



SASH Newsflash

Vol. 3 December 2023

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Dr David Davies, Dr Andrew Dunn and Dr Ryan Taggart, SASH Adelaide founding partners.

Did You Know?



SASH offers one of the most generous peer-to-peer discounts in the industry. If you work at a vet clinic and your pet needs emergency or specialist care, be sure to let the SASH Client Services team know that you work at a vet clinic when you book the appointment.

Continuing Education Program Survey



Thank you to those who have attended our CE program this year. Whether you're a regular attendee or not, we would love to hear your feedback. Please take 5 minutes to complete a survey to help us build the best possible CE program for 2024.



Helping pets and their families live their best life



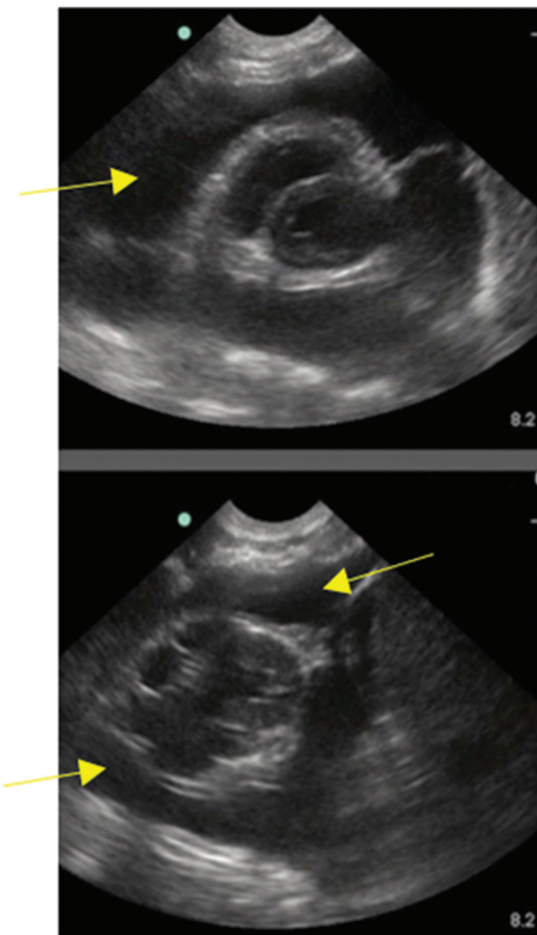
SASH clinical case challenge

Jerry the dyspnoeic Kelpie

Below is a medical case challenge. Scan the QR code to log in or register for the SASH Academy to reveal the answer. Once you've selected the answer, you'll unlock some additional questions and invaluable case notes.

Test yourself with an interactive, multiple-choice case challenge, featuring Jerry, the three-year-old male entire Kelpie who presents with dyspnoea and lethargy. Jerry is up to date with modern tick treatments

He has pale mucous membranes, severe dyspnoea with dull lung sounds bilaterally and a temperature of 39.8 degrees Celsius. He is given oxygen support and you perform the following diagnostics:



- PCV/TP: 38% 48g/L
- Blood gas analysis: mild hypokalaemia and moderate hyperlactataemia
- In-house CBC: moderate neutropenia with suspected bands and moderate monocytosis
- In-house biochemistry: within normal limits
- In-house C-reactive protein: 98.7mg/L
- aFAST: no free fluid found
- tFAST: see left



Question 1/3: What does the black area (indicated with yellow arrows) on the tFAST mean?

Scan the QR code to unlock all quiz questions and receive feedback through SASH Academy, our free online learning platform.

SASH team update



Dr Jia Wen Siow

Congratulations and welcome to Dr Jia Wen Siow who was recently been awarded Fellowship status by the ANZCVS and is now a registered specialist in Diagnostic Imaging. Dr Jia Wen completed her veterinary studies at the University of Adelaide in 2015 before travelling to Queensland for a rotating internship at a specialist practice. There, she developed an interest in diagnostic imaging and subsequently pursued a Graduate Certificate in Ultrasound while also working in shelter and emergency practice in Adelaide. After completing a diagnostic imaging position at another referral practice in Brisbane, Jia Wen moved to Sydney to undertake her Residency in Diagnostic Imaging at the University of Sydney. During this time, she developed an interest in gastrointestinal CT. After completion, Jia Wen passed her exams to become a Fellow in the Australian & NZ College of Veterinary Scientists.

