

As summer approaches many horses and ponies will start to suffer from sweet itch. Toby Kemble of Wensum Valley Veterinary Surgeons, Fakenham, explains what the condition is and how it can be managed.

How to handle a sweet itch attack

Sweet itch is an allergic reaction of horses to the saliva of the culicoides midge. It can affect all breeds of horses, but is more commonly seen in cob types than in thoroughbreds.

Normally, when bitten by a midge, the horse's immune system recognises a foreign protein and reacts to eliminate the substance. In horses which suffer from sweet itch, the immune system overreacts in the same way hay fever sufferers overreact to pollens. This is known as a type one hypersensitivity reaction and results in the release of histamine and other similar substances.

Histamine exerts its effects at the site of the bite by causing intense itching and swelling. In turn, this itching causes the horse to rub and scratch, which will often lead to the horse damaging the overlying skin, allowing infection in.

The top of the tail and the mane are often the worst affected areas, although sometimes the belly, inside of the legs and the groin region can also be affected. Horses will spend large amounts of their time scratching, swishing their tails and biting at themselves.

Sweet itch is typically a disease of the spring, summer and autumn, because the midge is dor-

mant during the winter. However, in severe cases, midge attacks in the autumn can continue to cause the symptoms for many weeks.

The damage the horse has inflicted upon itself will have caused a skin infection, which will also cause itchiness, so even though the midges have long gone, the horse will continue to self-traumatise because of the secondary infection. Horses which suffer from sweet itch often become very agitated when there are flying insects around and will swish their tails and shake their heads.

Because sweet itch becomes less obvious in the winter months, it is not uncommon for these horses to be sold at this time of year, so be aware of this when buying a horse in the winter months. Telltale signs are bald patches or thickened skin at the tail head and mane, but these will not always be present.

Management

Once a horse starts suffering from sweet itch it is not easy to achieve a 'cure'. There has been some partial success with desensitisation therapy, but usually treatment is aimed at preventing the midge biting or, if this fails, limiting the effects of the hypersensitivity reaction.

Condition

- Sweet Itch is an allergic reaction to the culicoides midge
- It is a debilitating condition which causes itchiness and self-trauma
- The key to treatment is to prevent the midge biting the horse
- Once the horse has become itchy, aggressive therapy is needed to prevent further damage
- Start treatment early before the horse's skin becomes broken

The culicoides midge is most active at dawn and dusk on still days. It breeds on wetland near watercourses and favours woodland over exposed sites. It is often found around rotting vegetation and muck heaps and cannot fly against winds greater than 5mph. This knowledge can help in managing your horse and preventing sweet itch attacks.

One of the simplest things you can do is stable the horse from 4pm to 8pm, particularly on still days. If feasible, a fan placed within the stable roof will cause air currents which will prevent the midge entering. Lightweight summer rugs can be effective, but these need to completely enclose the neck and belly.

Fly and insect repellents are very useful at keeping the midges away. Traditionally, Benzyl Benzoate has been used. This is worked into the affected areas, but often needs to be applied daily. It is an irritant to skin and particularly on broken skin, and therefore needs to be used as a preventative rather than a treatment once itchiness has started.

Repellents are more useful as they need to be applied less frequently (once every seven to 14 days) and are less of an irritant. Ask your veterinary surgeon what he recommends.



Lightweight rugs can give the horse protection from midges but must cover its neck and belly.

All insecticides and repellents should be applied wearing gloves and care should be taken regarding washing hands after their handling. This is particularly the case when applying to children's ponies.

'Natural' products

There are a number of 'natural' products which people use, such as citronella oil, garlic and tea tree oils. Oils can act as a natural barrier to the midge, but to be effective they have to be applied quite thickly, resulting in a greasy appearance.

The particular smells of the products may deter midges, but I have examined many horses for sweet itch in the past, which, despite smelling strongly of citronella or tea tree have midges actively settling while I am examining them.

One of the problems of sweet itch is, despite taking all the precautions, the horse only needs to be bitten once and an 'itch-scratch' cycle starts, whereby the more a horse scratches or

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bites at itself, the more it itches.

To break this cycle sometimes medication needs to be given and there are two effective forms. One is a human anti-histamine treatment. But this can be expensive because of the large amounts needed to treat a horse, which may weigh six to seven times the weight of a person for whom the treatment was formulated. Also, it is not always effective because substances other than histamine are released by the immune system and it has little, if any, effect against these.

The most popular way of stopping the itchiness is the use of cortico-steroids. These are very effective in suppressing the immune system and hence stopping the overreaction of the body to the midge bite, but can have side effects. Cortico-steroids come in a number of different forms, but all need a visit from your veterinary surgeon before they can be administered.

To prevent the itchiness in the short-term, a short-acting injection is probably the most effective

treatment. If itch-prevention is necessary for a few days then cortico-steroid tablets can be given on a daily basis. It is not advisable to continue with these for longer than is absolutely necessary because of the risk of side effects, the most serious of which can be laminitis.

Occasionally a long-acting cortico-steroid injection may be administered, which can last for two to three months, but the risk of this is, if side effects are seen, there is no way of removing the product from the animal. This can be cheaper than keeping an animal on prednisolone tablets, but tablets have the advantage of being able to be withdrawn immediately, if they have an adverse effect.

Damage

If the horse has damaged itself through rubbing or biting, your veterinary surgeon may prescribe antibiotics and/or antibiotic cream. These are particularly important if cortico-steroid therapy is being used, as the latter will suppress the immune system and hence the body's ability to heal.

For long-term treatment desensitisation therapy can be tried. This involves regular small injections of gradually increasing amounts of culicoides allergen. In theory the horse's immune system gradually reacts less to the allergen and the itchiness in turn lessens.

I have had mixed success with this treatment. Some horses have responded well and have definitely become less itchy, while others have not responded. You should discuss this with your veterinary surgeon.



Intense itching and swelling is caused by a midge bite, which in turn, causes the horse to rub and scratch. PICTURE: Prof Derek Knottenbelt



The top of the tail and the mane are areas worst affected by sweet itch, but belly and groin can also suffer. PICTURES: Prof Derek Knottenbelt

