

Melbourne Bird Vet Clinic – Dr. Colin Walker Updates

Update 13th Feb 2017

I live in WA. My loft was infected with Rota virus in mid-2016. I have bred some healthy looking babies this season. Could these babies spread the virus?

All youngsters bred from surviving stock birds at the time of the outbreak will become infected with the virus and some will die in the nest or be weaned as weakened babies. However youngsters bred months after the outbreak, even within the carrier period or in a contaminated loft can be expected to be quite healthy. It is thought that this is because the level of immunity in surviving stock birds rises with time and these stock birds not only expose their babies to the virus but also pass their own immunity to the youngsters through the egg and crop milk. This means that these apparently healthy youngsters are in fact infected with the virus and even though they don't look sick themselves, can spread the virus into previously uninfected lofts. This is not only thought to happen with Rota virus but does happen with other common pigeon viral diseases such as Herpes virus.

10/02/2017

Statistics on Rota Virus.

Fanciers need to be mindful of drawing conclusions about "cases" of Rota that have not actually been diagnosed. There is currently a tendency among some fanciers, if they have a few birds that have diarrhoea and are vomiting and a few have died, to assume a diagnosis of Rota virus. They then tell their friends. Word then quickly spreads that the fancier has the disease and conclusions are drawn about the way the disease behaves even though a Rota infection has not actually been diagnosed in that loft. AgriBio has asked vets to only refer cases to them for diagnostic work if there is a strong suspicion of Rota. Diagnostic testing is costly and ties up resources. At the Melbourne Bird Veterinary Clinic (MBVC), we have 3 qualified avian vets on staff that review pigeon cases and only refer those to AgriBio if they think they are cases of Rota. For other cases, the necessary samples for diagnosis are sent to private labs. Even so, about one-third of the cases sent to AgriBio turn out to be something else. If the symptoms of other diseases can mimic Rota sufficiently in a veterinary situation, how can a fancier in his backyard make a diagnosis of Rota. In one recent case, a fancier stated that his loft had been infected with Rota but only a few of his birds had died. He told the attending vet that this was due to his birds being so healthy because of all the vitamins and other supplements he gave them. When his test results came back, it turned out that his birds had vitamin poisoning through over supplementation! The most common problem mistaken for Rota, as shown by testing, is PMV although other viral, bacterial, parasitic and management problems are all in the mix. One interesting thing that I have noticed is that people who are keen to race this year are promoting that the disease kills less than 5% (and sometimes even lower numbers) of birds. Rota is a disease with a significant mortality rate. Any fancier who has been told that their birds have Rota and lose less than 5% of birds should get a second opinion as this casts doubt on the diagnosis. Without an accurate diagnosis, no conclusions can be drawn about any case. Any conclusions drawn from lofts that have not been fully diagnosed are invalid and simply just cloud the issue. An accurate diagnosis involves testing by experienced pathologists at established labs.

So what do we know? At the MBVC we have had 10 confirmed cases of Rota. Yesterday I rang each of the owners and this is what they said. I have placed them in chronological order:

Fancier 1

Diagnosed 15th Dec. 44 of 160 birds died. Mortality rate of 27%. 4 of 70 young birds died. 40 of 90 old birds. 80 % of birds that had returned from 500 and 600 mile races in 2016 died. The stock birds were kept paired (to minimise stress) after the disease , the youngsters they produced died in the nest. Birds treated with Trimidine (a brand of trimethoprim /sulphadiazine) antibiotic.

Fancier 2

Diagnosed 16th Dec. 70 of 200 birds died. Mortality rate of 35 %. 50 of 120 older youngsters died. 20 of 80 stock birds died. No recently weaned youngsters died. Treated with Doxy T (doxycycline /tylosin) antibiotic blend and garlic.

Fancier 3

Diagnosed 20th Dec. 20 of 76 birds died. Mortality rate of 26%. 17 of 50 older youngsters died. 3 of 26 stock birds. Disinfected loft daily. Treated with Sulpha AVS (a brand of trimethoprim/sulphadiazine) antibiotic and vitamins.

Fancier 4

Diagnosed mid Dec. 35 of 160 birds died. Mortality rate of 22%. 19 of 70 youngsters died. 2 of 20 2-year-old and 14 of 70 stock birds. The stock birds were kept mated but many of the nestlings produced died at 10 to 12 days of age. In one section, the 10 nestlings in 5 nests all died. Surviving nestlings in other sections grew heavily 'fretted ' feathers. Treated with Sulpha AVS.

