the people involved with them, and it gives us great pleasure to have been able to give to each of them on behalf of members of the veterinary profession.

Bill Oxley
RCVS Diplomate in Small Animal Surgery (Orthopaedics)

We are very pleased to welcome back Bill Oxley to the Orthopaedic and Spinal Surgery teams at Willows. Bill undertook a three year RCVS approved orthopaedic Residency at Willows and subsequently went to work in an orthopaedic referral practice in his beloved Lake District. He has since gained his RCVS Diploma and has recently returned to Willows as a full time permanent member of the team. Bill’s main areas of interest include treatment of cruciate disease, fracture management and the correction of angular limb deformities.

Fergus Allerton
BSc BVSc CertSAM

Fergus and Julien are both soon to join our Internal Medicine team. They will both have completed European Residencies in internal medicine – Fergus at the University of Liege and Julien at Cambridge University. Fergus will be joining Willows as a permanent member of staff, bringing the number of medicine team clinicians up to five, and Julien will initially be providing maternity cover for Kirsty Roe.

We are delighted to announce that internal medic Kirsty Roe and neurologist Raquel Travail are both expecting their first babies in early 2014. We wish Kirsty, father-to-be Nigel, Raquel and expectant dad Tim, and of course their new babies, good health, happiness and all the very best for the future!
What’s your diagnosis?

**HISTORY**

**FINDINGS**

**DIAGNOSIS**

**PLAN**

**PROGNOSIS**

**WILLOWS CASE STUDY:**

**An eight-month-old Pomeranian**

Humphrey, an eight-month-old Pomeranian weighing 1.1kg, was presented with a two week history of sudden onset screaming and weakness affecting all four limbs. Signs had developed when playing with another dog. Analgesics were prescribed, but intermittent apparent neck pain continued. Two days prior to presentation there was a sudden deterioration, with Humphrey becoming unable to ambulate. Examination revealed tetraplegia with intact segmental spinal reflexes. Gentle palpation of the cervical spine was resented. Pain perception was considered to be normal. A lateral radiograph of the cervical spine was obtained under general anaesthesia.

**What is your diagnosis? What additional investigations could be considered? How would you manage this case? What is the prognosis?**

...for the answer see back page

**Give us your feedback!**

We want your feedback regarding the service we offer to you and your clients! To encourage you to fill in and return one of our feedback forms, or to complete our on-line feedback form, we offer a quarterly prize draw for £100 of M&S vouchers. The latest winner is Emily Banks of Avonvale Veterinary Centre in Warwick. In her feedback, Emily commented “The speed of call back and helpfulness of the clinician was excellent”. We value all comments, good or bad, and we continually strive to improve our service for referring vets and owners and to deliver first class patient care.

**NEW Elbow replacement surgery ... ‘Sirius’!**

Chronic elbow pain and lameness due to osteoarthritis is common in dogs. Whilst the majority of cases can be managed satisfactorily with either conservative therapy or arthroscopic surgery, there are dogs in which a salvage procedure is worthy of consideration. Recent advances in elbow replacement surgery include novel prostheses and refined instrumentation, providing robust fixation and minimising post-operative complications. Willows’ orthopaedic Specialists, Toby Gemmill and Stephen Clarke, have undergone training on the new ‘Sirius’ elbow replacement procedure and are familiar with its use. They are happy to discuss case suitability with colleagues – telephone 0121 712 7070 for advice. Further details are available on our website www.willows.uk.net

Sirius elbow replacement in a Labrador Retriever with chronic pain due to osteoarthritis. The novel humeral and radioulnar prostheses provide robust fixation and offer advantages over other techniques.
Chest drain placement – avoiding the pitfalls

Incorrect chest drain placement can cause life-threatening complications resulting from damage to intra-thoracic organs, such as the heart and lungs, or the development of an iatrogenic sucking pneumothorax.

Here we consider some of the key factors to bear in mind when placing a chest drain.

All the equipment required should be prepared prior to commencement of the procedure. This should include all syringes and connectors likely to be used once the drain has been inserted, the local anaesthetic and the suture material for securing the drain.

1. A small skin incision is made (usually over the 10th or 11th space), several centimetres behind the intercostal space chosen for insertion through the chest wall. The drain is typically angled towards the ipsilateral shoulder, running in a subcutaneous tunnel. This helps to prevent iatrogenic pneumothorax associated with the presence or removal of the drain. Most thoracic drains are inserted into the thorax caudal to the sixth intercostal space in order to minimise the risk of damage to the heart.

