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# How to Survive OOH!
# Mini Series

## Session 1: General Approach to the Emergency Patient and Practical OOH Survival Tips

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## General Approach to the Emergency Patient

### How to Handle Out-of-Hours Phone Calls

When faced with a phone call outside of normal working hours (Out-of-Hours, OOH) – or indeed even a non-routine call during normal working hours – what's to be done?
What information should you ask for?
Should the patient be seen at the practice?
Should only 'true' emergencies be seen OOH and if so, what defines a 'true' emergency?

Opinions do vary somewhat and to an extent this is dependent on the working model in question, e.g. OOH service provider with dedicated staff working night/weekend shifts versus veterinarians/nurses that are on-call, potentially having worked the day before and/or being expected to work the following day.

A 'true' emergency patient can perhaps be defined as an animal that has a life-threatening problem; a moderate-to-severe problem with the potential to (rapidly) become life-threatening; and/or moderate-to-severe (typically acute or acute-on-chronic) pain.

Many human Emergency Departments are overrun with individuals that do not fall into one of these categories and much effort is being invested in trying to divert such individuals for example to Urgent or Acute Healthcare Centres or to General Practitioners offering extended surgery hours or on-call services. However this breadth of services is not available in veterinary medicine, so who should be seen?

Some people argue that if a pet carer is worried enough to ring OOH and wants their pet to be seen, this offer should always be made irrespective of the reported problem; of course some pet carers ring purely for advice and it turns out that their pet is a true emergency!

Moreover how much can we ever truly ascertain over the phone and how can we be sure that the information being provided by the lay pet carer is accurate and sufficient, especially at a time when he/she may be somewhat stressed? If we ask questions and try to tailor our recommendations accordingly, do we risk not seeing patients that we should with potentially serious consequences or at any rate poorer patient welfare?

From the RCVS Code of Professional Conduct for Veterinary Surgeons:

"The veterinary surgeon should provide advice to enable a person to decide what steps to take in the animal's best interests. Veterinary surgeons are responsible for any telephone advice that they give. It is recognised that advice over the telephone, without a physical examination of the animal, is limited and reliant on the quality and accuracy of information provided by the caller."

But what if the pet carer declines to be seen, for financial or other reasons?
Indeed, does ascertaining some information over the phone allow us to at least understand the sense of urgency with which the animal needs to be seen?

What are some questions that could be useful to ask, bearing in mind that who is best placed to ask these questions may depend on the circumstances of your individual practice, e.g. does a non-veterinary receptionist (internal or outsources) answer the phone in the first instance or does a veterinary nurse/surgeon answer the call?

Furthermore, depending on the information being provided, it may be more or less appropriate to pursue any/some/more in-depth questioning.

Whoever arranges for a case to come in, it is essential to communicate the details of a possible in-coming emergency to all team members – front desk, veterinarians and veterinary nurses. On the other hand you don't necessarily have to share the information right away either – use your discretion regarding timing.

**Basic Information:**

- Establish the basic necessary details* if not known, e.g.
    - Client's name (first and surname); are they the pet's legal owner?
    - Pet's name, species, age, sex, neutering status
    - Postal address; distance from your practice
    - Contact phone number
    - Potentially read back to confirm accuracy
    - (*The extent of the need for this will depend for example on whether you are the primary care practice for the patient or an external OOH service provider.)

**Current problem(s):**

- Brief description of the main current problem(s)
- How long has the problem being going on for? When was your pet last normal?
    - If a problem has been going on for several days and they call OOH, what's changed to concern you and prompt your call now?
- Where an episode occurred (e.g. trauma), did you witness the episode? When did it occur?
- Any other animals affected?
- For episodes of vomiting/diarrhoea:
    - How many times witnessed?
    - When was the last time?
    - Frequency?
    - Volume each time?
    - Appearance?
    - Known scavenger? Possible access to any foreign bodies, bins, potential toxins?

**General health status:**

- Does your pet seem to be in pain or otherwise distressed?
- Is your pet conscious? Responsive? Disorientated?
- Does he/she appear to be breathing normally? If not, can they describe what they are seeing? How is the breathing abnormal?
- What color are your pet's gums?
- Is there any evidence of bleeding? If so, where from and when did you first notice it?
- When was the last time you saw your pet eating normally (NB. Actually eating as opposed to just being fed!)?
- When was the last time you saw your pet toileting normally (especially tomcats)?
- Indoor/outdoor?
- Previous medical history? Current medical problems and medical therapies?

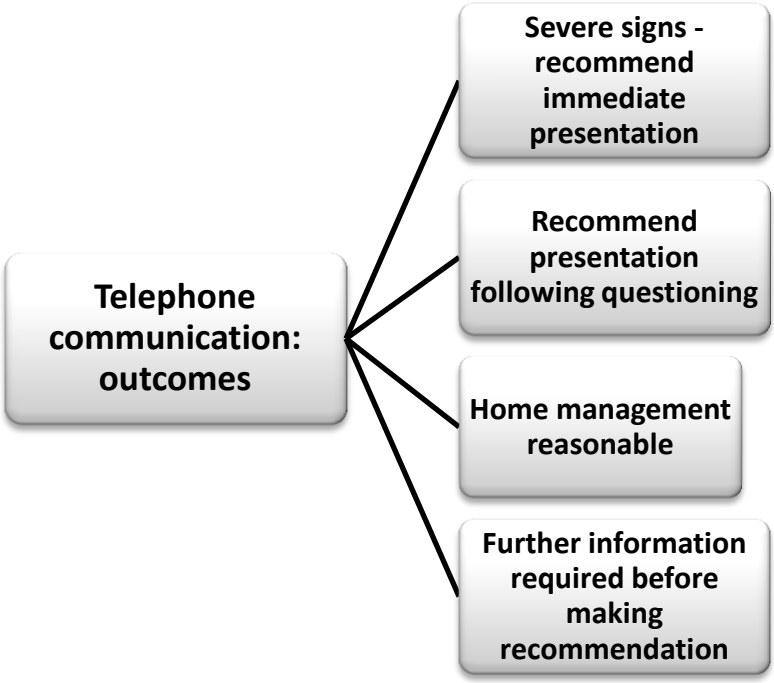
**Transport-related:**

- How big is your pet?
- Can your pet get up and walk?
- Do you have assistance to get him/her into the car?
- Will you need assistance to get him/her out of your car?
- NB. May also be appropriate to provide transport-related advice, e.g.
    - Seizuring animal: prevent him/her getting injured en route; client to be careful to avoid getting bitten
    - Covering large open wounds
- Do they need directions? Post code/address for satellite navigation (GPS)?

