Herpes virus (part 2)

The herpes virus in practice.
In the last newsletter, I described the scientific facts of the Herpes virus. But what is the impact of this virus in everyday practice?

As I explained before, a lot of pigeons are latently infected without any signs of symptoms. We have seen that most of the young pigeons between the age of two and ten weeks old, are infected by this virus. Some are extremely sick so that death follows. In these cases, the symptoms concentrate mostly in the upper-respiratory system and, frequently, the pigeons have the symptoms of Coryza.

But before the birds can reach this level of illness the resistance of the pigeons has to be at a low level. This happens during weaning but even caused by overcrowding in the lofts and during transport in less fortunate circumstances, such as high temperatures and humidity.

In case of an outbreak, there is not so much you can do to defeat the virus. For virus infections in general, antibiotics are not available and non-effective. Still, there are a lot of fanciers who request for antibiotics to 'fight' a virus infection. As long as the expectations are to treat secondary infections, this is no problem. During an infection outbreak, with the diminished resistance of the pigeon caused due to the infection, bacteria that usually are useless are responsible for the secondary infections. It could be wise to treat these secondary infections. The pigeons are busy fighting off the primary infection.

These kind of infections will emerged easier if the pigeon is infected with another infection, like canker, coccidiosis or worms. Fighting off these infections is just as important as increasing the general resistance.

For a long time, the reactions on Herpes infections were laconic. The number of lofts dealing with extreme outbreaks were low. But the last few years, we have seen in our practice an increase of clinical infections, where the severity of the symptoms are growing. Reason for every fancier to become more cautious. A possible reason in this increase is a larger number of Circo infections, because this last virus makes sure that the resistance of the pigeon is low. The Circovirus affects mostly immune cells. The response of the resistance will decline because of this. The degree in which the resistance is affected depends on the moment of infection of the (young) pigeon. The sooner this happens, the more damage the virus does. When the pigeons are vaccinated against paramyxo, but in the meantime are infected with the Circovirus, the response to the vaccination will be none or non-optimal. Protection through the vaccination for the field virus will be limited, the pigeons could show clinical signs of a paramyxo virus infection. The degree in which this will happen, depends on the degree of damage caused by the Circo infection. Back to the Herpes virus. It is not hard to imagine that pigeons who are latently infected with the Herpes virus (one of the many), in case of Circo virus infection, are first to be affected with the dormant Herpes virus.

The Circovirus affects the immune organs of young pigeons, which still have to develop fully, in a way that the pigeon becomes ill of this Herpes virus. An active Herpes virus can, as we have seen with a diminished resistance, destroy it all. (Often with symptoms which suspect an Adeno-infection)

Under the best circumstances there will be possibly a few symptoms. But during stressful times, the virus will emerge. The orientation of the pigeon will be extremely affected. It is too short-sighted to contribute the great losses which occur increasingly among youngsters from 2005 until now, to this virus. Personally, I strongly feel that this is happening, possibly accompanied by the paramyxo virus.

The problems were in the picture since the rise of the Circovirus during the millennium. However, in the last
couple of years, as we all could have seen, the infection rate increased in a lot of places. Due to the limited capacity of the immune organs, the pigeon is unable to respond adequate. This means that the pigeons can massively multiply the virus. If you put the pigeons in the baskets (in general the pigeons look healthy) during transport, they will become a source of contamination for the entire convoy. After just a week, the infected youngsters can suffer from this virus during the next flight and will be unable to get back home.

There is no medication to cure the virus. Just for the accompanying infections. Therefore, the strategy has to be focused on prevention. On one hand, to support the own resistance of the pigeons if this is possible (for example with Bony SGR or Bony Sambuccaplus).

For viruses in general, we have to protect our patients through vaccination. 25 years ago, there was a vaccination for the Herpes virus. But it was ineffective. Nowadays, the research and development has moved on. Just 25 years ago, I drove a car. But now, 25 years later, my car has a lot more features. The fact is that a vaccine made 25 years ago that was ineffective does not mean that a vaccine developed nowadays still is ineffective. A critical view of these new developments is welcome. And this is a wise thing to do. But we have to stop claiming that the earth is flat, when we all know it isn't!

In 2005, a Hungarian colleague reported good results with a new Herpes vaccine. I was skeptical. After all, it is generally assumed that it is hard to develop good and effective vaccines against the Herpes virus. But it was possible for other species. For cats, there is an effective vaccine, as well as for cattle. The vaccine strongly reduced the Herpes virus problems amongst cattle.

In the last couple of years, I contacted a company to get the vaccine available in Holland. During 2011, when the vaccine became available, we have vaccinated 5,000-6,000 pigeons with the combination vaccine (Herpes-paramyxo). We vaccinated twice, with three to five weeks between the injections. With every vaccination, I told the fanciers 'don't shoot the piano player!' Surely, we had to experience if there were less mortals among these vaccinated youngsters. And we had to exclude the factor 'luck'. The first season expired, and I can report a group of happy and satisfied pigeon fanciers. There were reports saying that there were less stray youngsters and there were reports stating that the pigeons did not suffer as often as they used to do from respiratory problems.

Cautiously I dare to claim, still with some hesitation, that this vaccine can contribute in a positive way in keeping the virus within the limits of the growing problem of dying youngsters. After this season, we can with the available and more detailed data, exclude the factor 'luck' completely. It is possible that by frequently vaccinating, we can reduce the problems with the Herpes virus, like it works for cattle.

If you don't see any benefit in vaccinating, you can consider to support and optimize the resistance of the pigeons.

If you meet at your loft a Herpes virus outbreak this season, be wise enough to, with optimal support for the youngsters, give the pigeons enough time to eliminate the infection. After all, even we can't enter and play in a game if we are suffering the flu. If you still make the choice to enter the pigeons for a race it is almost for sure that most of the pigeons get lost.

Good luck,
Peter Boskamp