

An Interview with Dr. Hein Van Haeringen

Dr. Van Haeringen, Phd, Vet. Med., Founder
 Van Haeringen Laboratories - an Applied Genetics Laboratory
 b.v., Postbus 408, 6700 AK Wageningen
 The Netherlands
 email: hvanhaeringen@ision.nl

The Friesian:

Dr. Haeringen, Thank you for speaking with me about your article on Icterus.

Dr. H:

First of all, it is a pleasure to give the official permission for reprinting the said article. It is very important to educate breeders and veterinarians for a better "feeling" about this blood group incompatibility in order to gain quick diagnosis and good advice.

The Friesian:

Would you consider traveling to North America to participate in an educational seminar at some time in the future?

Dr. H:

I do not know if the FHANA has meetings for their members but this is an item for oral presentation and discussion as well. I am willing to give a presentation - almost any time and any place. Compared to the cost of recovery of a foal, I think the foal is even more expensive! *(A recent recovery cost for a foal in the US was roughly \$8,000.00 for emergency veterinarian hospital care, medicines, and support, although costs would vary depending on situation - Ed.).*

The Friesian:

Is the incidence of foal mortality as a result of blood groups increasing or decreasing in Friesians?

Dr. H:

In my experience the number of tested Friesians with this is increasing. There are two possible explanations. First, the diagnosis is better or the real incidence is increasing by the influence of several stallions. A percentage is hard to mention because I do not have any information about dead foals and suspected cases. But, nevertheless, my feeling is that the problems are really increasing.

The Friesian:

Can icterus be overlooked or misdiagnosed?

Dr. H:

I know that several times the diagnosis is incorrect. What is called "joint ill" might be a secondary infection after a "mild" icterus where the foals do not have the capacity to survive such a bacterial infection. This is similar for septicaemia. In a very few cases I do not fully understand another syndrome, which maybe is related to icterus - foals with anaemia problems for a rather long time and mostly ending with a dead foal at an age of 2 weeks or more.



Photography by Kris Fulwiler

The Friesian:

It has been said by some that icterus does not occur in first foals. Is this true?

Dr. H:

THIS IS NOT TRUE. I have data from mares with first-born foals dying from icterus. Even colleagues lost foals due to this old fashioned theory. The risk in first pregnancies is lower than in older mares, but absolutely not absent.

The Friesian:

Can you explain further how the antibodies are produced?

Dr. H:

To obtain antibodies in blood and milk, two conditions must be satisfied: 1) The blood type of the foal is different from the mare, and 2) During pregnancy there has to be at least one injury in the placenta. Through the wounds, blood from the foal is entering the blood circulation of the mare, where antibodies might be produced. I myself think (however without scientific evidence), that mostly more than one injury is necessary to have antibodies produced. Furthermore, an injury early in the pregnancy has a longer period to produce antibodies than those occurring one or two weeks before birth. Mostly the injuries are not observed by owners, but remnants can be seen in the placenta's afterbirth, but to see them requires a specialist in this field.

The Friesian:

Is icterus caused by a stallion? Is it caused by a mare?

Dr. H:

It absolutely is INCORRECT to treat a stallion in any negative aspect for the icterus! The dam is as "guilty" as the stallion. Stallion keepers cannot be considered to be a bad guy,

not at all! It is always a combination of mating - stallion x mare. Nevertheless, it looks like the incidence of icterus is increasing in the Friesians. This can be due to the choice of stallions in the selection, but I will NEVER support making the blood groups part of selection. I will never agree to adding a screening for blood groups to the criteria for approval of stallions. Publishing the data of stallion blood types is not a good idea either, because misinterpretation will be a high risk.

The Friesian:

Are you saying that breeders should not use blood groups in their breeding programs?

Dr. H:

I did not mean individual choices, but just that the general selection procedures at Leeuwarden and Drachten for Approved stallions should not be influenced by blood group information. If the problems in breeding do increase, some breeders may ask to test their mares individually and ask for breeding advice to avoid the risks of icterus.

The Friesian:

Does the Studbook record blood groups for registered individuals?

Dr. H:

The Friesian studbook has the rule to do a DNA test for parentage verification immediately after the stallion show in January in Leeuwarden. Those stallions who have passed their exams after the training in Drachten are blood typed just as a service for the breeders to make a choice for low risk with icterus. The owners of mares decide if they want to have their mares blood typed. Mostly they do so only after a fatal case with icterus.

Indeed, ALL the stallions with a permit after Drachten have been blood typed. Also, those Approved stallions exported to North America and other countries are blood typed and recorded. The FPS has a copy of all those data, but only in file. The actual database is in our hands. The FPS gave us permission to use these blood types for diagnostics and advice.



The Friesian:

Can members in North America, who have a mare that has a blood group incompatibility, receive information in order to choose a stallion for a low risk mating? Where would members go for this information?

Dr. H:

The FPS itself does NOT give any advice in matings to avoid the icterus. The only group doing so is ours, and from this group it is mainly my duty, being a veterinarian and a geneticist. Mating advice is given by myself, based on the blood groups from both mare and stallion. This should not need a new blood type from the stallion. Most probably it is in my data base. What we need to know are some items:

- If the mare has been blood typed, we need a copy of this blood type and a copy of her pedigree.
- Which stallions are the favorites to be used for the mare?

With these data, it would be possible, most probably, to give an advise for a low risk mating. Members may contact me directly at hvanhaeringen@ision.nl

The Friesian:

Do you have any closing remarks or suggestions for members?

Dr. H:

I will comment on the diagnosis. Few universities have the proper tool to make a correct diagnosis for icterus as a result of blood group antagonism prior to breeding. Only the original blood typing laboratories have these abilities. They also can do the blood typing of a mare, to predict the risk after a mating with a particular stallion. Such a blood typing of a mare is not very expensive. The test when a foal is sick can be done very quickly and at low costs as well. Doing all kinds of tests in a clinic does not add a real "plus." It is only adding a dollar amount to the bill.



Photography by Katherine Ortis