



## THE ITCHY HORSE

### The Causes and Cures for Itchiness.

**Itchiness or pruritis as it is called by the professionals is caused by a variety of instigators, and the search for these causes can be frustrating. Itchiness is a very serious complaint for our horses and ponies because it can cause severe irritation and even lead to self-harming. Itchy patients can be very uncomfortable and it is important that we as owners provide relief where we can.**

The causes for itchiness are varied, but can be largely broken down into three categories: parasites, irritants and allergies. Parasites can cause itchiness through feeding on the horse's skin and releasing irritating enzymes in their saliva. Irritants cause release of enzymes that can lead to itchiness. For allergies to cause itchiness, an interaction between the horse and the instigating factor has to occur. Allergies are caused by an over-reaction of the horse's defence mechanism (the immune system).

#### Parasites

All insects and mites that feed off the skin or secretions of our horses can be considered parasitic. In its simplest form, a fly bite can cause some transient pruritis (itchiness), whereas a wasp sting is more characterised by swelling, discomfort and some itchiness. The more typical parasites that are driving our horses and us to despair are discussed below

#### Mites

**Chorioptic Mange (leg mites).** This mite mainly infests the legs of feathered horses, and causes itchiness, skin irritation and crusty lesions. Thin-skinned horses can also be affected. The lesions can spread to the groin and abdomen. The mites can lead to mudfever, and can also easily be confused with mudfever. Some horses are carriers of the mites, without showing signs, which is why it is sometimes necessary to treat all in-contact horses. (direct or indirect) and disinfect their environment. Leg mange can be confirmed by analysing skin scrapes or sticky tape smears under a microscope. This mite does not spread to humans.

**Sarcoptic mange** is a rare generalised skin disease, which can affect people. The disease causes severe itchiness all over.

**Harvest mite** infestation can affect the head and legs of grazing horses in the summer. Stabled horses may be affected over the whole body, because these mites can survive in hay and straw.

**Hay and straw mites** can cause itchiness in horses, but this is more common if the horse is allergic to them (see below)

All these parasites can be treated with anti-parasitic drugs. Products that are available without prescription are rarely effective, and you may need your vet to diagnose the condition and prescribe treatment

#### Fly Strike

Some insects lay their eggs by preference in open wounds and the larvae of these insects can cause severe destruction of some wounds. The movement of maggots can cause severe itchiness to our horses. The diagnosis of this disease is easily made, but when the diagnosis is made the larvae are usually already fairly mature.

Prevention by regular rinsing of open wounds is the most important measure to take when wounds occur during the summer season. Fly repellents applied in the vicinity of wounds but no where else on the horse may help to prevent this potentially serious disease. Once flystrike is present, call your vet as soon as possible to instigate treatment.

#### Louse Infestation

Lice are parasites that fall into two major groups, 'biting' lice and 'sucking' lice. Lice are most prevalent in the winter months when horses are congregated together in warm stables and wear rugs.

The lice spread by direct contact or via grooming and tack. The 'biting' lice prefer the back and the sides of the neck, while the 'sucking' lice can be mainly found on the neck, tail and limbs.

All lice cause itchiness, which produces irritation, rubbing and biting and very often a 'moth eaten' appearance of the coat will be present in cases of lice infestation. Some severely affected horses can lose condition and have anaemia. Nits can often be found in the coat and occasionally some of the lice can actually be seen crawling around. In cases of itchy skin disease it may often be beneficial to include lice treatment in any case because this disease is so common.

#### Irritants

Irritants can come in many guises. Some chemical substances can irritate the skin and cause itchiness. For example, teatree oil is known to be irritant to some

horses, even though this ingredient is often contained in products that are meant to treat skin conditions.

A common irritant to horses are nettles. Horses do not appear bothered by a small amount of contact with nettles, presumably because their coat protects the skin. If the nettle comes in contact with the horse's skin, severe reactions can be seen. Itchiness can be present for several hours. If the horse is exposed to vast amounts of nettles, horrendous reactions are often seen. I have known horses to fracture legs in an attempt to try and run away from the stinging nettles. The solution to this problem seems obvious, but out hacking or if the horse spooks, contact with nettles cannot always be avoided. Hosing any affected areas with cold water, or the administration of anti-histamine drugs or steroids is the answer in severe cases.

## Allergies

Allergic reactions are seen when the body over-reacts to a foreign material, and the immune system goes into overdrive. The normal response to many products is one of recognition and, if needed, the immune system will attack the foreign molecule to prevent it from harming the body. In allergic responses, the body recognises the substance, but then builds up a reaction which is more dangerous than the initial molecule itself. The immune system will release molecules that cause an inflammation, and many of these molecules cause itchiness.