**Poisoning-related questions:**

Suspected or witnessed poisoning is a common reason for presentation of small animals to emergency clinics, with dogs being much more commonly affected than cats. These notes present a general approach to the poisoned patient before going on to describe some of the more commonly implicated poisons in greater detail.

*Telephone communication:*




Initial telephone communication is perhaps no more important than in the intoxicated patient. The important questions to ask are summarised below.

Was exposure witnessed or is it suspected? If suspected, based on what evidence?
What poison/poisons are involved? Can the owner provide more specific details – quantity, concentration etc.?
Where appropriate, does the owner have access to the container?

- The owner should be asked to bring this with them if the animal is presented to the practice

What is the animal's signalment and estimated body weight?
How long ago did exposure occur?
By what route did exposure occur?
Is the animal showing clinical signs? If so, what are they, when did they start and what is their progression?
Is the owner sure that this is the only animal to be affected?
Has the owner tried to induce emesis already?
Does the animal have any pre-existing medical conditions?
Is the animal currently taking any medications?

Nurses are frequently the first members of staff with which owners ringing about suspected or witnessed poisoning will communicate. It is therefore imperative that all nurses are well rehearsed in the questions that are important to ask and advice should be sought from the veterinary surgeon if there is any concern.

On the basis of the information obtained a recommendation should be made as to whether the animal needs to be presented to the practice or may be managed conservatively at home. In some cases, the animal will be exhibiting marked clinical signs and questioning should be kept to a minimum with immediate transport to the practice being the only appropriate recommendation. In other cases, it is necessary to obtain further information before a recommendation can be made.

*Further information:*

The purpose of seeking additional information about the poison in question is to ascertain if possible the severity of exposure that has or may have occurred:

Has potentially toxic exposure occurred?
Has lethal exposure occurred?
What are the expected clinical signs?
Would the animal be expected to have developed clinical signs by now?
If signs are present, are they reported to be early or late signs of intoxication? Is their progression typical?

A number of sources of information are available with respect to veterinary toxicology that includes:

- The Veterinary Poisons Information Service (VPIS) in the United Kingdom
- Toxcall in the United Kingdom
- The ASPCA Animal Poison Control Center in North America
- Pet Poison Helpline in North America
- Books on veterinary toxicology
- The internet: only reliable up-to-date sources should be used (e.g. www.vin.com, www.ivis.org, www.merckvetmanual.com). The internet is also useful for determining ingredients and concentrations in cases where for example only a proprietary product name is available

Some information that may be useful when calculating exposure dosages is:

- 1 standard teaspoon = ~ 5 ml; 1 standard tablespoon = ~ 15 ml
- 1 fluid ounce (oz) = 29.6 ml; 1 ml = 0.034 oz
- 1 lb = 0.454 kg; 1 kg = 2.2 lb
- 1% solution = 10 mg/ml = 1 g/100 ml
- 1 part per million (ppm) = 1 mg/kg for solid substances, 1 mg/l for liquid substances
- *w/w:* an abbreviation for 'by weight'; used to describe the concentration of a substance in a mixture or solution. In strict terms, 8% w/w means that the mass of the substance in question is 8% of the total mass of the solution or mixture. The metric symbol g/g has the same meaning as w/w.

**Indications for veterinary attention during parturition:**

- Prolonged gestation: due date (if known) reached without signs of labour
- A history of previous dystocia
- More than 24 hours of anorexia in the full-term queen
- No signs of labour more than 24 hours after the decrease in body temperature in the full-term bitch
- No signs of labour 12-24 hours after body temperature increases again in the full-term bitch
- More than 4 hours since the onset of second stage labour without a foetus being passed
- Strong active but non-productive abdominal contractions for more than 30 minutes
- Flank biting or other signs suggesting severe abdominal discomfort in the dam

- A green (bitch) or brown (queen) vulval discharge without a foetus being born in the subsequent 2 hours
- Sanguineous or malodorous vulval discharge
- Weak irregular non-productive straining for more than 2 hours
- More than 2-4 hours between foetuses being delivered
- Failure to deliver all foetuses within 24 hours (bitch) or 36 hours (queen) from the onset of second stage labour
- Signs of systemic compromise in the dam
- The presence of a foetus or foetal membranes protruding from the vulva for more than 15 minutes

Note that posterior presentation is considered to be a normal variation in dogs and cats

If a dam is in active labour the stress of transportation and veterinary examination may endanger the life of a foetus that is in the birth canal and undergoing normal parturition. Attempting to progress parturition at home must however be balanced with the realisation that the sooner cases that require veterinary attention receive this treatment the more likely it is that a successful outcome will be achieved.

**Client communication during OOH calls:**

And remember as always that it is not just about what you say and ask, but how you say and ask it; how you engage with clients on the phone can have far reaching consequences not just on the outcome of the phone call (e.g. some clients can get frustrated or angry when they perceive too many questions being asked or anticipate they are being dissuaded from coming in) but potentially also the animal's well-being and the on-going relationship between the client and you/your practice.