Welcome to Dr Morgan Woodforde, Registrar in Critical Care, who will be joining SASH Adelaide in early 2024

After spending her childhood in Adelaide and knowing from the age of five that she wanted to be a veterinarian, Dr Morgan travelled to Perth to pursue her dream. In 2014 Dr Morgan graduated from Murdoch University in Perth and spent two and a half years in a busy general practice before moving to Sydney to undertake a rotating internship at SASH. Having never considered a career in emergency medicine, after her first rotation with the Emergency and Critical Care department Dr Morgan discovered her passion for dealing with critical cases. After a busy 12 months working throughout the many departments of SASH, Dr Morgan completed her examinations in Small Animal Medicine becoming a member of the Australian and New Zealand College of Veterinary Sciences.

Dr Morgan stayed on at SASH to continue working as an emergency vet working alongside our Specialists. Following a year of emergency work, Dr Morgan moved in to the role of Emergency and Critical Care intern, and then resident, to further develop her skills in managing critically ill patients and pursue her goal of specialisation. Morgan recently completed her training program in Critical Care Medicine, becoming the Registrar at SASH Adelaide.



Dr Morgan Woodforde

SASH continuing education

A year of webinars & face to face events



If you have missed a webinar, please visit sashvets.com/academy to watch the recording, and gain CPD points.



Vet resource hub

www.sashvets.com/collateral-order-form/



Our resource hub enables you to easily order SASH flyers, posters and client information sheets for your clinic.

SASH continuing education

Why do some ear infections not respond to ear drops?



Dr Peter Hill, Dermatologist

A frustrating scenario commonly encountered in general practice is an ear infection that doesn't respond to treatment with ear drops. Based on analysis of medical records received at the time of referral, the commonest response to this scenario is for vets to try a different type of ear drop. In some cases, multiple different ear drops have been prescribed prior to the case being referred. For example, in a case that was seen recently, a dog had been sequentially treated with Aurizon, Easotic, Osumnia, Baytril Otic and Mometamax, and the infection still persisted!

There are various reasons why cases might play out this way and I have summarized them in the chart below. In nearly every non-responsive ear infection I have seen, the answer lies somewhere within this chart. There is always some initiating cause or perpetuating factor that has remained undetected or been overlooked. In many cases, it is the conditions listed under the perpetuating factors that are the culprits.

Antimicrobial resistance is a common problem in the bacteria that are involved in ear infections, especially with *Pseudomonas*. Resistance can occur due to inherent defense mechanisms that certain bugs have but it can also be acquired via spontaneous mutations or transfer of resistance genes from one bug to another. Worse still is the fact that sequential use of different ear drops can drive this process along. In many cases, multi-drug resistant infections are actually caused by the previous treatments that have been given rather than the acquisition of some new superbug. It's a bit like a bizarre microscopic Squid Game, with each new challenge (a new ear drop) wiping out all the weaker contestants until only one superbug remains. Unfortunately, with bacteria, that single superbug can reproduce to become a trillion in no time at all. If these bugs then organize themselves into biofilms, they become 1000 times more resistant to antibiotics.

Another major issue that has to be considered is what damage the ear infection is doing whilst it is present. The prolonged presence of purulent exudates can cause degeneration of the ear drum and other pathological changes in the ear canal linings such as proliferation of the epithelium and glandular tissues. Otitis media and narrowing of the ear canal lumen can result, both of which will make resolution of the infection more complicated than simply using a different ear drop. Chronic ear infections will also disrupt the natural ear cleaning mechanism which will lead to inadequate clearance of dead skin cells and wax. These can provide substrates for biofilms to form on and can also become condensed into ceruminoliths which provide impenetrable fortresses for bacteria to hide in.