2. The intercostal neurovascular bundle caudal to each rib is avoided by inserting the tube at the cranial edge of the appropriate rib.

   NOTE: the drain should be firmly grasped with a sterile gloved hand a short distance from the tip to prevent abrupt, uncontrolled over-insertion into the thoracic cavity.

   The usual aim is for the tip of the drain to come to lie at the level of the first or second intercostal space.

3. Once placed, the drain is suctioned to ensure correct placement. It is then secured to the skin using a Roman sandal (finger-trap) suture.

   All connections should be secured (for example with superglue) and the tube covered with a chest bandage (e.g. stockingette).

   An Elizabethan collar is essential while the drain is in place, and the patient should be closely supervised due to the potential for disconnection or displacement of the tube(s).

Willows on-line Referred Case Registration Form – first quarterly £1,000 prize winner!

Our on-line patient registration form makes referring a routine case more streamlined, especially for vets or practices that have signed onto the veterinary professionals members area of our website. Being a member allows the form to auto-complete with your details. You then just need to fill in the patient and client details, upload the history and submit the form. We do the rest!

To encourage use of this new, time-saving system, we are running a quarterly prize draw to include any vet using the process, providing that the appointment comes to fruition. We are delighted to announce our first prize winner, Derek Attride of St George’s Veterinary Group, Wolverhampton, who receives the sum of £1,000! So next time you refer a non-urgent case to Willows, why not visit the veterinary professionals section of our website at: www.willows.uk.net/vp and follow the link to the Referred Case Registration Form – you will save time and effort, and you could become a prize winner, too!
Canine Keratoconjunctivitis Sicca

Keratoconjunctivitis sicca (KCS) or ‘dry eye’ is commonly encountered in general practice and involves a deficiency of the aqueous component of the tear film leading to desiccation of the conjunctiva and cornea.

Aetiologies
Immune-mediated destruction of the lacrimal glands is the most common cause of KCS in dogs. Certain breeds are over-represented, including the West Highland White Terrier, Cavalier King Charles Spaniel, English Cocker Spaniel and the Shih Tzu. Neurogenic dry eye is not uncommon and most cases are idiopathic. Other causes of KCS include endocrine disease (e.g. diabetes mellitus), drug-induced (e.g. systemic sulphonamides), surgical removal of the gland of the third eyelid, infectious disease (e.g. Leishmaniasis) and irradiation. Two breed-related congenital dry eye syndromes have recently been described in Yorkshire Terriers and Cavalier King Charles Spaniels (ichthyosiform dermatosis).

Clinical Presentation
Common signs of KCS include ocular discomfort, conjunctival hyperaemia, a tenacious mucopurulent ocular discharge and a lack-lustre appearance to the corneal surface (Figure 1). Sequelae to KCS may include corneal neovascularisation, corneal pigmentation and progressive corneal ulceration. An ipsilateral dry nose is considered pathognomonic for neurogenic KCS (Figure 2).

Diagnosis
The Schirmer Tear Test remains the standard means to assess both the reflex and basal aqueous tear production in dogs. This test should be carried out early on in the examination and before topical treatments have been applied.

<table>
<thead>
<tr>
<th>Schirmer Tear Test reading (mm/min)</th>
<th>Interpretation</th>
</tr>
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<tbody>
<tr>
<td>≥ 15</td>
<td>Normal production</td>
</tr>
<tr>
<td>11-14**</td>
<td>Early KCS**</td>
</tr>
<tr>
<td>6-10</td>
<td>Moderate KCS</td>
</tr>
<tr>
<td>&lt; 5</td>
<td>Severe KCS</td>
</tr>
<tr>
<td>0</td>
<td>Absolute KCS</td>
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</tbody>
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**Borderline results should be interpreted with caution and considered in conjunction with other clinical signs, as other factors (e.g. sedation) may reduce the STT in the absence of true KCS.

Treatment
Topical lacrimostimulants and lacrimomimetics +/- antimicrobial agents constitute the mainstay of treatment. Topically applied cyclosporine A (CsA) (Optimmune, Schering-Plough) achieves its action through both immunomodulating and tear stimulating properties and may take up to 6 weeks to exert its maximum effects. Greater concentrations of the drug can be formulated ‘in-house’ with corn-oil, but can cause local irritation. Tacrolimus, a much more potent immunomodulatory agent, has become more widely used in the treatment of KCS refractory to CsA. The use of this drug is currently off-licence and should therefore be reserved for severe or absolute KCS cases.