The treatment for allergies is based on identifying the substance the horse is allergic to and avoiding exposure, or drug treatment to change the immune response. Sometimes, after identifying the causes for allergies, vaccines can be useful in changing the reaction of the horse to these substances. Natural products, or supplements containing anti-oxidants have been used to reduce itchiness with mixed success. Horses with allergic reactions, that cause suffering or danger to the patient, may need drug therapy. Anti-histamines do not seem to be very effective against itchiness, whereas steroid drugs are frequently highly effective, but have more side-effects.

Contact allergies (for example against washing powders) or feed allergies are not very common in horses. These allergies are even more rarely involved in causing itchiness. Baldness, redness and skin lumps are more commonly seen with these types of allergy.

## Atopy

This form of allergy is common, but often overlooked. The disease is very similar to eczema in humans. In this case the patient over-reacts to inhaled allergens. These could range from some plant materials that are more frequently encountered in the spring and summer, to some products that are around in the stable environment. Finding out which are the allergens the horse reacts to can be very challenging, and our specialist dermatologist, Dr. Janet Littlewood BVSc, MA, PhD, DVD, DVR, MRCVS, may have to carry out allergy testing to find the cause. Allergy tests involve injecting the allergens under the skin and checking which ones swell up. The results of these tests can be used to avoid contact with the allergens or, if this is not practical, to prepare a vaccine that may make the horse less reactive to the allergen. In severe cases of Atopy, the horse may have to be maintained on high

doses of steroids in order to lead a normal and comfortable life.

## Sweet Itch

This disease is caused by an allergy to the bites of gnats and midges. These small biting insects are found mostly at dawn and dusk and their breeding areas are usually around still waters such as ponds.

Shetlands and Welsh ponies seem to be more predisposed to allergy against these insects. The signs of this disease can get worse as the animals become older. The main signs seen are severe itchiness around the mane and tail and thickening of the skin in these areas. Some symptoms are related to self-inflicted trauma due to the itchiness. The skin can be red raw in these areas and infection will often complicate matters.

Fly-net rugs, that envelop as much as possible of the horse, are by far the best prevention of this condition. Good fly repellents and keeping the horses in at dawn and dusk are further preventative measures. These measures should be started in February and go right through to October if prevention is to be achieved.

Some horses are so sore and itchy that it is necessary to treat the allergy with steroids. Steroid therapy can cause laminitis, particularly in native breeds that are already prone to this disease. We therefore prefer to treat this disease with oral steroid tablets, rather than giving long acting injections, which cannot be taken out of the system if serious complications occur. Even if steroid therapy is necessary, as many as possible preventative steps should be taken to make the horse unattractive to these insects.

Administering garlic in the horse's feed may have some beneficial effect in doing this. The use of permethrin and cypermethrin repellents or aromatic oils (such as citronella) and benzylbenzoate are the most helpful preventative compounds to apply to the skin. The mane and tail may need to be treated with antiseptic shampoos and soothing creams

## Ventral Mid Line Dermatitis

This is an insect-related dermatitis in the summer months, which affects sensitive horses. Several varieties of insects, including biting flies, midges and gnats can cause this condition and, interestingly, younger horses seem to be more prone to this. Crusty, itchy skin lesions are seen around the umbilicus and stretching forwards and backwards from there. Biopsies of these skin lesions show severe infiltration with specific white blood cells and inflammation of the blood vessels.

Treatment and prevention for this condition is similar to that for sweet itch

## Insect Bites or Stings

Many biting and stinging insects can cause allergic skin lumps and itchiness in our horses. Sometimes horses have been attacked by swarms of insects and are literally covered in lumps.

Bee stings can usually be positively identified if the sting has been left in place. Many other bites cannot be 100% diagnosed, and it is certainly not always possible to identify exactly which species of insect has caused the lesions. Horses may be very distressed and agitated after they have been attacked by any of these insects.

For individual treatment anti-histamine injections can be used, in more severe cases it may be necessary to apply corticosteroid creams or even administer steroids by mouth or injection. After massive attacks by some of these insects, animals can occasionally show severe signs of anaphylactic shock, which can be a fatal consequence. Luckily this occurrence is very rare.

Fly-net rugs are the most effective way to separate insects from horses. Fly repellents and garlic are other preventative measures available to horse owners at the moment, but it is not always possible to make individual horses unattractive to insects.

## **Tail rubbing**

Many horses rub their tails in summer, even if they are not very allergic. Insect bites are often to blame. Pin worms can also be a consideration, so make sure your worming is up to date if your horse rubs its tail. Washing the tail with mild antiseptic shampoo often provides relief from tail rubbing. Using fly-net rugs for turnout seems the most effective way to avoid tail-rubbing.

**In conclusion, pruritis is better avoided, than treated. During the summer, it will often be flying insects that bother our horses. Good husbandry and fly repellents are the most effective in keeping our horses problem-free. Unfortunately, none of these products are foolproof and experimentation to see which is most effective for you and your horse may be necessary. Make sure not to use incompatible compounds and beware of some of them causing skin irritation in their own right. Finding the cause of allergies, and their treatment can be a challenge for your vet, and it may be necessary to find specialist help.**