Be calm and confident and provide direction.
If you display stress or anxiety during the conversation the client will pick up on this
Focus on attaining necessary information about the emergency case while being supportive and helpful to the client
Be confident in your interaction
Express empathy…

> ***"I used to make sure that I was thoroughly awake when the pager went, and if I did not know the client, that I imagined a picture of them and their pet in my head before I rang them. I always tried to remember the few times that we called the vet out, when I was little. By doing this I was much more compassionate to those owners who thought it was OK to ring me in the middle of the night, for something that I might have perceived as minor." (Tanya)***

Sometimes it is appropriate to point out to the client that while there may be financial concerns, waiting to bring their pet in could ultimately require more investigations and treatment being needed which could prove more costly in the long run.

Some practices offer a 'triage' fee which is less than a full consultation fee. It allows animals to be examined briefly with a focus on identifying any potentially serious problems; the animal may then be discharged without intervention or treatment or the client may be advised that a full consultation is required.

In some practices all phone calls, or at least all OOH phone calls, are recorded. Even if this is the case it is still a good idea to keep a good record of the conversation, especially if the client declined to bring their pet in against your recommendation.

## Must See Emergencies (for Receptionists)

**For the following cases, it is appropriate to <u>recommend that carers bring their pet straight down</u>** for veterinary attention – following discussion regarding the cost of the visit and any other formalities depending on the urgency.

- Any change in breathing, especially if more labored; (and open-mouth in cats)
- Owners perceive pale/red/blue gums
- Any collapsed/non-responsive animal
- Non-stop/very frequent seizures (fits) or severe twitching/tremoring
- Owners perceive moderate-to-severe pain; (or restlessness, inability to settle)
- Eye injuries or severe swelling
- Wounds: on chest or actively bleeding wounds
- Dog bite wounds especially on chest, abdomen or face
- Witnessed or suspected venomous snake (in UK = adder) or spider bite
- (Significant) bleeding from body orifice, i.e. eyes, ears, nose, mouth, anus
- Owners think that there is 'something sticking out' of a body orifice that isn't usually there (e.g. may be a uterine or rectal prolapse)
- Animals that have been hit by a vehicle or suffered some other form of significant trauma
- Dogs non-productively retching or where owners think their abdomen is distended (bloating); especially true for biggish dogs
- Any rapid or progressive abdominal distension
- Animals straining to pass urine (or straining at all if owners can't tell whether they are straining to pass urine or faeces)
- Poisonings – regardless of suspected dose:

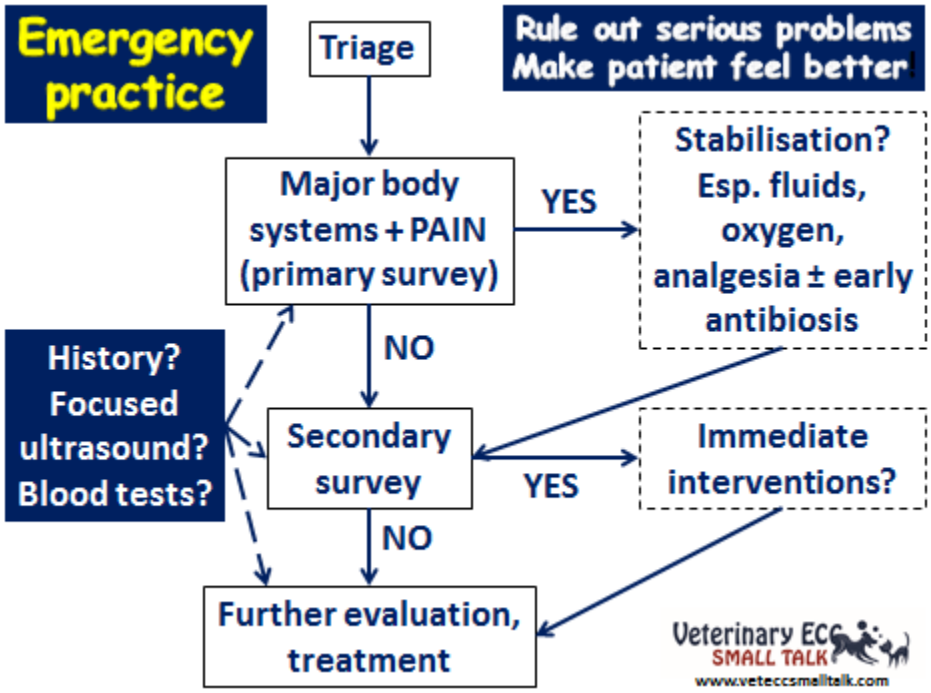
  | | |
  |---|---|
  | Snail/slug bait (metaldehyde) | Paracetamol in cats |
  | Lily plant ingestion in cats | Grapes/raisins in dogs |
  | Ethylene glycol (antifreeze) | Xylitol in dogs |

- Multiple episodes of severe/non-resolving vomiting (especially young animals)
- Signs of eclampsia post-whelping (e.g. panting, restless, shaking/trembling etc.)

PLEASE NOTE THAT THIS IS <u>NOT</u> AN EXHAUSTIVE LIST – and I have not mentioned dystocia – but hopefully a useful guide.

## Initial Clinical Approach

**For more on the general philosophy of Emergency Medicine, see this blog post. http://bit.ly/emergencyapproach**




Comment on History:

The history should be taken at the appropriate time without compromising initial assessment and stabilisation of the patient. The author will often – but not always – get a very brief capsule history from the pet's carer(s) during initial admission of the patient to the emergency room with a more thorough history being taken once the patient has been assessed and urgent interventions undertaken. These circumstances will vary not just between patients but also between practices with respect to levels of staffing, policies about providing treatments without signed consent (where does 'first aid' end?) and so on; it is therefore not possible to be too prescriptive.

## Triage and Primary Survey

**Triage**: classifying and prioritising patients based on how severely affected, critical or unstable they are assessed to be. Achieved by performing some or all of the **primary survey**, i.e. major body systems examination.