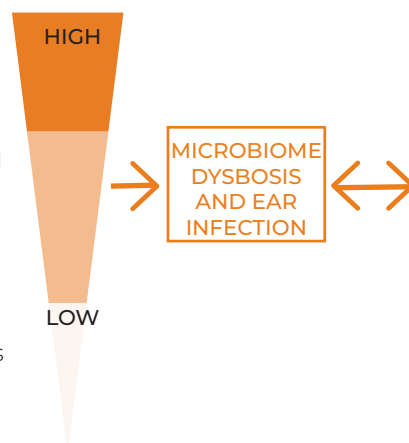
The key to avoiding this progressive worsening of the situation is early intervention. The temptation to try another ear drop in the hope that it will succeed where others have failed is best resisted. If an initial course of ear drops fails, the approach should be focused on identifying any initiating causes and perpetuating factors so they can be rectified as soon as possible. The offending bacteria should be identified on cytology and further characterized by culture if necessary. The best way to prevent progressive acquisition of antibiotic resistance is to remove as many bacteria, biofilms and ceruminoliths from the ear canal before any new ear drops are applied. Many treatments fail if this aspect of the treatment isn't performed successfully. A thorough deep cleaning of the ear with appropriate techniques, solutions and equipment is required. If otitis media or chronic pathological changes in the ear canals have developed, a CT scan and video-otoscopic examination is often required for accurate diagnosis and treatment. When detected, this will require a middle ear flushing technique performed under video-otoscopic guidance followed by a targeted antibiotic treatment plan.

Pathophysiology of otitis and ear infections

INITIATION OF OTITIS

Possible causes and risk of otitis developing

- Grass seed foreign body
- Ear canal polyps and tumours
- Otodectes cynotis infestation (ear mites)
- Atopic dermatitis
- Food allergy
- Abnormal or disrupted natural ear cleaning mechanism
- Adverse reaction to ear medication
- Endocrine disease
- Transient changes to ecosystem
- Swimming
- Congenitally narrow ear canals
- Hairy ear canals
- Excessive wax production
- Pendulous pinnae



PEPETUATION OF OTITIS

Microbial evolution and progressive pathology

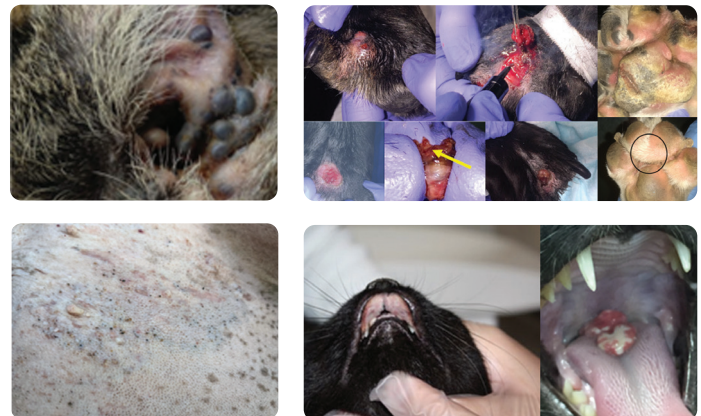
- Resistant bacterial infections (esp *Pseudomonas*)**
 - Often follows previous treatment
 - Survival of the fittest in an antibiotic rich environment
- Ruptured tympanic membrane and otitis media**
 - Often occurs spontaneously due to digestive enzymes in pus
- Ear canal hyperplasia, fibrosis and narrowing**
 - Can inhibit penetration and dispersal of treatment agents
- Development of ceruminoliths**
 - Can act as a impenetrable nidus of infection
- Damaged natural ear cleaning mechanism**
 - Will provide a constant environment for microbiome dysbiosis
- Excessive cleaning**
 - Can cause irritancy and maceration

New toys in time for Christmas!

Aesculight CO₂ laser

Our Aesculight laser is en route from the US! Lasers cut, ablate and coagulate tissues, resulting in less haemorrhage, pain and wound dehiscence, and destroy bacteria, reducing the risk of post-operative infection. Whilst this has many surgical uses from anal sacculotomy to cystotomy, our Dermatology team shall be using it predominantly in our patients with:

- Apocrine cystomatosis
- Pododermatitis - some requiring podoplasty (and removal of interdigital lesions in interdigital furunculosis)
- Aural mass removals (e.g. aural polyp)
- Actinic disease (actinic keratoses, SCC, haemangioma, skin resurface)
- Pinnal ablation
- Viral papilloma removal
- Oral EGC removal



Fluorescent Light Energy Therapy



Sticking with dermatology toys; our Phovia Fluorescent Light Energy Therapy system is up and running as well. Phovia is clinically proven to accelerate time to clinical resolution in cases of canine deep pyoderma, by reducing bacterial burden and stimulating more rapid skin regeneration

Electrochemotherapy



Durable, effective local tumour control in veterinary patients with solid neoplasms represents one of the major challenges for veterinary oncologists. Electrochemotherapy has been extensively investigated over the last 15 years as an additional treatment modality for local control of solid cancers. We're very excited to be able to offer this treatment option at SASH Adelaide, improving outcomes and reducing side effects by lowering the dose of systemic medical chemotherapy.

