

Megabacteriosis

About megabacteriosis

Despite its name, megabacteria is actually a yeast organism called *Macrorhabdus ornithogaster*, or avian gastric yeast. It was originally named for its appearance because it looks like a large chain of merging bacteria.

Routes of transmission – spread to other birds

M. ornithogaster is very easily spread between birds through secretions from regurgitation and crop contents. Healthy birds should be kept separately to affected birds in a separate air space, and good hygiene should be practiced when moving between birds i.e. always deal with healthy birds first, and ensure thorough hand washes after dealing with sick birds. Clothing changes may also be required depending on the situation.

How does it affect birds?

Megabacteria is often a secondary condition resulting from general ill health of the bird caused by something else. This means that birds with a primary condition (ranging from psychological conditions such as stress, to physical ailments) may be more prone to it. Some birds carry the yeast organism without any signs at all, however some infected birds will become very unwell. Unwell birds will display signs of gastrointestinal problems such as vomiting or regurgitation (accompanied by head-flicking), dark green to black faeces (often with undigested seed present) and anorexia. This can also result in weight loss and lethargy or depression.

Does megabacteriosis occur in people?

M. ornithogaster is a pathogen of birds and does not cross species barriers, so does not pose a threat to human health.

Diagnosis

Diagnosis of *M. ornithogaster* is based on an index of clinical suspicion from vomiting, regurgitation of food or general ill health and further investigations. A crop wash (the patient's crop is flushed with fluid and the contents analysed) may be performed initially, and samples may also be taken from your bird's faeces (droppings). The samples are studied under a microscope to confirm the presence or absence of *M. ornithogaster*. A culture may also be performed on the sample to allow targeted effective treatment of the yeast as effectively as possible.

Concurrent tests such as radiographs (x-rays) or blood tests may be necessary to rule in or out any primary causes that may have led to the infection. Any primary causes will need to be treated alongside the megabacteria infection. Your bird may need a general anaesthetic to allow these tests to be performed.

Treatment

Treatment for megabacteria can often be a very difficult and lengthy process. Treatment success cannot be guaranteed and can depend greatly on the bird's compliance and stress levels associated with receiving medication, the compliance of the person administering the medication, as well as the primary cause of the bird's illness, which should be treated if known. A long course of antifungal medication is required and may be needed for many weeks – length of treatment is determined by repeat samples from crop contents or faeces. Your bird's diet may be changed to egg food whilst receiving treatment and for around 6 weeks afterwards if additional nutritional support is required. Affected birds will need regular veterinary checks throughout the recovery period, but once cured, have a good prognosis.