Wound management in chelonians

A guide to assessing, treating and managing a range of wounds that may be encountered in chelonians

IN FOCUS

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In small animal practice, it is not uncommon to be contacted by a client for advice on their pet reptile. This will include chelonians (tortoises, terrapins and turtles) that have received a traumatic injury and may be in pain and systemically compromised. It is important that you can offer first aid advice and are able to assess these injuries on presentation.

Common injuries
Common injuries seen in chelonians include bite wounds from a conspecific, attacks from wild or domestic predators (such as dogs and foxes) and strimmer or lawnmower injuries in tortoises that are free roaming in the garden. Injuries from falls and road traffic accidents may also be seen.

Injuries can be classified into mild (prognosis good, manageable in general practice; Figure 1), moderate (guarded, protracted healing time, experience would be beneficial; Figure 2) and severe (life threatening, specialist experience required; Figure 3).

Multi-modal analgesia should be at the forefront of clinical discussions around severe cases, as the unavoidable fluid loss through wound exudation and the potential negative systemic effects that the loss of these fluids can have in uricotelic patients.

Triage
The initial point of contact with the owner is usually a telephone call; this is where vital information on the cause and extent of the injury should be attained, as well as information on the species. Knowing what species you will be dealing with and the type of injury it has sustained will enable you to quickly research the appropriate husbandry and issue before they arrive, potentially saving vital time. If necessary, first aid advice and information on how to safely transport the patient to the clinic can be given.

If the wound is haemorrhaging, the owner should be advised to apply pressure to the area to encourage bleeding to stop; this should be done with something absorbent and lint free (for example, a sanitary towel). If shell or limb fractures are suspected, immobilisation may be appropriate. This can be done by gently wrapping a towel around the body for support and to keep movement to the minimum. If the animal is not used to being handled, however, or if the owner does not feel confident doing this, it can cause extra stress and would cause more harm than good.

These patients should be brought to the clinic as soon as possible for assessment. They should be transported by placing them in a snug fitting polystyrene, cardboard or plastic box with a heat source – a water bottle wrapped in a towel can be useful to prevent excessive movement and maintain the body temperature. The box should also have high sides to prevent the patient trying to climb out.

Initial assessment
It is important to consider stress levels, which can be very challenging in reptiles that don’t give many outward signs. Stress can be severely detrimental to health and can have a negative effect on wound healing. To limit stress, it is ideal to first assess patients without any form of restraint. You can assess the extent of the injuries, patient demeanour, activity and respiration.

History gathering
Getting a full history is very important. Finding out when and how the injury occurred is helpful – reptiles can be slow to show clinical signs, and the injury may have occurred days or weeks before the owner noticed there was a problem. Finding out if they have adequate husbandry is also very important and will be crucial for wound healing. Any underlying illnesses, conditions or current medications should be identified at this stage.

Examination
A full physical examination should be performed. While handling, it is essential to be mindful of the mental demeanour