Learn more about electrochemotherapy by watching our CPD talk on the SASH Academy. Scan the QR code, or visit sashvets.com/academy



Service updates

MRI at SASH

Features and benefits of advanced imaging at SASH include:

- The only on-site high-field MRI providing unique clinical advantages together with optimal patient care.
- Real-time image evaluation by our Specialist Radiologists and/or our Neurologist. Having Specialists on hand during the scan to advise on any necessary adjustments to the sequencing can shorten overall anaesthetic time or avoid having to repeat the test.
- When a lesion is noted on MRI that warrants a CT scan, such as detection of a tumour requiring staging, at SASH the additional scan can be done right away and is typically undertaken at no extra charge to the client.
- Any procedures required in conjunction with an MRI (e.g. CSF sampling, fine needle aspirates, biopsies, surgery) can be performed by a Specialist under the same anaesthetic, saving the patient multiple anaesthetic events and additional costs and time for your client. Importantly, the Radiologist or Neurologist can advise at the time of the scan whether or not a procedure such as CSF sampling is safe to perform.
- If severe disease is discovered on MRI and patient safety may become compromised, our Critical Care Specialist and ICU team are on-site to immediately provide any necessary life-saving care.

- Same day service can often be facilitated if further treatment or surgery is required.

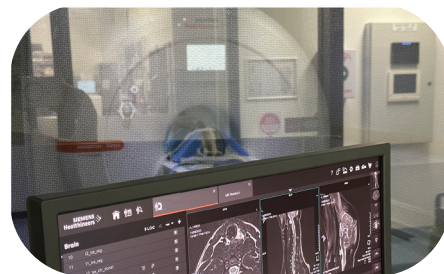
We understand the financial pressures owners are currently under when pursuing advanced veterinary care. In recognition, we will be temporarily introducing a new pricing structure for MRI scans.

New MRI pricing for SASH Adelaide (including average general anaesthetic and specialist interpretation):

- MRI 1 region: \$2786
- MRI 2 regions: \$3239
- MRI 3 regions: \$3693

Any blood work, tests or treatment costs are in addition to these prices.

An introductory consultation with a Specialist is required to ensure the most appropriate initial imaging modality is chosen, and any appropriate tests can be performed at the same time.



Dermatology advice service

Dr Peter, Dermatologist offers a comprehensive advice service for cases where you require the input of a specialist dermatologist, and referral is not possible. This can take place over the phone or online, and will comprise a thorough case review, formal assessment, plan and a written report for your records. The cost of this service varies according to case complexity.

Different types of remote consultation can be provided:

- Email consultations
- Telephone consultations
- Telemedicine consultations (Zoom/ Teams)

Typical costs

- 10-15 minutes \$85
- 30 minutes \$175
- One hour \$350

If you are unsure if a remote dermatology consultation is required, please email us with your query and one of our team will be able to assist you.



24/7 Emergency and Critical Care



SASH is committed to providing a world-class emergency service for the people and pets of South Australia; 24-hours a day, 365 days a year.

In preparation for a potential period where other veterinary emergency centres are unable to offer their regular services, we want to explain our offering and ask for your assistance in communicating our processes to our shared emergency clients.

Staffed at all hours

SASH Adelaide is staffed at all hours by emergency veterinarians with at least two emergency veterinarians on shift at any time, peaking at four emergency vets during periods of predictably high case load (e.g. Friday evening, Saturdays and Sundays).

Critical Care and afterhours specialist reach-back

Our emergency vets are supported by our Specialist in Emergency and Critical Care Medicine (Criticalist) Dr Nici Kalnins and Registrar Dr Morgan Woodforde. Our Critical Care team oversee cases in the ICU and prepare treatment plans and options for ICU patient care around the clock. No matter what time of the day, our team are ready to perform life-saving urgent surgeries, such as GDVs, spinal decompression and thoracotomies. Similarly, we have internal medicine specialists on call to perform oesophageal foreign body removal via endoscope afterhours.