Topical lacrimomimetic therapy is very important, especially early in the management of KCS. Lacrilube (Allergan), Viscotears (Novartis) and Lubrithal (Dechra) are all examples of commonly used tear replacements.

Topical antibiotics (e.g. chloramphenicol) may be indicated initially in the management of more severe cases with secondary bacterial infection.

Neurogenic and some congenital KCS cases can be treated with the parasympathomimetic agent, pilocarpine. The drug is generally given orally as a 1% solution but is potentially toxic. Topical application for treatment of neurogenic KCS has been described, but it is irritant and should be diluted to a 0.1% solution.

Surgical intervention in the form of parotid duct transposition (PDT) should be considered for those KCS cases which prove refractive to medical management. Appropriate microsurgical equipment and training are vital to prevent serious intra and post-operative complications. Dogs with xerostomia (dry mouth) are not good candidates for surgery. A recently published retrospective review† showed that, whilst complications can occur, most of these can be managed relatively readily, and the overall success rate was very high (93%). The study showed that, following PDT, dogs were generally more comfortable, had improved vision and required less ongoing maintenance than pre-operatively.

Summary
Canine KCS is a relatively common condition and diagnosis can often be straightforward. Most cases can be managed with standard medical therapies, but some prove to be very challenging. In such cases, the underlying aetiology should be reviewed and alternative medical or even surgical options should be considered. Referral to a specialist ophthalmologist can be beneficial, especially if the dog is a potential candidate for PDT surgery.

Benson, a 12 week-old M/E domestic shorthaired cat

Benson was referred following two recent episodes of ataxia, lethargy and vacant behaviour. Blood tests performed prior to referral revealed moderately raised fasting and post prandial bile acids concentrations and a markedly raised ammonia concentration. On examination, Benson was bright and responsive but undergrown and underweight (body condition score 4/9).

Benson’s clinical history and laboratory findings supported a provisional diagnosis of a congenital portosystemic shunt (PSS). Benson was admitted for further investigations, and an abdominal ultrasound examination performed under sedation confirmed the presence of microhepatica and bilateral renomegaly. In addition, an anomalous vessel was noted, arising from the portal vein caudal to the pancreatic-duodenal branch, coursing cranially to join the caudal vena cava at the level of the diaphragm. The findings were consistent with a single extrahepatic (left gastro-phrenic) PSS. In certain cases (inconclusive ultrasound scan, complex vascular anomaly, likelihood of an intrahepatic PSS, etc.), we may recommend the use of a contrast-enhanced CT scan as an alternative diagnostic procedure. Benson was discharged with a three week course of a gut active antibiotic (amoxicillin), lactulose syrup and a protein-restricted diet.

Benson made good progress following the introduction of medical management for hepatic encephalopathy. He was returned after three weeks for the surgical management of the PSS. In addition to the other medications, the administration of the anti-seizuring drug, levetiracetam, was started 7 days prior to the operation. At surgery, the abdominal viscera were approached via a ventral midline coeliotomy and a mesenteric vein positive contrast portovenogram (using intra-operative fluoroscopy) confirmed the presence and position of a single extrahepatic left gastro-caval PSS. The anomalous vessel was located as it passed along the lesser curvature of the stomach near the oesophageal hiatus. The temporary, full ligation of the shunt resulted in the development of unacceptable portal hypertension and, in view of this, the shunt was partially closed using a cellophane band (secured with a number of titanium surgical clips). Following its placement, the cellophane band induces gradual closure of the shunt over a period of 3 to 4 weeks.

Postoperatively, after spending the first 24 hours being very closely monitored in the ICU, Benson went on to make an unremarkable recovery and was discharged 72 hours after the surgery with a further 7 days course of levetiracetam, a two week course of amoxicillin and lactulose syrup and advice to continue feeding the protein-restricted diet for a further four weeks. A telephone conversation with the owners three weeks after discharge confirmed that Benson was making excellent progress; his wound had healed without issue, there had been no evidence of seizures or seizure-like activity and the owners reported that Benson was now behaving normally and was a much brighter and happier cat than he had been prior to his surgery. Finally, a further indication of the positive outcome was obtained when a follow-up dynamic bile acids assessment (performed by the referring practice) showed Benson’s fasting and post prandial bile acids concentrations both to be within reference ranges.

