

“Respect for All”

CASE STUDIES ABOUT PRE VETERINARY MANAGEMENT OF WILDLIFE

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JUVENILE WOMBAT

A 5 kg body wt. (approx.) was rescued from her deceased mother killed by a motor vehicle collision. Initially the wombat appeared quite well. She drank her bottles, moved about without apparent restriction, was alert and responsive and had no breathing or other difficulty. Her faeces was soft, being consistent with the gastrointestinal response to the stress of the owner being orphaned. Urine output was adequate. Soon thereafter the carer noted that the wombat became a little lethargic, less interested in feeding and she noted a strange smell emanating from the wombat. She could not account for the origin of the odour. She correctly sought veterinary help.

On examination the wombat showed the clinical signs noted above. She was obviously unwell with lethargy, irritability and eyes partly closed, consistent with a headache and/or photophobia. The cardiovascular and respiratory systems revealed no abnormality with normal pink mucosae, heart rate and heart sounds, pulse pressure and normal lung function and sounds. The abdomen was soft with normal bowel sounds. Body temperature (core) was 36.8 C. The smell was apparent and indicative of purulent activity somewhere. A small area, in the centre of the scalp, revealed a tiny drop of moisture that was the apparent origin of the smell. There was a small sinus through the scalp skin.

Following an appropriate dose of preanaesthetic medication, intravenous access was established with a 20 G cannula and intravenous fluids commenced. Under general anaesthetic the sinus was explored with standard sterile operative technique. There was a compound depressed fracture of the skull with focal meningitis and a purulent exudate. The area was cleaned extensively, noting that the meninges were not perforated by the original trauma/wound. The depressed fracture was elevated and the wound superficially packed. Intravenous antibiotics were started and maintained for 10 days. Analgesia was maintained for a number of days until the wombat seemed comfortable. At 5 days, under general anaesthetic, the wound was cleaned and repacked. Close supervision was maintained during recovery.

This case illustrates the positive outcome that can be achieved by an astute carer seeking veterinary attention at the earliest indication that there may be a problem. Delay in doing so would no doubt have resulted in a poor outcome with the likelihood of spreading meningitis, septicaemia, cerebral compression, continued pain and likely death.

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LACE MONITOR ADULT

This monitor was rescued from the road following motor vehicle trauma. The rescuer phoned the current reptile coordinator who advised that the monitor be placed “in the garage and see what happens”. The rescuer was obviously not impressed by such negligent cruelty and phoned another carer who immediately brought the patient for veterinary care.

As the monitor had apparently been compromised for some time and had been lying on the road in the hot sun, he was severely dehydrated as well as having multiple injuries. Rehydration was immediately commenced and analgesia given. Further examination revealed a fractured mandible and a lacerated poorly active tongue.

Following adequate rehydration the patient was anaesthetized and underwent surgical reduction and internal fixation of the fractured mandible, repair of the extensive lacerations of the tongue, replacement of the tongue into the mucosa to protect its integrity and placement of an oesophagostomy tube to allow long term hydration, feeding, analgesia and antibiotic administration.

There were regular assessments of his progress. The tongue sutures were removed at the appropriate time and fluid and dietary adjustments made.

After a period of some months the patient requested to be released. The wounds were healed and the monitor decided that eating was possible. Under general anaesthetic the pin was removed from the mandible and the oesophagostomy tube removed. Once it was established that he could eat without assistance and was otherwise well, he was released.

The importance of timely intervention is obvious. The immediate resuscitation to rehydrate the patient and provide analgesia and then the less urgent but necessary operative treatment of the injuries were all achieved. It is unlikely that the initial advice of “put it in the garage and see what happens”, would have had a positive outcome.

WOMBAT JUVENILE

A 180 gm (approx.) wombat was orphaned when mother was killed by a motor vehicle. Unfortunately as the wombat tried to hide in the pouch, part of the body was exposed and a fox took advantage of that and began to eat the wombat starting with the feet. An alert rescuer fortunately was able to discourage the fox and rescue the juvenile. There being obvious injuries, the victim was promptly transported to us for assessment and treatment. Following initial examination, analgesia was administered, followed by general anaesthesia, fluid therapy and operative intervention. The wounds involved both front and back feet with some on the body. Extensive cleaning of all wounds was undertaken, followed by assessment of deep structures, debridement and appropriate dressings. Antibiotic therapy was commenced and continued together with analgesia and oral hydration and nutrition. Dressings were changed regularly. As there was significant deep tissue damage and infection, it was decided to reassess the situation regularly and to undertake formal repair at the appropriate time.

The tissues of the hind foot healed well but there was resultant deformity of one front limb. The deformity was such that future digging would have been compromised because the toes were either fixed in flexion or extension. Formal repair was undertaken to realign the toes by lengthening or shortening the involved tendons and escharotomy.

The outcome was that the foot was functional. It was critical, that to achieve a positive outcome, the patient needed to be assessed and treated early after the injury. Adequate analgesia, deep cleaning and debridement under general anaesthesia, and formation of a treatment protocol were all essential but would have been precluded by any significant delay in presentation for veterinary management.

The patient is now able to dig properly and has four functional legs and feet.

VARIOUS PATIENTS

There are many case histories that do not illustrate positive outcomes. These may relate to injuries particularly of legs and feet, eye trauma, abdominal pathology, neurological injury of brain and spine, bowel disturbances and others. Any species may be involved at any age. A few examples shall suffice.

Injuries to legs and feet are common and may be caused by fence entrapment, gun shot, motor vehicle trauma, predation, physical violence and other inputs. The patients may be birds, reptiles, mammals, adults, pouch young, free ranging or in care.

The wounds are usually dirty and contaminated with foreign matter including pieces of skin, feathers, scales, sequestered bone fragments, plants, gravel, bullets, teeth, or other.

The primary requirement for wound management is cleaning.

There are other general management issues such as analgesia, hydration, hypothermia, hypoglycaemia, haemorrhage, myopathy prophylaxis, other injuries such as closed fractures and head injury. Triage involves assessment and management of all those problems with the appropriate priorities.

Wound contamination usually involves deep tissues. Proper cleaning is facilitated by general anaesthesia to enable access to those tissues. Sedation is not pain relief. Wounds that are not properly cleaned are likely to become infected despite concurrent antibiotic therapy. Keeping in mind the 'golden period', the sooner wounds are properly cleaned the better the outcome. Gross infection of wounds with difficult to treat organisms, osteomyelitis, peritonitis and destruction and loss of vital structures such as tendons, may lead to permanent disability or a fatal outcome from septicaemia, loss of a limb, neuropathic pain or inability to be rehabilitated.

The necessary protocol is that all injured or unwell patients should receive veterinary assessment and treatment as soon as possible. Every wound is an individual and requires specific management such as removal of dead tissue and foreign matter, deep curettage, realignment of bone fragments, repair of damaged tendons and ligaments, skin flap repair, radiography, culture and sensitivity testing, particular antibiotic therapy depending on the wound characteristics, splinting, special dressings, a specific management plan, appropriate local and/or parenteral analgesia and many other decisions.

There is a responsibility for rescuers and carers to seek such attention and a responsibility for wildlife group supervisors and coordinators to encourage/ insist that carers do so. Neglect of these responsibilities is ultimately reflected in poor outcomes, carer distress when preventable tragedies occur and unnecessary suffering of the patients.