

Allergies in the horse – a status report

Did you know?.....

... that for **almost 10 years now horses can be tested for allergies**. Thousands of animals have been diagnosed and treated. This fact stands for knowledge, competence and experience. We have published several reports and various information regarding allergies in horses and the treatment.

... which the major allergens are?

Allergen groups	Examples	Incidence of positive reactions	Occurrence
Grasses	Orchard grass	34 %	April – June, in hay all year
	Timothy grass	7 %	June – August, in hay all year
	Rye grass	15 %	May – August, in hay all year
	Mugwort	9 %	June – October, in hay all year
	Lambs Quarter	7 %	May – October, in hay all year
	English plantain	20 %	May – September, in hay all year
	Sheep sorrel	22 %	May – September, in hay all year
Trees	Birch	6 %	February - May
	Hazel	7 %	February – May
	Beech	17 %	March - May
Moulds	Alternaria	14 %	hay, straw, grains
	Aspergillus	2 %	hay (damp)
	Cladosporium	3 %	hay, straw, grains
	Helmintosporium	2 %	grass, moist soil
	Penicillium	4 %	hay (damp), grains
	Fusarium	3 %	hay, straw, grains
	Ustilago	3 %	grains
	Rhizopus	10 %	humus soil, compost, manure
Mites	Acarus	28 %	grains, pellets, flours (storage mite)
	Derm.f./Derm.p.	36 %	blankets, stable (dust mites)
	Glycophgus/ Thyrophagus	28 %	hay, grains (hay mite, storage mite)

... that **most moulds and pollens are present all year around**. A distinction between seasonal and perennial allergens is almost impossible to make.

The mould spore concentration depends on the moisture level. Thus increased mould spore concentrations are found in damp hay, in stables and outside following rain falls.

... that about **72 % of animals suspected of having an allergy are tested positive in an allergy test.**

... that one of the **major causes of allergies in horses are mites.**

... that about 43% of animals suspected of suffering from „summer itch“ are tested positive in an allergy test.

... that the specific immunotherapy (SIT), formerly called hyposensitization, is applied as a **therapy for allergies in veterinary medicine for more than 40 years.**

... that the incidence of adverse reactions to the **SIT in horses is less than 1%.**

... that the SIT aims to stimulate the immune system in producing blocking IgG antibodies and suppressor Th1 cells. Therefor the SIT causally attacks the pathophysiological mechanisms of the allergic disease.

... in the horse the **success of the SIT clearly depends on the duration of the illness.**

Summer Itch	duration 1- 2 years	83 % success
	duration 3 –5 years	77 % success
	duration >5 years	< 25 % success

COPD	duration 1-3 years	79 % success
	duration 4-5 years	33 % success
	duration >5 years	< 10% success

Conclusion: the earlier you start to treat with the SIT after diagnosing the allergy the better the chances are for a successful therapy.

... that you can see the success of the SIT treatment in horses showing symptoms for less than three years in 44 % of animals with COPD and in 65 % of the animals suffering from summer itch within the first 3-4 months.

... that the success of the therapy is independent on whether only 1 or 6 allergens are included in the treatment.

... that the greatest success of the therapy is obtained in animals 2-8 years of age.

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