Fancier 5

Diagnosed 30th Dec. 14 of 154 birds died. Mortality rate of 9 %. All 14 of these deaths occurred in a group of 86 weaned youngsters. 0 of 68 stock birds died. Concurrently infected with Circo virus. Treated with Sulpha AVS. Loft disinfected. Some Magpies in the back yard looked sick and some were found dead.

Fancier 6

Diagnosed 20th Jan. 11 of 170 died. Mortality rate of 6%. 0 of 30 youngsters died. 11 of 140 mature birds. Not a racing loft, mainly Middle Eastern breeds. Treated with Sulpha AVS, VE powder (which according to the fancier is a herb tonic) and Probac (a brand of probiotic).

Fancier 7

Diagnosed 23rd Jan.. 36 of 130 died. Mortality rate of 27%. No youngsters died. 20 of 25 2-year-old hens died. 6 of 20 2-year-old cocks died. 10 of 40 stock birds died. Treated with Sulpha AVS. Found 30 dead Indian mynahs in yard. Doves share bath water with pigeons.

Fancier 8

Diagnosed 23rd Jan. 55 of 150 died. Mortality rate of 36 %. 22 of 55 first-round youngsters died. 15 of 22 white racing pigeons died. 4 of 30 stock birds died. No second- or third-round youngsters of 26 died. Treated with Sulpha AVS.

Fancier 9

Diagnosed 23rd Jan. 6 of 97 died. Mortality rate of 6%. 1 of 70 youngsters died. 5 of 70 stock birds died. Did not give antibiotics. Disinfected loft, drinkers and hoppers with "Domestos ". Treated with Fennel tea. Fennel tea anecdotally increases the rate of crop emptying and helps prevent gut stasis (failure of the bowel to contract and advance contents normally).

Fancier 10

Diagnosed 1st Feb. 16 of 110 died . Mortality rate of 14.5 %. 2 of 70 youngsters died. 12 of 20 2-year-olds died . 2 of 20 stock birds died. Treated with Sulpha AVS. Loft drying/disinfectant agent applied to floor after cleaning.

So what conclusions can be drawn. Because the sample is very small unfortunately not a lot but certain observations can be made. Some fanciers record keeping and memories were better than others . One fancier initially advised a certain number of deaths but then later said that only a third of that number had died. However based on the figures we have, mortality rates range from 6% to 36 % with the average being 19.3 %. One has to wonder whether the prescribed antibiotics are really modifying outcomes. One of the lofts with the lowest mortality rate only gave Fennel tea. Most fanciers noticed that deaths peaked about 4 days after the first birds were noticed to be unwell. All fanciers reported that deaths stopped after 7 days. Most fanciers said that all birds that became unwell died while other birds in the loft remained quite normal. All fanciers reported that the survivors appeared particularly well in the first few weeks after the disease. It is unusual that so many mature and apparently robust birds died. Many pigeon diseases cause more severe disease and higher mortalities in young birds. This is not apparent here. We still have much to learn . Getting an accurate diagnosis and meaningfully interpreting the results is paramount to developing our knowledge and understanding of this disease.

06/02/2017

Click links below to open

[The ANRPB Rota Virus Press Release](#)

[The VHA Rota Virus Information night flyer](#)

03/02/2017

Meeting today.

We had a 2 hour meeting this morning at AgriBio. Experts from AgriBio, Deakin University, Animal Science at LaTrobe University and AAHL were all involved. A robust, productive discussion was held. Topics discussed included testing to calculate the length of time of the carrier state, the persistence of immunity in survivors from infected lofts, the virus' effect on other bird species, the possible effect on chickens, the evaluation of cross immunity from a molecular and biological perspective, the incidence, distribution and possible control of the disease, how the virus acts in the body, why only some birds get sick, funding, government approval permits and of course all aspects of vaccine development and manufacture. I have been again advised that the vaccine could be available as early as the end of this year but will be ready no later than Feb/March next year.

Risk of transfer of virus at pigeon club meetings.

At the Kyabram sale where the first infected birds were recorded in Victoria, all of the fanciers who subsequently had the disease in their lofts either bought birds or handled birds . Fanciers who did not handle the birds did not get the disease in their lofts -- this despite the fact that there were infected birds in the room. The chance of virus transfer from one fancier to another is very remote however if fanciers were particularly concerned then washing the clothes worn to the meeting and not wearing the same shoes in the loft should eliminate any risk.