

## *Self-mutilating behavior in rabbits*

*Esther van Praag, Ph.D.*

Some rabbits engage in self-mutilation to the point of severe injury to themselves, behavior that can include chewing the skin down to the bone, and can lead to the loss of a digit. Rather than diagnosing self-mutilation as a psychotic problem, possible causes should be examined and ruled out when a rabbit shows this behavior.

Causes include:

- Hypersensitive reaction. This involves the immune system, and is difficult to assess. Such reaction can be triggered by medication. Indeed, intra-muscular injection of ketamine/xylazine has been known to cause skin irritation in some rabbits, 3 days post-injection.
- Infestation of the skin by parasites, such as fur mites (*Cheyletiella parasitovorax*, *Leporacus gibbus*, harvest mites), or burrowing mites.
- Atopy, or hereditary allergic reaction.
- Contact dermatitis - inflammation of the skin or rash, caused by contact with an irritating or allergy-causing substance.
- Neurological disease.
- Presence of a foreign body in the fur, e.g. seeds from grass, oat, burrs or awns (bristle-like appendages found on grasses).



T. Saarony

**Fighting boredom: investigate during exercise, toys and nibbling material in a pen.**





T. Saarony

Variety of food, pellets, fresh vegetable, hay, cardboards, nibbling material, and toys help fight boredom



- Frustration in non-castrated female or male rabbits, driven by hormones to build a nest or find a partner respectively.

Compulsive self-mutilating behavior has additionally been linked to environmental factors (e.g. boredom), and in specific breeds of rabbits to genetic predisposition. These rabbits start to mutilate the pruritic skin of their digits, more commonly in late summer and autumn (hormonal problem?). Histological studies ruled out the presence of skin disease, bacterial, fungal or parasitic infection, or neurological problems. When genetic predisposition is determined as the cause, the condition is treated with psychotic drugs.

### Treatment

The treatment will depend on the cause of the self-mutilating behavior.

Often, the administration of a pesticide (e.g. ivermectin) has solved the problem, even when no skin parasites were detected after a skin scraping.

Neutering the rabbit will help fight sexual frustration, and regulate other behavioral problems such as spraying and marking territory.

Boredom can easily be dealt with by giving the rabbit toys, opportunities to exercise and explore its environment, cardboard to tear, branches to chew, hay to play with and eat, etc.

Compulsive self-mutilating behavior can be brought under control with the administration of the tranquilizer haloperidol (0.2-0,4 mg/kg, BID).

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### Further Information

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3. Vachon P. Self-mutilation in rabbits following intramuscular ketamine-xylazine-acepromazine injections. *Can Vet J.* 1999; 40(8):581-2.

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