

Sweet Itch and Other Summer Allergies

Summer Skin Allergies in Horses:

It is thought that over 50,000 horses in the U.K. suffer from skin allergies in the summer each year. The symptoms usually start to appear after turn-out in the spring.

Some breeds of horse are genetically more prone to allergies than others, for example, Icelandic and cob type ponies are much more likely to suffer from allergic skin diseases than thorough bred type horses.

There are a number of causes of these allergies, for example: feed hypersensitivity, nettle stings, and most commonly saliva from insect bites – especially from the *Culicoides* midge (Fig. 1).



Fig.1: The major culprit of equine skin allergies – the common *Culicoides* midge

After being exposed to the allergen (e.g. saliva from the midge bite), allergic horses will develop a Type I hypersensitivity reaction, resulting in histamine being produced by the body's immune system, exactly the same as happens to people who suffer from hay fever (Fig. 2). This is an "over the top" immune reaction to the bite, resulting in swelling, and intense itching of the skin.

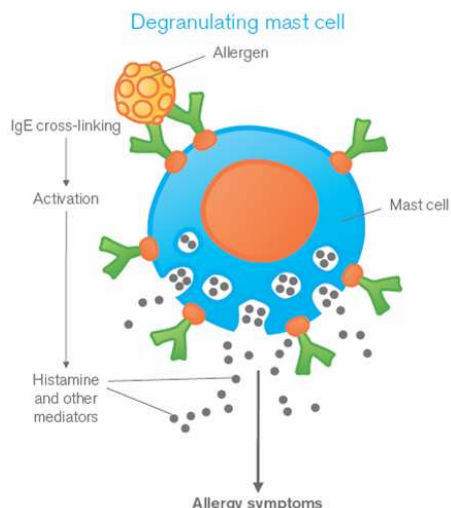


Fig. 2: The allergen (midge saliva) binds to the sensitised mast cell in the skin and causes histamine to be released – this causes swelling and intense itching

Just like with people suffering an allergic skin reaction, the desire to itch and rub at the affected site is intense. Consequently the horse will start to rub and chew at the area, which can then become infected making the problem even worse (Fig. 3). The more often that a horse is bitten by midges, the worse the reaction becomes. Some horses can become rather debilitated throughout the spring and summer months and subsequently become very miserable.



Fig. 3: Two very itchy horses, both showing bald areas, caused by excessive rubbing and chewing due to allergic reaction. These areas are very prone to secondary bacterial infection.

Management Options:

It is always best to remove your horse from the source of the allergy where possible; digging up nettles or changing feed are easy changes, but removing your horse from biting midges is very difficult.

1. Adapt the environment.
 - Midges like to breed on wet land, near water sources, and near woodland. Susceptible horses should be removed from these conditions where possible. A windy hillside is ideal for keeping midges away!
 - Midges are most active at dawn and dusk. Keeping horses away from midges at these times is important.

2. Keeping midges away from the horse.
 - Putting a *full body blanket including neck and belly* on your horse when out at grass will prevent the midges from biting.
 - Stable your horse from 4pm – 8am in the summer months (avoid dusk till dawn grazing).
 - Fitting a fly screen on the stable door can protect horses against midges entering the stable.
 - Putting a fan in the stable will create air movement – midges cannot fly against a wind stronger than 5m.p.h.
3. Fly repellents.
 - There are many types of fly repellents available from vets and saddlers – some are more effective than others. You should find one that suits you and your horse best. The one we find the most effective is Deosect, which provides protection against most biting flies for around 14 days following application.
4. Oils and Greases.
 - Midges don't like to bite through layers of oil. Oils such as citronella oil, garlic oil and tea tree oils can be helpful to provide barrier protection against the biting midges.
5. Antihistamines.
 - Piriton and other types of antihistamine tablets can be used, but their effects are very variable, and they don't always stop the itch.
6. Veterinary "rescue" therapy.
 - Despite all the best efforts at prevention some horses still succumb to sweet itch and require "rescue" therapy from the vet. This is usually in the form of a drug called, prednisolone (a type of steroid). Prednisolone is very effective at decreasing the itching associated with sweet itch. It acts by "dampening down" the immune system slightly in order to prevent this hyper-reactivity reaction towards the midge saliva. We try to use it at the lowest possible dose, and only when necessary to prevent the occurrence of sweet itch, because in some instances, usually at very high doses, it has been associated with an increased risk of laminitis.
7. Fidavet Cavalesse.
 - Fidavet Cavalesse (produced by Janssen Animal Health) is a natural food supplement containing the active ingredient Nicotinamide (a type of Vitamin B3), which is known to have a specific effect on the immune system within the skin. It is useful for all types of allergic skin disease in the horse, in particular sweet itch.

Cavalesse has a number of beneficial actions on the skin, mainly:

 - Reduces the production of histamine – the substance which causes the itch.
 - Improves the skin lipid (oil barrier) by increasing the amount of natural fats in the skin's surface – acting almost like a natural "barrier protection".

Cavalesse comes in both an oral form, for once a day administration, and a topical (cream) form. The products can be used separately or in conjunction with one another for maximum benefit. While Cavalesse can be used as a treatment for sweet itch and other allergies, it works best if given a month or so before the allergy season starts for your horse, and it should be continued throughout the risk period. Good midge avoidance and prevention techniques should also still be practised.

For more information regarding summer allergies and their treatment please contact the surgery: 0131 445 4468.