Long term medical management of cats suffering from congenital PSS is often very unrewarding and carries a poor prognosis in the majority of cases. Although surgical management is considered the treatment of choice, it is not without its risks and complications. In cats, the surgical management of both extra- and intrahepatic PSS carries a significant chance (up to 15%) of inducing potentially untreatable seizures in the postoperative period. Despite the risks, good outcomes can be achieved in the majority of cats by means of careful case selection, the perioperative administration of levetiracetam and a team approach to the management of these potentially complex cases.
The lateral radiograph shows malalignment of the atlanto-axial articulation with widening of the interarcuate space dorsally and subluxation of the articular facets ventrally. These changes are consistent with a diagnosis of atlanto-axial instability (subluxation). More advanced imaging techniques may be considered in selected cases. CT provides superior bony detail and can be invaluable when planning surgery, and MRI can be beneficial for detecting significant spinal cord pathology when present. Cerebrospinal fluid (CSF) collection and analysis should be performed in dogs where there is any suspicion of concomitant inflammatory CNS disease. It is extremely important that CSF collection is via a lumbar puncture and not from the cerebello-medullary cistern, since the latter necessitates flexion of the neck that may exacerbate atlanto-axial instability. The associated spinal cord injury may result in respiratory arrest and death.

Conservative treatment (restricted exercise and analgesics) may be considered in mild cases of atlanto-axial instability. However, this is a life threatening condition and therefore surgery is generally the treatment of choice. Numerous surgical techniques have been described using either dorsal or ventral approaches, but the majority of them have been abandoned due to unacceptable mortality rates. Ventral stabilisation of the atlanto-axial joint with screws placed in the pedicles of the atlas and in the caudal vertebral body of the axis results in a robust fixation. Great care is needed to avoid penetrating the vertebral canal and injuring the spinal cord. Often these patients, like Humphrey, are extremely small. Surgery commonly requires very small implants and can be extremely challenging.

The prognosis in dogs that are managed surgically is generally good, provided spinal cord injury is not chronic and surgical implant placement is precise. Humphrey had surgery on the day of presentation. Four 1.5 mm cortical screws were carefully placed in the atlas and axis and stabilised with a tiny amount of polymethylmethacrylate bone cement. A post-operative CT scan showed reduction of the atlanto-axial subluxation and the safe positioning of the implants. Humphrey was discharged two days following surgery, and with the aid of regular physiotherapy he regained the ability to ambulate two weeks later.

What was your diagnosis?

Postoperative CT scan showing reduction of the atlanto-axial subluxation and the position of the 1.5 mm screws and bone cement

Humphrey 12 weeks following surgery

CPD at Willows

Willows continues to provide high quality CPD for members of the profession

Events still to come in 2013:

Free evening forums

WEDNESDAY 18 SEPTEMBER 2013
The top 10 ophthalmic mistakes - and how to avoid them!

WEDNESDAY 2 OCTOBER 2013
The bleeding obvious - A case-based approach to canine and feline coagulopathies

WEDNESDAY 13 NOVEMBER
Getting started with abdominal ultrasound

WEDNESDAY 4 DECEMBER 2013
“Please help me”, dear vet, “why is my young dog lame?”

Day meeting

WEDNESDAY 16 OCTOBER 2013
Endocrine multi-disciplinary CPD Day - The highs and lows of endocrine disease

Clinical Clubs

In addition to day meetings and free evening forums, we are also running very popular free monthly evening Clinical Clubs at the practice. These centre around a steeplechase of several case studies which are presented for small groups of 4 to 6 vets to discuss amongst themselves first, followed by further discussion with one of Willows referral clinicians. Our Clinical Clubs are informal, highly interactive and enjoyable.

CPD events for 2014

In 2014 we will have another full programme of evening and day meetings covering a wide range of topics including feline ophthalmology, emergency and critical care, challenges in medical and surgical oncology, and the coughing dog. An evening of case-based neurology videos is also in the pipeline, and there will be an evening for nurses on monitoring the anaesthetised patient.

Registering for CPD updates

To ensure that you don’t miss out on the opportunity to attend any of our forthcoming CPD events, just sign up in our Veterinary Professionals section of the website to receive email notification of every event two weeks in advance. You can also view details of planned meetings in the CPD section of the website. Bookings are all made on-line on our website: www.willows.uk.net/vp