

HerpVet Services  
Dedicated veterinary service for exotic pets



## **HerpVet Services**

**(Dr Bruce Maclean BSc BVM&S MRCVS)**

Iffley Vets

35 Iffley Road

Oxford OX4 1EA

Tel: 07754 125302

[www.herpvet.co.uk](http://www.herpvet.co.uk)

## **HerpVet Information Services Publication IS07**

### **Medicating reptiles and “Dr Google”**

Taking doses from online sources without full understanding is generally a BAD idea.

Be very wary of taking any doses from the internet or untrusted source. Lay people (i.e. non-veterinary professionals) may not even be aware that there are different drug concentrations (amount of drug per amount of pill/liquid/etc).

A dose of, for example, 1 ml is meaningless unless the specific concentration of drugs is specified. Really, any information source that gives a dose in terms of amount without specifying a concentration should be instantly blacklisted as a source of information.

Specific brand or preparation of a drug may be important even if the concentration is the same. Different doses of drug may be used depending on how it is given (by mouth versus by injection, for example). And in today's international world, people may forget or be unaware of the fact that while there may only be one dose or preparation of a drug available in their country, this may not be the same in other countries.

Selecting an appropriate drug and dose involves balancing out many factors such as likely benefit to the animal, risk to the animal, side effects, practicalities of administration and so on, and may involve consideration of:

- the specifics of the animal (species, sex, age, reproductive status, general state of health, husbandry)
- The specifics of the illness (site of lesions, multiple or single site, specific cause (down to specific microorganism type and drug sensitivity)
- In theory genetic make-up of the animal, although we're not there yet for reptiles

So in a specific case we might consider the following, with examples from a common, apparently simple example often advised online; how to treat worms in reptiles. In fact this is not really a valid single question – a whole series of questions need to be considered.

Question to consider	Example in case of worms
What condition are we treating?	What type of worms are we dealing with? (indicates where in the body they might be; what drugs might be appropriate. Also what is their life cycle – how important is hygiene control/other measures (which may even be as effective on their own as drug treatment)
How bad is it?	What load of worms is there (i.e. how many – might affect drug choice and dose, also potential risks of killing them all at once with drugs – this can lead to fatal consequences for the host animal).
Do we need to treat?	Some worms may be beneficial to the gut ecology. We are just beginning to understand how important “other” organisms can be for the health of animal bodies.
What drugs might be appropriate?	So what drugs might be effective against such worms? Will they reach where the worms are in the body, in sufficient concentration to be effective?
Which of these drugs is appropriate and relatively safe to use in this species?	How much information is available for these drugs in this species (or even reptiles at all)?
Of these drugs, which is/are appropriate and relatively safe to use in this animal given its age?	Certain drugs should be avoided (or dose adjusted) in growing animals, or older animals
Of these drugs, which is/are appropriate and relatively safe to use in this animal given its sex and reproductive status?	Certain drugs should be avoided (or dose adjusted) in reproductively active animals
Of these drugs, which is/are appropriate and relatively safe to use in this animal given its general health?	General health status of the animal must be taken into consideration.
Of these drugs, which is/are appropriate and relatively safe to use in this animal given any other medication it may be on?	Possible drug interactions must be considered
Does the husbandry affect drug choice?	Temperatures may affect drug choice or dose; worming in summer may require a different dose/regime than worming in late autumn temperatures for outdoor

	animals, for example
What dose and frequency/duration of administration is appropriate given the animal species, age, sex, reproductive status, general health, husbandry etc?	
Is the proposed dose regime practical for this case?	For animals more stressed by handling, a shorter/less frequent dosing regime is generally preferable. Whether the owner can administer doses may affect practicality.
What supportive husbandry measures do I need to take?	Should specific temperature ranges be supplied if feasible for that species? Does hygiene have to be improved? Does the animal need to be fed more/differently? Does the animal's water intake need to be monitored or changed? Does the individual need to be isolated (removed from group) if appropriate?
Do I need to administer other drugs at the same time (and each of those needs similar consideration)	e.g. lungworms in particular can set up pneumonia as they die – concurrent anti-inflammatory drugs and antibiotics may be appropriate. Or probiotics may minimise the risk of resulting gut upset
What potential side effects should be specifically monitored?	

Take home message; selecting a drug and dosage regime is rarely a simple matter, despite how it may appear. It should be done by suitably trained/experienced professionals in most cases.