

#### **TOXOPLASMOSIS**

#### Introduction

Toxoplasmosis is an infection caused by a tiny parasite, *Toxoplasma gondii*, which is found in most animals and birds. It is also often present in garden soil and on fresh vegetables. Sooner or later one person in two will pick up a Toxoplasma infection – probably without realising it, as the infection has similar symptoms to a mild 'flu-like illness. Toxoplasmosis is not usually dangerous to a healthy adult or child. However, if a woman catches toxoplasmosis for the first time while she is pregnant, there is a risk to the health of her unborn child. Toxoplasmosis is not to be confused with Toxocara, a roundworm found in cats and dogs. Both are treatable and preventable in the pet animal.

There is no reason to panic and banish the cat from the household with a mother-to-be. Toxoplasmosis has been around for a very long time, and as you will note, cats are only one of the sources. You can happily continue to handle your cat as usual. However, cats can excrete Toxoplasma in their faeces if they pick up an infection from eating wild birds, mice or raw meat, so it is important to take relevant precautions. The excretion of Toxoplasma is for a few weeks following their first exposure to the organism, after which they should develop immunity.

### What is Toxoplasmosis?

Toxoplasma gondii is a microscopic single cell organism, which can be found in meat, unpasteurised goat's milk, soil and cat faeces. The parasite can infect most birds and warm-blooded animals worldwide, including humans.

# Source of Infections in Cats

The organism completes its sexual cycle in the gut of members of the cat family. Following infection through eating birds, mice or other raw meat, the cat sheds infectious faeces for about 14 days and will not normally be a



source of infection again. Sick cats may re-shed infected faeces. Cats are the only animals that can have infected faeces.

Toxoplasmosis is caught by swallowing anything infected with the parasite. Soil where cats have defecated may remain infectious for up to 18 months, so farm animals become infected with toxoplasmosis through grazing on contaminated land or eating feed contaminated by cats.

### **Toxoplasmosis and Humans**

Human infection can occur through eating the raw or undercooked meat of an infected animal (thorough cooking destroys the organism as does freezing to –22°C) or accidentally swallowing soil, for example when gardening or eating unwashed, uncooked fruit and vegetables. Undercooked meat has been shown to be a significant source of infection.

The organism has been detected in goat's milk, so unpasteurised goat's milk and products are a possible source. Toxoplasmosis is a significant cause of abortion in sheep and there may be a risk of toxoplasmosis from handling lambing ewes or newborn lambs.

Toxoplasmosis is rarely dangerous to a healthy adult or child. Many people do not even know they have had the infection as they might have mild 'flu-like symptoms or no symptoms at all. It is generally accepted that once a person has had toxoplasmosis, the infection becomes dormant and lifelong immunity is established.

#### Treatment in Humans

If a woman contracts toxoplasmosis in pregnancy, she can be treated with a specific antibiotic. Studies suggest that this drug reduces the risk of foetal infection by 60-70%. If the baby is found to be infected then two antibiotics plus folinic acid are used to help limit foetal damage. These drugs can also be used to treat an infected newborn for the first year of life.



Antibiotics and steroids are sometimes used in the treatment of eye damage and antibiotics are occasionally used in the treatment of acute acquired toxoplasmosis. All treatment is given after consultation between the Toxoplasma Reference Unit and the relevant clinician.

## Prevention of Toxoplasmosis in Pregnant Women

Every mother-to-be should take a few simple precautions during pregnancy:

- Only eat meat which has been cooked thoroughly right through not just brown on the outside but on the inside too, with no trace of pinkness
- Observe good refrigerator hygiene. It is essential to keep raw meat at the bottom of the fridge
- · Avoid raw cured meat such as parma ham
- Feed cats a good quality commercial cat food. Do not feed raw or undercooked meat. Discourage cats from hunting e.g. by keeping them indoors at night.
- Always wash your hands before and after preparing raw meat and before eating or handling other foods. Also wash the cooking utensils and chopping boards you have used
- Wash all fruit and vegetables thoroughly to remove all traces of soil and other potential contaminants
- Avoid unpasteurised goat's and sheep's milk and their products
- Always wear rubber gloves when gardening and store these gloves separately – preferably in the garden shed – from the ones you use for housework and washing up. Remember to check them first for holes and tears
- Avoid emptying dirty cat litter trays yourself but if you have to, always wear rubber or polythene gloves. Make sure both faeces and trays are emptied at least daily. Toxplasma faeces are not infective for at least 24 hours after they have been deposited so, if the trays are emptied, disinfected and thoroughly washed once a day, the risks are reduced to an absolute minimum.



#### Conclusion

On average, one in two people will pick up toxoplasmosis during their lifetime, but it is much more likely to come from a food or food-related source than from a cat. No-one lives in a totally germ-free environment so basic hygiene and cleanliness, starting with meticulous hand-washing will help to eliminate the risk of toxoplasmosis – and many other chance infections.

### Pets are Good for People

Pets provide us with loyalty, companionship, love and affection, as well as the many physical and psychological benefits. The least we can do to repay this is to ensure that we keep them in the best of health. A healthy pet is a happy pet and a happy pet can help us enjoy a much fuller and more rewarding life.

- ends -

## For further information, please contact the Pet Health Council on:

Telephone: 020 7379 6545

Email: enquiries@pethealthcouncil.co.uk

Website: www.pethealthcouncil.co.uk