How can you help?

We ask for your help to manage the expectations of our mutual clients. Despite multiple layers of staffing, there will be periods when our wait times for stable patients may be longer than anyone would like. The flipside to unpredictable caseloads is that we often can see cases extremely quickly, including within minutes of their arrival.

If you have a client who is considering coming into SASH Emergency, they are more than welcome to call and our friendly client services team can provide an estimate of the current wait time for a stable case (noting that we cannot provide triage over the phone).

Triage

On arrival at SASH Adelaide, your patients will be assessed by a highly-trained triage nurse who will determine the urgency with which the case will be seen. This means that patients who are coded as lower acuity may be "leap-frogged" by high acuity cases, like motor vehicle accidents and cardiac emergencies. Despite occasional extended waiting periods for stable patients to be seen, we are always committed to providing your patients with exceptional care:

- Clients will be given an expectation of their wait time based on their triage code and encouraged to alert us for re-triage if their pet's condition changes.
- If a patient chooses to leave without seeing a vet, but having been triaged by a nurse, no fees are levied. This way, your clients can be reassured that their pet is considered stable – they can then choose to wait for a consultation with an emergency vet or elect to leave of their own volition.
- We will never turn a client away who would like to be seen.
- You will receive a clinical summary from us within 12 hours of your client consulting with one of our emergency vets, regardless of whether the patient was admitted or treated as an outpatient.

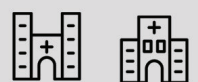
SASH Adelaide's emergency department has an unblemished record of remaining open. As we head into one of our busier periods and unpredictable industry shortages later this year, we want to reassure our valued referring vets that we are committed as ever to never closing our doors. We ask for your help to inform our prospective future clients, so that together we can manage their expectations, and ensure the stress of coming to emergency is minimized.

We appreciate your support as always.

Scan the QR code to check out our informational video which has been made specifically for you and your clients visiting SASH Emergency.



2023 in review



5 hospitals

4500+ CE attendees



Donated over
\$10,000 to
Sophie's
Legacy



48,000 cases
across all
SASH sites



Out of 3000
surveyed
clients, 96%
are happy
with SASH





SASH Adelaide

99 Rundle Street, Kent Town 5067
(08) 8133 5300

- 24/7 Emergency
- Critical Care
- Surgery
- Internal Medicine
- Medical Oncology
- Dermatology
- Diagnostic Imaging
- Neurology & Neurosurgery
- Physiotherapy & Rehabilitation



SASH North Ryde (02) 9889 0289
1 Richardson Place, North Ryde 2113

- 24/7 Emergency
- Specialist Anaesthesia
- Avian & Exotics
- Cardiology
- Cancer Centre (Medical, Surgical & Radiation)
- Critical Care
- Dialysis
- Dermatology
- Dentistry
- Diagnostic Imaging
- Feline Radioiodine
- Internal Medicine
- Neurology & Neurosurgery
- Ophthalmology
- Pituitary Centre
- Sports Medicine & Rehabilitation
- Surgery



SASH Western Sydney (02) 8609 9444
1 Rowood Road, Prospect 2148

- 24/7 Emergency
- Specialist Anaesthesia
- Critical Care
- Dermatology
- Diagnostic Imaging
- Internal Medicine
- Medical Oncology
- Sports Medicine & Rehabilitation
- Surgery



SASH Central Coast (02) 4311 1311
2 Bounty Close, Tuggerah 2259

- 24/7 Emergency
- Specialist Anaesthesia
- Critical Care
- Dermatology
- Diagnostic Imaging
- Internal Medicine
- Medical Oncology
- Ophthalmology
- Sports Medicine & Rehabilitation
- Surgery



SASH Alexandria (02) 8913 4000
5/476 Gardeners Rd, Alexandria 2015

- 24/7 Emergency
- Specialist Anaesthesia
- Critical Care
- Diagnostic Imaging
- Internal Medicine
- Reproduction
- Surgery
- Plus more specialty services to come.

SASH Perth opening 2024

www.sashvets.com