

PO BOX 31626, Waverley, Pretoria, 0136

28 February 2022

**Possible Rota Virus outbreak in Pigeons in South Africa**

To all Pigeon Fanciers

As you may be aware there has been numerous reports of massive acute deaths in Pigeons in several areas of South Africa.

From clinical symptoms as well as the acute onset, progression of disease and very high death (mortality) rate it is highly possible that this may be a **Rota virus**, Astro virus or other RNA viruses known to causer watery droppings.

**Clinical symptoms are as follows:**

Acute loss of appetite.

Dramatic Increase in water consumption.

Green stained urine (Biliverdin in urine).

Small amounts of green stained faecal material present



Regurgitation (Vomiting).

Crop stasis with water accumulation in crop

Weakness and inability to fly.

Moribund state followed by acute death.

The symptoms have an extraordinary acute onset and fast progression, with pigeons dying in many cases, within 18 to 24 hours from the first onset of symptoms.

**Differentiating the disease from other viral diseases:**

In cases of PPMV the urine is clear with minimal green staining and in Young Bird Disease (Circo virus) the faecal component is mostly still present but voluminous, soft and smelly. It is however possible that pigeons may suffer from one of the above and then progress to the new disease.

**Diagnosis:**

As far as I am aware no firm laboratory diagnosis has been made to confirm the cause of the above disease.

Post Mortem examinations of early cases of the disease needs to be made as soon as possible. Viral isolation and typing via sequencing need to be performed as soon as possible. Pigeon fanciers are requested to submit clinical cases to ARC- Onderstepoort 100 Soutpan Rd Onderstepoort tel. no 012 5299111 for Full PM. (Further information to follow) It is hoped that by doing so a firm diagnosis as to the cause of the outbreak may be made ASAP.

It is best to submit live pigeons that has just started showing symptoms along with some moribund cases as well as some recently dead pigeons. The dead pigeons must not be frozen but kept refrigerated.

**Preventative measures:**

Follow a closed loft approach.

Do not allow any strange pigeons in your loft.

Refrain from visiting other pigeon lofts for the time being

Do not allow any stray pigeons in your pigeon lofts.

Make use of overcoats and foot baths and apply good sanitary practices in your lofts.

Ensure that your pigeons especially young birds have been adequately vaccinated against PPMV1 (Specifically the Pakistani strain) as well as ND virus

Wean all youngsters int a completely separate weaning loft.

Follow a good youngster weaning program.

Isolate any ill pigeons immediately well away from healthy ones.

Follow a good Prebiotic, Probiotic and immune stimulant preventative health program added to the food at least 4 x per week.

There is currently no vaccine available.

**Treatment during the disease outbreak:**

The causative organism seems to attack the liver as is the case in Rota virus cases world - wide. The recommended treatment program is provisional and based on the assumption that we are dealing with a Rota or Astro- virus outbreak until a firm diagnosis has been made.

Add a pigeon specific Electrolyte and Amino-acid (Major and Minor) powder to the drinking water daily. Make up fresh mixtures 2 x per day. Cranberry fruit juice may be added.

Treat **all** pigeons in the lofts continuously with a Pre and Probiotic powder combined with Beta-glucan, anti-oxidant, apple cider vinegar and toxin binder over the food daily. Consider adding liquorice extract (Glycyrrhiza uralensis), casein and Bovine colostrum along with the above over the food. Carry on with this until all symptoms have stopped. And then carry on four times per week.

Do not use broad spectrum antibiotics as a routine. The use of Neomycin as a single source antibiotic may be considered as it has been shown to have Rota virus inhibitory effects.

The use of Ivermectin needs to be further examined.

Individual dosing of very sick pigeons may be attempted via tube feeding with electrolytes and highly digestible food mixtures. The danger of overdosing and aspiration needs to be taken int account.

Heavy concomitant infections with Trichomonas may be treated with Ronidazole.

**Summary:**

Urgent attempts must be made to confirm the exact cause of this devastating pigeon disease.

Self-isolation and sanitary practices must be followed at pigeon lofts until the cause and further action has been elucidated.

Preventative measures as described above must be instituted by fanciers ASAP.

Correct treatments based on the correct diagnosis and scientific principles must be followed.

Regards

Dr Ockert Botha (BVSc)

SANPO Veterinarian