Major body systems: so-called because a significant abnormality in any of these systems may be rapidly life-threatening; cardiovascular, respiratory and central nervous systems.

| |
|---|
| A head-to-tail examination is usually not appropriate when assessing an emergency patient as it does not identify potentially life-threatening abnormalities most efficiently. A more focused approach is required. |

In essence each major system is assessed to see if it is normal or abnormal; if abnormal, what is the abnormality, how do you interpret it, and what needs to be done? Remember that systems may be abnormal because of a primary problem within that system itself and/or secondary influence from a problem outside that system. In the latter scenario, it is important to reassess the major system once the influencing factor has been addressed, e.g. after adequate analgesia where pain was causing tachypnoea; after adequate warming where hypothermia was causing depression.

*Assessment of each of the major body systems is described in the notes for the second and third sessions in this mini-series.*

Pain assessment is also part of the primary survey.

**Pain assessment**

| |
|---|
| If in doubt, treat for pain! As long as they are used rationally, analgesic agents, opioids in particular, carry little risk but offer potentially great benefit, i.e. the risk-benefit assessment lands heavily on the side of benefit. Give a low testing dose and assess the patient for a positive response confirming that pain has been alleviated. |

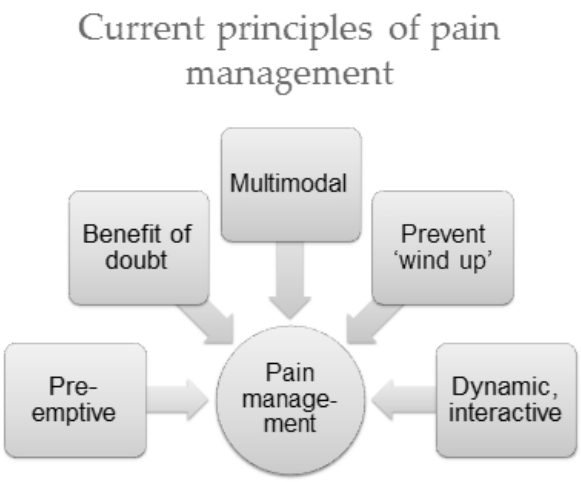
Untreated pain is clearly bad for patient welfare.
Pain may also affect physiological parameters thereby confusing clinical assessment; however it is essential to realise that physiological parameters such as heart rate and respiratory rate may be normal in a painful animal – normal parameters do not exclude the possibility of pain!
Detecting pain can be difficult, especially in cats. Sick animals may also be unable to exhibit behavioural signs of pain.

**Sensitisation or 'wind up' pain:**

'Wind up' refers to changes in nervous system processing that occur following noxious stimulation and result in greater conscious pain perception with continued pain that is harder to control. A proactive preventative approach to pain management is therefore essential.

Emergency patients are often already painful at presentation. To minimise wind up:

- Administer analgesia as soon as possible to reach a pain-free state
- Maintain the patient at this pain-free plateau
- Ensure adequate analgesia prior to any surgical or other potentially noxious procedures




## Secondary Survey

A more comprehensive examination performed once initial stabilisation of the major body systems and analgesia are underway. Important aspects include abdominal evaluation, rectal temperature measurement and hydration assessment.

**Abdominal evaluation**

Intra-abdominal disorders are common in emergency patients and some can be life-threatening.

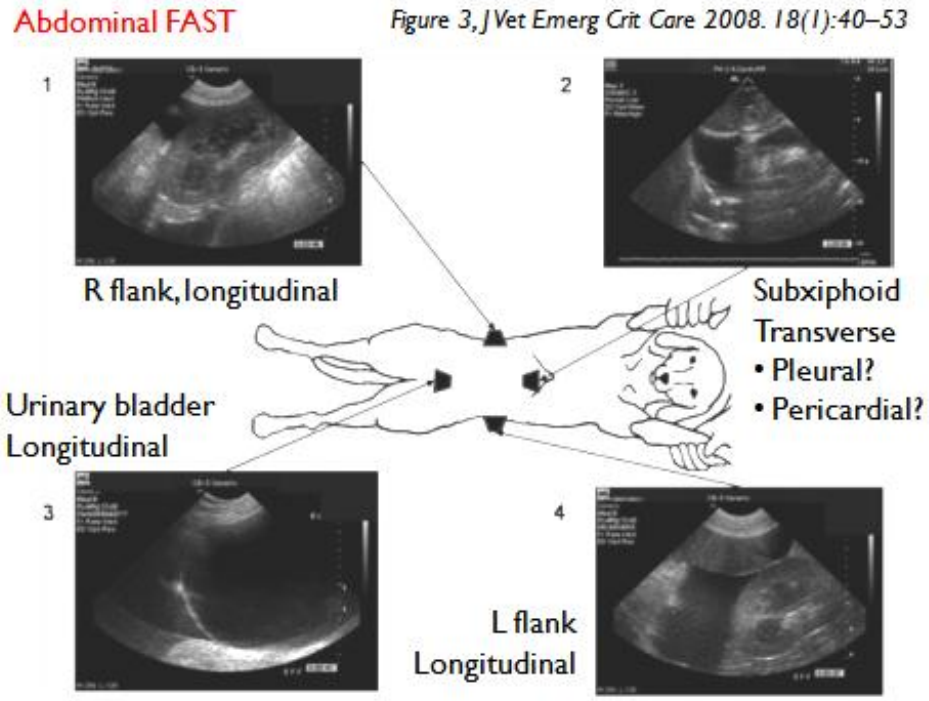
Many emergency patients present with intra-abdominal disorders, some of which can be life-threatening. Abdominal palpation is therefore important early on but in recumbent patients may be limited. Although abdominal palpation can be extremely useful, it is affected by many factors, both patient- and clinician-related. As such, apparently normal abdominal palpation does not exclude potentially severe intra-abdominal disease.

The abdomen should be gently palpated for pain, focal lesions and fluid thrill (fluid wave). If suspected, pain should be categorised as localised or diffuse. It is important when palpating the abdomen to avoid pressing on the spine (e.g. with the thumbs in a standing animal) in order not to misdiagnose spinal pain for abdominal pain.

