**COCCIDIOSIS**

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This may be a serious disease in Budgies.
There are numerous species of coccidia. Eimeria spp and lsospora spp being common.
A wide variety of bird species may he affected, in particular budgerigars, pigeons and poultry.
The entire coccidia group has basically similar direct life cycles. The bird is infected by ingestion of a sporulated oocyst. These hatch in the intestine and undergo a number of asexual (schizogonous) generations in the small intestine. If the schizonts occur deep within the mucosa they may cause extensive trauma to that mucosa when they rupture.  Intestinal haemorrhage may result.
If, however, they parasitize surface epithelial cells, their effect may be minimal. After undergoing, their schizogonous cycle the parasites differentiate into male and female forms (micro and macrogarnetocytes respectively) and undergo a sexual (gametocytic) generation. This phase is usually considered to be relatively non- pathogenic. The culmination of the sexual cycle is the production of oocysts which are passed in the faeces, usually in the non-sporulated form. Exposure to a warm moist environment facilitates development of the oocyst to its infective form.

Coccidial oocysts have been identified in the faeces of a wide variety of birds. Each species of coccidia is generally regarded as being a fairly, host specific parasite, and capable of infecting only the species of bird from which it was obtained.

**Clinical signs**
Birds passing oocysts may not have clinical signs, stress may result in disease. Lethargy, weight loss, diarrhoea, dehydration and rapid death are reported. Birds may show "dirty" vents. In pigeons weight loss, poor performance, diarrhoea and deaths, especially in young birds, are recorded.

**Diagnosis**
Based on clinical signs and numbers of oocysts shed. A few oocysts in healthy birds may not indicate a problem, however, treatment may still be indicated (e.g. budgerigars).

**Treatment**
Many birds can carry coccidia and shed oocysts without any indication of disease. Overcrowding and concurrent disease can cause a flare up of disease, requiring treatment. Anti-coccidial drugs can be used to treat infections, and in some cases can be used as coccidistats if disease flares up as soon as treatment finishes. Baycox (Bayer), Coccivet (Vetafarm), Toltro (Agrotech Australia Pty Ltd) are all effective. Trimsul (All Farm Pty Ltd) is also very useful.
**Control**Thorough cleaning, maintaining dry conditions, preventing food and water containers being fouled, must be paramount at all times.
In thoroughly cleaned aviaries, large numbers of infected oocysts will not accumulate. If conditions are maintained as dry as possible, sporulation of oocysts to their infective form is minimized.
The avoidance of fouled food and water containers ensures that birds will ingest only a minimal number of oocysts.
It is impossible to prevent exposure of birds to coccidia.
Continuous infection with small numbers of oocysts results in a state of immunity. (This does not apply to budgies in an aviary situation).
Maintenance of such an immune state should be the aim. However, debilitation by other diseases or stress, as well as infection by large numbers of infective oocysts, may breakdown such immunity, and result in disease.

Strategic treatments may prevent outbreaks <e.g.: before breeding, after fledgling, after rain or high humidity>
Strict quarantining of **ALL** newly acquired birds is also very important.         Minimum quarantine period is 6 weeks, and the quarantine facility should be separate from the main aviary, cleaning and feeding should be done ***last each day***to avoid cross infection. Separate feeding and water containers should he used.