

## LIMB DEGENERATION IN TWO SPECIES OF ASIAN NEWT

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Reichenbach-Klinke & Elkan (1965) describe degeneration of the limbs and tail in newts and provide photographs of an afflicted *Pleurodeles waltl*. The skin on the toes degenerates and then the bones, until the foot and finally the leg disappears. They concluded that the disease may be connected with diet and not due to parasites or external causes.

I have recently had the misfortune to observe the progress of the disease in two Asian newts *Paramesotriton chinensis* and *Cynops ensicauda popei*. In the first species, three out of a group of four individuals (2 pairs) died as a result of the disease. One month after arrival, both females had areas of degeneration on their bodies. One female arrived with one foot missing and lost toes from another front foot whilst the face of the second appeared to be rotting away, an indentation having appeared in the upper and lower jaws. The skin around the afflicted area had become pallid and evidence of *Saprolegnia* could be seen around the foot of the individual that had lost several toes. Both females had previously fed well on earthworm and beef-heart dusted with vitamin supplement. The affected individuals shed their skins much more often than normal and their bodies developed a slimy texture and a strong scent, resembling that of Witch Hazel. Both females died shortly afterwards, the one with the rotten mouth going into convulsions before it did so. Both animals had been kept in a 0.4% NaCl solution since the onset of the disease. Two months later, one of the males developed foot degeneration, the joints of the digits swelling, shortly before they disappeared. In this animal the foot finally degenerated completely and one side of the hip became white and ulcerated before death.

Of six *Cynops ensicauda popei*, received from the same source as the *P. chinensis*, three individuals (a female and two males) showed limb degeneration, some toes having totally disappeared, others swollen at the joints. As with the previous species, ecdysis was much more frequent in the sick animals. However, they continued to feed well and their limbs received a regular wash with the disinfectant Hibitane. The 5% Hibitane concentrate was diluted 1ml in 99ml of water (Lawrence, 1982) and applied to the legs with cotton wool, twice a week. After 1 month of treatment, the progress of the disease appears to have been halted, the joints are no longer swollen and there appears to have been some regeneration of toes, though whether the cure was due to the Hibitane treatment awaits further study.

### REFERENCES

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