A significant volume (maybe up to 40 ml/kg) of free peritoneal fluid is necessary for a fluid thrill to be detected and palpation with the patient standing is most likely to be successful. Radiology offers some improvement – fluid causes loss of serosal detail – but if available, ultrasonography provides a much more sensitive and patient-friendly means of detecting peritoneal fluid as compared to both palpation and radiography. 'Abdominal focussed assessment with sonography for trauma, triage and tracking (AFAST)' has been evaluated in dogs and shown to be extremely useful for detecting peritoneal fluid in both dogs and cats. This technique involves having the patient in left (or right) lateral recumbency and then performing transverse and longitudinal scans at the following sites (see picture on next page):

- Just caudal to the xiphoid process
- On the midline over the urinary bladder
- At the left and right flank regions

Peritoneal fluid appears as anechoic-to-hypoechoic material bathing the intra-abdominal structures. Failure to identify fluid using the above protocol means that it is nearly 100% certain that there is none *at that point in time* (i.e. some may be identified on repeat scanning) – this is true even in inexperienced hands as long as the protocol is followed. Although abdominal scanning for free fluid in emergency patients may have first been introduced in trauma patients it is now used for a variety of scenarios and strictly speaking the FAST acronym should not be used for non-trauma patients; at this time another acronym has not been agreed upon to the author's knowledge.




Abdominal radiography is useful for identifying **free peritoneal gas** (often most readily seen between the liver and diaphragm) as well as diagnosing intestinal foreign body material and obstruction. Radiography will be less useful in this respect if a large volume of free peritoneal fluid is present due to increased loss of contrast.

In animals without a history of recent (last 3-4 weeks) laparotomy or open system abdominocentesis, free peritoneal gas suggests rupture of a hollow viscus and is an indication for emergency surgical exploration. This also applies to animals that have suffered penetrating injuries as free peritoneal gas implies full thickness penetration into the abdomen.

***The abdomen in trauma***

In the author's experience, clinically significant intra-abdominal injuries are relatively rare in companion animals that sustain blunt trauma (clearly some animals suffer bite or other wounds to the abdomen that may or may not penetrate full-thickness). However they do occur and most will manifest with free peritoneal fluid that can be detected by ultrasonography as described above; as such the author would strongly encourage free fluid scans to be performed in all patients that have suffered abdominal trauma. Where fluid is detected aspiration should be performed, preferably with ultrasound guidance, to allow analysis – chemistry analysis, cytology etc – to be performed and a diagnosis to be achieved.

It is noteworthy that in humans the concept of 'occult' injuries is described. These are injuries that do not manifest initially with free fluid on ultrasonography but are detected on CT scanning. Detecting injuries at this time allows patients to be monitored with a greater index of concern and/or interventions to be

performed as deemed necessary. In veterinary medicine the most realistic approach may be to recognise that free fluid should develop in patients with initially occult injuries. For patients that have a negative initial free fluid scan, on an individual patient basis based on progression, it may therefore be sensible to repeat the scan at least once subsequently (e.g. after 2-4 hours). It is important to note that at this time, to the author's knowledge, there is little or no information published on the prevalence and progression of so-called occult injuries in veterinary patients.

The incidence of peritoneal haemorrhage following blunt trauma is thought to be low; however this may be because for many years we did not look for evidence of haemorrhage until and unless a patient became clinically compromised – it may be more accurate to say that at this time the incidence of *clinically significant* peritoneal haemorrhage is low. Thankfully surgical intervention is rarely required for intra-abdominal haemorrhage following trauma in companion animals.

If a free fluid scan is not performed routinely in these patients, then it certainly should be considered in a patient in which hypovolaemia on presentation and assessment of venous packed cell volume/total protein as part of the emergency database suggest haemorrhage has occurred – is the source in the abdomen? Similarly elevations of urea, creatinine or potassium should prompt evaluation for urinary tract rupture (be this peritoneal, retroperitoneal or outside of the abdomen). Likewise for elevated plasma bilirubin and bile peritonitis and it should always be remembered that gastrointestinal tract rupture resulting in septic peritonitis does occur….

| Abdominal fluid parameter | Finding | Suggestive of… |
|---|---|---|
| Packed cell volume (PCV) | Similar to peripheral blood PCV | Haemoabdomen |
| Potassium | Significantly greater than peripheral blood potassium (typically more than 1.4:1) | Uroabdomen |
| Creatinine | Significantly greater than peripheral blood creatinine (typically more than 2:1) | Uroabdomen |
| Glucose | Lower than peripheral blood glucose | Septic peritonitis |
| Lactate | (Significantly) higher than peripheral blood lactate | Septic peritonitis |
| Bilirubin | Significantly greater than peripheral blood bilirubin | Bile peritonitis – abdominal fluid may also be dark green or black in appearance |
| Microscopy | Degenerate neutrophils with intracellular bacteria<br>Intestinal/plant/food material<br><br>Golden refractile pigment | Diagnostic of septic (bacterial) peritonitis<br>Diagnostic of septic peritonitis due to GI leakage<br><br>Bile peritonitis |

## Septic peritonitis

- Cytology gold standard BUT

Peritoneal glucose frequently lower than plasma glucose

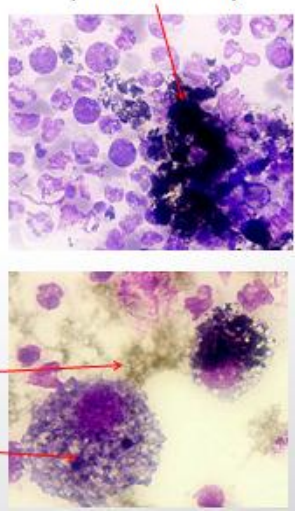
- One study showed a gradient of > 2.8mmol/L to be 100% specific for septic peritonitis
- Another study suggested especially if more than 1.1 mmol/L lower in dogs

## Uroabdomen

- Measure fluid and concurrent plasma levels of:
  - Urea
  - Potassium
  - CREATININE
- Gradient may be quite small
- May get false positive if animal has just received large volume IV fluids rapidly

## Bile peritonitis

- Uncommon
- Fluid bilirubin higher than plasma bilirubin
- Septic bile peritonitis carries a poor prognosis



**Rectal temperature**

Although it is important to know rectal temperature early on, it may not be appropriate to check this in all animals (e.g. often best avoided in animals with pelvic fractures) so make a risk-benefit assessment: how likely is it that the temperature will be significantly abnormal prompting you to do something different/in addition to what you already plan to do? How is the patient likely to respond to temperature measurement? The use of other sites (e.g. aural, axillary, subcutaneous thermistor microchips) has not been validated in conscious dogs or cats (as yet anyway).

