Nursing Reptiles, Birds and Wildlife

Dr Mark Simpson
Sugarloaf Animal Hospital
67 Carrington Street, West Wallsend, NSW 2286

Introduction
The role of Veterinary Support Personal or Veterinary Nurse in the care of reptiles, birds and wildlife in private veterinary practice ranges of two important domains: client communication and in-patient care. Client communications can be further divided into pre-consultation (predominantly history collection) and post consultation (provision of information and case review) situations. In-patient care is focussed on the species-specific requirements, and management of stressors for these unusual patients.

Having highlighted the very particular care and knowledge unusual, exotic and avian patients (UEAP) require, it must be emphasised that much veterinary nursing of these species is based on the same principles that we apply to all our patients. We must apply the principles of veterinary nursing that we use on every other species, adjusted for the idiosyncrasies of the species in question!

Client communication – pre-consultation
The conversation on the telephone is the “first impression” of our businesses that members of the public experience. Soliciting the primary signalment data and the most pertinent parts of the problem quickly and efficiently saves time on the telephone. However an extensive history is often the key in UEAP cases, since the majority of pathological states can be traced back to a failure of captive husbandry.

Considerable time is saved for the veterinarian if forms collecting and collating this historical data are sent electronically to the client before the initial consultation. The use of such anamnesis forms tailored to each particular group of animals makes a considerable saving in one of the parts of UEAP veterinary medicine that is the most inefficient.

One of the other advantages of such forms is the veracity of such historical information. When it is presented during a face-to-face interview the client is more inclined to tell the veterinarian what they think the veterinarian wants rather than the explicit truth. Filling out forms seems to remove the self-consciousness in the response improving its accuracy.

Many clients enquiring about UEAP will suggest that the animal “looks OK” or “is trying to eat” and therefore veterinary attention may not be required. The very nature of the “preservation reflex”, where UEAP patients actively conceal their clinical signs, means that change enough to prompt a telephone enquiry is already very serious. It is most important that these animals receive veterinary attention at the earliest sign of a problem, as it is almost certain they have already been ill for a considerable time!
In the case of wildlife cases, it is critical to have the member of the public acquire and record as much provenance and history data as possible and keep it with the animal. They may well not be the person to present the animal and this information could be critical to the outcome - it could be absolutely a matter of life or death for the patient.

Other veterinary hospitals that take an interest in wildlife are usually keen to discuss cases, and veterinarians that are members of the Avian, Unusual and Exotic Pet Special Interest Group of the AVA have a good network of contacts with knowledge of these types of cases.

Client communication – post-consultation
The nature of communication from the veterinary practice is maximised when all voices are “singing from the same song-sheet” – and so the outcomes for the animals are improved when the reception staff reinforce the husbandry information provided by veterinarian. If it is possible to couple the verbal information with handouts or other written information then the synergy is likely to be enhanced. There are numerous sources of quality information on all our UEAP species, but also a greater number of less credible or even sometimes plain incorrect sources of information, especially on the internet. Short punchy handouts on a single husbandry topic tend to be easier to maintain than long treatise on the complete husbandry of a species.

In situations where the VSP have detailed knowledge of case and expected outcomes there is improved post-consultation communication. If follow-up telephone communication occurs and the VSP knows that a case should be at a certain stage of improvement, then earlier reassessment of cases can be initiated if they are not progressing as they should. Some UEAP clients have limited financial scope to work cases up, but if initial empirical plans fail to lead to an improvement there is often an increased capacity in the client to pursue further diagnostics and informed VSP can facilitate this next step. It is good for the patient, and it is good for the veterinary practice.

In-patient nursing care – general preparation
Sick and injured UEAP are presented in critical condition, and so being able to act promptly to satisfy their basic requirements for medical support is facilitated by some preparation. It is very important to have a location in the hospital where prey animals like many birds and rabbits can be kept away from predators like dogs and cats (as well as ferrets, snakes, and birds of prey) as proximity to these animals is intensely stressful for most prey species. A certain degree of quarantine is also appropriate, as they can frequently be carrying diseases of importance to other patients, such as psittacine circovirus (PBFDV) or Sunshine virus. Ideally purpose-built heated enclosures would be available, but any dark, quiet enclosure covered by a towel will often help animals settle down by minimising the typical noises of a busy animal hospital. We have found that a collection of inexpensive plastic tubs of various sizes (available from many locations for storage) are invaluable secure enclosures for many species. They can be warmed by heat mats, or cable heating, or even clamp lamps. They are easily cleaned, and limit the chance of escape. It is important for many wildlife cases to have hides available and simple cardboard boxes or cardboard roll inners are inexpensive and disposable.

While costs will always be an important factor in resources devoted to UEAP patients, some form of oxygen cage or tent is generally money well spent. Many birds, rodents, and rabbits will present to the veterinary practice with dyspnoea and hypoxia. The ability to supply these patients with a quiet, dark oxygen-rich environment is often life-saving.

