

## **ENCEPHALITOOZON CUNICULI**

### **WHAT IS ENCEPHALITOOZON CUNICULI?**

*E. cuniculi* is a small pathogen that is spread in urine and affects primarily the nervous system (brain and spinal cord), heart, eyes and kidneys. The disease is very common in the pet rabbit population and can be carried by other animals including wild rabbits. However, in a recent study very few of them are infected with the disease.

### **WHAT SIGNS WILL MY RABBIT SHOW WITH E. CUNICULI?**

Back leg weakness and paralysis is a result of the swelling surrounding the *E. cuniculi* causing destruction of the nervous tissue. Other signs commonly seen with this disease include a head tilt, fitting, loss of balance, tremors, kidney failure and bladder weakness. Unfortunately, once the rabbit develops severe clinical signs this can lead to death. Signs of kidney failure may include increased thirst, increased urination, weight loss and decreased appetite.

The *E. cuniculi* can infect the eyes of un-born rabbits that are infected whilst in the womb. This may cause destruction of the lens and eye later in life (commonly seen in rabbits from 6 months to 2 years). Medical treatment can be effective in saving the eye if this is carried out early enough. Otherwise surgery may be required. The rabbit may develop a cloudy lens and cataract. Then the eye may become red and swollen.

### **HOW CAN MY RABBIT BE TESTED FOR IT?**

#### **Blood test:**

A blood test can be carried out to measure antibodies that are produced by the rabbit if it has been exposed to the disease at some stage in its life. Over 50% of healthy rabbits were found to have antibodies to this pathogen in a study carried out, but different antibodies will be produced at different stages of infection. Sometimes a repeat blood sample may be necessary to confirm if this is a current active infection.

#### **Urine and fecal testing:**

There is also a test that can determine if your rabbit is shedding *E. Cuniculi* in its urine or faeces. Most of the spores are shed in the first 3 months after the rabbit has been infected, but it may be shed intermittently after that. We recommend urine and fecal samples are collected for 3 days and sent to the laboratory. The organism is no longer present in urine or faeces once treatment is started.



### **WHAT TREATMENT IS AVAILABLE FOR THIS CONDITION?**

Unfortunately, at this stage we can only support rabbits with the condition, because at present there is no specific treatment that will reverse the damage caused by the presence of the *E. cuniculi*.

Medication (fenbendazole) can slow or halt the rate of multiplication of the *E. cuniculi* within the body.

We can also offer a variety of supportive care and medication to support the signs of bladder problems or nerve disorders.

### **HOW CAN I PREVENT MY RABBIT FROM GETTING E. CUNICULI?**

If you have concerns, we recommend rabbits that have been recently acquired (purchased or rescued) can receive a single course of fenbendazole for 4 weeks by mouth or on the pellet part of the diet. If your rabbit has *E. cuniculi* it will kill the pathogen before it causes further damage and may prevent clinical signs developing. There is no lasting effect, so if your rabbit comes into contact with the pathogen it can be at risk of disease. Hygiene is also important as the pathogen is easily killed with contact for only 30 seconds with 1-10% bleach.