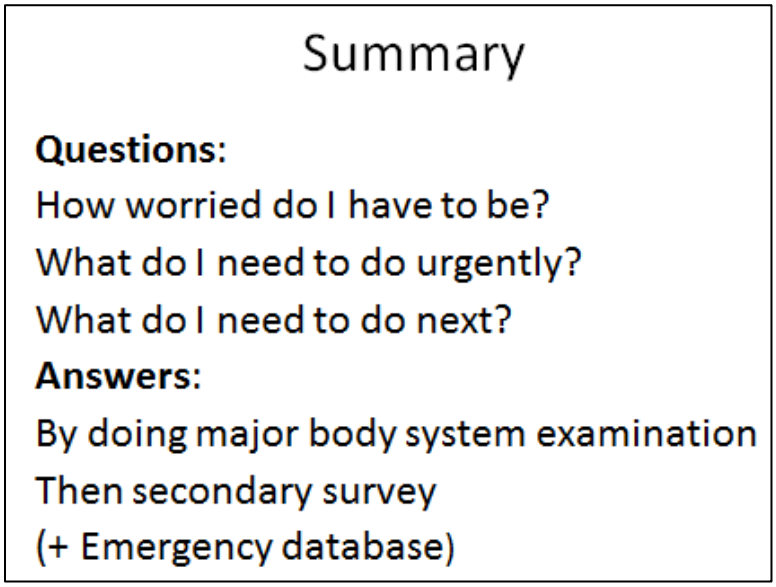
Not all increases in rectal temperature are the same! There is an important distinction between hyperthermia and pyrexia (fever) which impacts on patient assessment and management.

**Hydration**

Physical hydration parameters are different to cardiovascular parameters and include moistness of mucous membranes, skin elasticity (turgor) and whether or not there is globe retraction (sunken eyes). Hydration assessment using physical examination is insensitive at best and both historical information and blood/urine parameters help to improve hydration assessment.

**Focused ultrasonography in emergency patients**

The use of focused ultrasonography in emergency patients is gaining increasing traction both in human medicine and more recently in veterinary medicine. As suggested by the word 'focused' the purpose of this type of scan, ideally using portable devices that can be taken to the patient (i.e. POCUS = **p**oint-**o**f-**c**are **u**ltra**s**ound), is to answer specific and essential questions based on the patient's presentation. Fluid (peritoneal, pleural, pericardial) detection is often the purpose but other uses include evaluation of left atrial size and cardiac contractility in possible cardiogenic cases and indeed lung ultrasound for pulmonary oedema, as well for example as for the detection of pneumothorax, pulmonary contusions, pyometra, foetal heart beats…! Some of these are more challenging and require more training and expertise than others but the overall message is that focused ultrasonography is very useful in emergency patients and many of its uses do not require specialist skill by any means.



## Top Ten Practical OOH Survival Tips from Your Peers

> ***"I used to dread duties but when they came round I always quite enjoyed them – no fight for theatre or for nurses." (Tanya)***

Surviving OOH is not just about knowing how to handle phone calls or how to approach patients clinically. It is also about tips and tricks that will help you to not just survive but hopefully also to thrive! In preparation for this mini-series, members of the Veterinary ECC Small Talk community were asked for their tips; note that the extent to which some of these apply will undoubtedly depend on whether you are just doing a single night on-call, a weekend on-call, or working a series of shifts for an OOH service provider.

### 1. Get to know who you are dealing with

Have you had an adequate patient handover?
Have you examined the patients you are now responsible for?
Have you reviewed their records/kennel charts?

Even if you feel that you have been given a good and informative patient handover, it is essential to examine all in-patients yourself and make sure that you are familiar with their kennel charts and medical records. These patients are now under your care, for the night or weekend, and you will be responsible for making decisions about their care and for liaising with their carers. This can only be done well if you have taken the time to familiarise yourself with your new charges!

Taking this time to get to know the patients also affords you to the opportunity to review their monitoring and medications schedule with a view to seeing where it might be possible to batch interventions, e.g. can any of the treatments be given a little earlier or a little later to minimise demands on staff time? Are the requests for vital parameter checks appropriate for the patient or unnecessarily excessive (especially rectal temperature measurements!)? Remember also that as well as potentially being more efficient for staff and shift workflow, this review can create more gaps for the patients to be left uninterrupted to get some rest which is very important.

### 2. (If possible) prepare in advance for a new patient's arrival

Prepare a "ready area" or at least know where appropriate supplies and equipment are, check that consumables are restocked; equipment is functioning as expected etc. You should have immediate access to all materials needed for resuscitation and primary survey including:

- Means of providing oxygen supplementation
- Venous access supplies
- Intravenous fluids
- Crash cart/box
- Common emergency drugs with readily accessible doses, syringes, needles, intravenous flush
- Key monitoring equipment (e.g. blood pressure device, pulse oximeter, electrocardiograph)

Additional equipment to be prepared according to the individual case in question (e.g. thoracocentesis equipment for a dyspnoeic patient)

### 3. Team work

Team work is no more important than OOH. In most environments overall staffing levels are lower during OOH shifts and these shifts can also be when some of the sickest patients and most distressed pet carers are seen. In addition, anecdotally, it does seem like a significant proportion of cases seen OOH end up being euthanised. The relative understaffing can mean that OOH shifts can be amongst the busiest; add in the clinical, mental and emotional challenges and the result can be a melting pot!