There is some important hardware that is invaluable when doing this work. Thermometers of a variety of types, but especially the infra-red beam types, are excellent for providing remote
assessment of thermal status of these patients. Heating appliances such as mats and cables, as well as clamp lamps are mandatory - hot water bottles are simply not going to maintain the body heat for many of these patients. A set of gram scales to get twice daily body weight measurements are also without peer in assessing hydration status and changes to that parameter.

Remember that nutrition comes secondary to stabilising the patient (thermally, fluid balance, and pain relief). Many UEAP clients will be focussed in feeding a patient when they are unlikely to eat even if an appropriate food source is available. It is a sad fact that most wildlife patients will need food items that are not commonly kept in our hospitals – so building a small cache of food items that will help most circumstances is a good plan. I recommend Hills AD, some frozen mice of various sizes, a wood roach culture, insectivore supplement food, honeyeater foods, and hand rearing foods for parrots. Most of these things will not be available on short notice 😞 more specialised foods like marsupial milks can be ordered, and the patient kept on electrolytes for 24 hours until the arrival.

It is important to be aware that some species of UEAP are known to be carriers of dangerous or even potentially fatal diseases that can be transferred to humans - the zoonoses. Many reptiles are carriers of *Salmonella spp*, and many avian patients will harbour *Chlamydia psittici*, and we should have plans in limit the chance of these diseases affecting humans. The potential of some diseases in some species may require staff to have personal protective equipment or vaccination. For example, fruit bats are known carriers of Australian Bat Lyssa Virus and for staff to handle the animals safely; they have to have had prophylactic rabies vaccination. This is an important OH&S matter that must be dealt with as part of the general risk management performed at veterinary practices to ensure that animals treated do not present an unreasonable risk to the staff.

**In-patient nursing care – the individual patient**

As UEAP patient will be in a more fragile and stressed condition while in the veterinary hospital, it is appropriate to for VSP to develop skills of distant examination. This takes some time (which may not always be available in many busy veterinary hospitals), but staff must resist the temptation to leap straight to handling the patient without a short period of time observing them first.

A normal UEAP will be alert and watching you. They will have barely visible respiratory efforts, and in the case of birds, they may be vocalising and eating. A UEAP patient that is fluffed up (birds), or adopts unusual body positions, and looks mentally obtunded and depressed is not well. If they demonstrated easily visible respiratory efforts, often manifest as “tail bobbing”, or if they appear to “fall asleep” during distant examination they are very ill. In the case of birds they may well still make attempts to eat and be active, but these quickly wane over a couple of minutes in the case of sick birds. Birds that are ill also demonstrate markedly decreased or absent vocalisations, and this is a marker of disease that owners can easily monitor at home.

Some patients will be observed at a distance, and be assessed as unable to cope with handling, whereupon they should be left to further recuperate. Do not be reticent to make this plan, as it is very frustrating to have an improving patient that decompensates due to the stresses of handling.

Once the decision to handle the UEAP patient to perform a detailed, contact physical examination it is critical to get everything ready before patient is captured: restraint aids, medications, measurement and recording devices, sample containers, and anything else that may be required. Much good work is undone by running around the veterinary practice to find the crop needle we should have had before we caught the patient up.
Once “in-the-hand” it is important to keep in mind the fact that critically ill UEAP have low energy reserves and often poor respiratory capacity. It is important to be very efficient and to perform treatments with a minimum of stress. A complete physical examination can be markedly sped up by conducting it in a routine and thorough fashion. Starting at the animal’s head and working caudally provides a framework to ensure all parts of the animal are examined. Be especially aware that our observations (two forward facing eyes staring straight at the restrained patient) is very stressful, and should be limited to the shortest time possible.

Early in the handling process the animal should be weighed - gram scales and small plastic tubs facilitate this process immensely. Changes in weight of UEAP patients that occur in the 12-48 hour time frame are almost always predominantly fluid changes and provide a good measure of replacement fluids that may be required.

Oral treatments and fluid provide particular risks in that they may be regurgitated and lead to aspiration pneumonia, or even asphyxiation. The positioning of feeding tubes or crop needles is an important skill in which to be confident. Such treatments should be left till just before the animal is returned to its enclosure so that it may adopt a position suitable to protect its airways if it does regurgitate. Moribund animals which allow their head to droop may need to be propped up by rolled towels or pillows.

The use of the smallest possible needles decreases pain and muscle damage significantly. Appropriate analgesia and local anaesthesia (such as EMLA cream) are also very useful adjuncts to nursing care of the hospitalised UEAP patient.

Once the examination is complete, GENTLY return the patient to its enclosure in a manner such that it cannot escape and allow it time to return to normal.

**Conclusion**

The care of UEAP patients is a growing area of veterinary practice in a time when other sectors are contracting. It is immensely challenging and gratifying at the same time. It can be financially rewarding as well. But it is more of all these things if the care for these animals is embraced by the VSP and taken to another level, and when it is it benefits those animals as well.