Team work, good clear communication (verbal and written) with colleagues, delegation and division of labour with a flattening of hierarchy (i.e. none of "that's a nurses' job!") are instrumental in keeping the lid on this pot and in maximising patient care and safety. These human-human interactions form part of what are referred to as human factors:

> ***"the study of all the factors that make it easier to do the work in the right way" (World Health Organisation, Patient Safety Education)***

Along this theme, if you feel like you are 'too tired to think straight then acknowledge this! For example, ask colleagues to double-check doses and dose calculations; run clinical decisions past another veterinarian (hopefully one is available to you, even just by phone). And….

### 4. If you get a break, use it!

In theory everyone is entitled to some sort of break during an OOH shift. Do your best to schedule them and if you are able to take one, use it! Some people like to have a power nap, others like to take a walk, or have some distraction (e.g. TV). Working non-stop without a break can actually make you increasingly less efficient – it is a bit of a false economy sometimes to just keep 'powering through' and taking a short break can bring you back firing on all cylinders again.

### 5. Know where to get help from

Although not everyone is willing to admit it, we all need a little help sometimes. This is totally normal, not a sign of 'weakness' or 'ineptitude', and recognising it and asking for help is essential to maximise patient care and safety. The reality of where you may be able to get this help from will clearly vary on the circumstances of your OOH work and not all options will be available to everyone. Potential options include:

- People:
    - Other veterinarians – and nurses! – working with you on your OOH shift
    - If sole charge, who can you call for advice, either a work colleague or a veterinary friend?
    - Is there someone who can come in and help with a surgery you are not comfortable doing?
    - Is there someone – veterinarian and/or nurse – available to come in and help out if it gets extremely busy?
    - Online groups (e.g. Veterinary ECC Small Talk's private Facebook group) and forums
    - See above under Poisoning in terms of getting advice for these cases
- Other resources, especially containing information on common emergencies, protocols and procedures:
    - Books
    - Websites
    - Apps (e.g. KIMBA Veterinary Small Animal Emergency Medicine app)

> ***"even if you don't need them, knowing that you have a backup plan can itself be stress-relieving."***

In particular be sure you know where to get help from for species that you may not be familiar with treating and where such cases can potentially be diverted to or sent to following initial stabilisation.

### 6. Know about the Admin stuff

This is one area that is so easy to overlook but where a little time spent in preparation familiarising yourself with aspects of taking payments, printing forms and so on, can prove invaluable. Even if you are working with a receptionist or a nurse, you cannot and should not rely on them to always be available to progress these tasks for you.

### 7. Use quiet time productively

Again, depending on the circumstances, this may be more or less relevant but whether on-call or working a full OOH shift, there may be some quiet time either at work or while confined within close distance of the practice. Consider using this time to accumulate some of those mandatory CPD hours whether that is using online or offline resources – including an audio podcast like Veterinary ECC Small Talk. You could also use this time for hobbies or to get in some crucial exercise!

> ***"There is nothing more soul-destroying than wasting nights "on call" doing nothing" (Mel)***

### 8. Know your 'first aid' policy

From the RCVS Code of Professional Conduct for Veterinary Surgeons:

**"Providing first aid and pain relief**

3.7 The purpose of first aid and pain relief is to attend to the initial and essential welfare needs of the animal. The primary consideration of the veterinary surgeon should be to relieve the animal's pain and suffering. In some cases, euthanasia may be appropriate.

3.8 A veterinary surgeon on duty should not unreasonably refuse to provide first aid and pain relief for any animal of a species treated by the practice during normal working hours.

3.9 A veterinary surgeon on duty should not unreasonably refuse to facilitate the provision of first aid and pain relief for all other species until such time as a more appropriate emergency veterinary service accepts responsibility for the animal."

'First aid' is a broad term that may encompass a number of treatments and even some point-of-care tests. Practices/practice owners are more or less open-minded about this so be sure to know what your practice policy is – you have to know the rules before you can choose to break them or not! [Disclaimer: the author is not encouraging readers to break rank with their practice policies!]

## 9. The dreaded OOH home visit!

**From the RCVS Code of Professional Conduct for Veterinary Surgeons:**

"3.36 In all but exceptional circumstances the interests of companion animals will be best served by being taken to a veterinary practice where the attending veterinary surgeon has access to a full range of veterinary medicines, equipment and facilities. Exceptional circumstances might include an entrapped animal that cannot be moved prior to veterinary attention.

3.37 In deciding whether or not to attend away from the practice, veterinary surgeons should consider all relevant factors, which may include:

a. the location and state of the animal;

b. the likely treatment needed;

c. the availability of transport e.g. private transport, friends, family, animal ambulance, pet taxi;

d. the personal circumstances of the owner and the availability of assistance;

e. the travelling time for the veterinary surgeon;

f. the ability of the veterinary surgeon to make the visit safely;

g. the possibility of another person attending with the veterinary surgeon;

h. local weather conditions;

i. the presence of any critical or unstable inpatients; and

j. any other emergency cases that take priority (not including hypothetical cases).

3.38 Veterinary surgeons who decide not to attend away from the practice should inform the owner or person making the request. Veterinary surgeons should document any advice given and the reasons for the decision in case of a future challenge.

3.39 Veterinary surgeons are not obliged to attend away from the practice, unless in their professional judgement it is appropriate to do so. This applies even if owners demand attendance away from the practice or the owner's personal circumstances mean that they have to make special arrangements to transport their animal to the practice*. Where a veterinary surgeon has declined to visit but offered to see the animal at the practice, or make other arrangements, the responsibility for the animal's welfare rests with the owner.

3.40 RCVS disciplinary action in relation to refusal to attend away from the practice will be considered where there has been a wilful disregard for animal welfare."

* Be prepared to provide "c. advice on animal ambulance and taxi services willing to transport animals outside normal working hours, to assist owners bringing animals to the practice"

These are the requirements as per the RCVS but once again it is essential to know what your practice policy is in this regard as some practices have provision to offer home visits OOH without taking staff that are on duty away from their work. Home visits can pose a real practical but also moral and emotional challenge – e.g. when you cannot attend, the client will not come in and you are sure the animal is suffering, potentially terribly – so do not underestimate the value in being prepared for what to do and how to respond.

## 10. Tips more focused on working multiple night shifts

In addition to the tips provided here, please consult the following resource which, although written for Junior Doctors, has much relevance to veterinary professionals as well:

Working the night shift: preparation, survival and recovery. A guide for junior doctors.

This is an excerpt from a blog post the author wrote:

"So this is a blog post I have wanted to write for some time and thankfully the moment has arrived! I hope you find it of some interest/use. The tips and strategies that follow with respect to coping with night work are a combination of my thoughts and tips gathered from members of the Veterinary ECC Small Talk community via email…

DISCLAIMER: Before we do, I should say that I totally realise that this all sounds a bit idealistic and I am the first to admit that during my ECC career I have not always used these strategies, certainly not all of them all of the time. And moreover we are not all the same and some people find that strategies that work great for some people do not work for them, and vice versa. Obviously you need to do what works best for you…but also please take a moment and think about your routine – are you sure it can't be improved upon?

**Be prepared:**

When approaching a run of night shifts, try to prepare by building up a sleep reserve; this can be helped for example by doing some physical activity beforehand then you could, e.g.
Stay up really late (at least 3am – 6am) the night before then sleep for the majority of the day before your first nightshift.
Or, go to bed as usual the night before, sleep in until late morning, have a big feed for lunch then go back to sleep for an afternoon nap.

**Drink plenty of water during your shifts:**

This is one that came up a lot in the feedback. It is not always easy but oh so important to stay hydrated. For example have a big water bottle that is well placed and easily accessible so having a drink does not seem really time consuming! I am willing to budge on some of the other tips in this blog but not this one! Drinking enough water is important people!

**Plan your caffeine and go easy:**

This is another one that came up a fair bit. Overall the take-home message seems to be to go easy on the caffeine. Firstly it can contribute to dehydration and if you are not consuming enough water as well, this becomes a desiccating vicious circle! Secondly if you have caffeine in the later stages of your shift this can reduce your chances of sleeping when you do get to bed…and so you are more tired….and so you drink more caffeine etc etc.! How about a coffee when you wake up, when you get to work and maybe mid-way through the shift then stop? Make it good coffee and make some for the whole team – obviously! Seriously, if you stay hydrated, get enough rest in the day and do some exercise, you should not need to be caning the super-strength coffee/energy drinks relentlessly!

**EAT!**

We have all been there, trust me, when **** is hitting the fan and even getting water seems out of the question, so who the hell has time to eat right? Uh, wrong! 'Eat while typing notes' seemed to come up a fair bit. It's important and very much helped by being prepared. Junk food is oh so easy and accessible but so not the answer! Before your run of night shifts, get your 'proper' healthy food organised, including

meals that can easily be re-heated or eaten cold. I am no nutritionist and I am not about to start recommending what you should be eating but go easy on the sugary junk high in 'bad' fats!

**When it comes to going home time, if you feel too tired to drive, please don't!**

We have all heard stories of people who have driven home falling asleep at the wheel, sometimes nearly having an accident with potentially disastrous consequences. In fact some of you may have had or know people who have had accidents. I know this sounds like a sermon but driving when you are too tired to do so safely is not big and it is not clever! Can you get a taxi? Can someone come to collect you? Can someone drop you home? Indeed, is there somewhere you can sleep at work?

**Have some 'breakfast' before bed:**

Opinions and preferences vary here in terms of what people like to eat. For some it is normal breakfast food, for others it is more the sorts of food you might usually eat in the evening. BUT the bottom line is again, try and stay on the healthy side, don't eat foods and especially large amounts which will interfere with you falling asleep. No curry and beer in the morning! And many people like something that is quick and easy and does not delay sleep for too long.

**When you do get to bed, take steps to ensure that you can sleep well, fall into refreshing deep sleep:**

As far as possible, keep interruptions to a minimum from family – including the furry kind! Get uber curtains that keep as much light out as possible; or use some other means of covering the windows, e.g. black out blinds; or get an eye patch. Unless absolutely necessary, get rid of all devices such as mobile phones or tablets from your room; they can be such an intrusion on sleep! And if needs be, get some ear plugs for noise cancellation.

**Go easy/stay off the alcohol:**

Yes it can relax you after a crazy shift – tick. Yes it can help you to get to sleep – tick. But it can also stop you from getting quality sleep and therefore exacerbate tiredness. Have one drink before bed if you must, but stop there!

**Exercise:**

This is something else that came up a lot in the feedback, the importance of trying to fit in some exercise. Some people like to do this at the end of a shift to help unwind and help with sleeping; others like to do it when they wake up to invigorate before going to work. It does not have to be for very long and it does not have to be super-hardcore. Just do some physical activity in-between shifts!

**Try to keep the days free for sleeping:**

I know this one can be a real challenge especially for parents where kids need taking care of (!) but as far as possible don't make 'unnecessary' commitments for the days when you are working nights. Can those things wait until your nights shifts are over before the next stint?

And look seriously if you really find night work too much, too exhausting, too debilitating…think seriously about whether it is for you. Depression is more common than we care to admit and this sort of work can be a factor in either causing or at least exacerbating that. If you are worried or struggling, get some help; there are plenty of places not least your doctor.

PS. I decided not to talk about transitioning to day shifts again – the so-called 'turnaround' – as the blog is already quite long. There are different ways of turning around and do feel free to share comments about that too."