Ovine Chlamydiosis

Background Information

Ovine chlamydiosis is a bacterial disease acquired from infected sheep or goats. It causes abortion in sheep and goats (known as enzootic abortion in ewes (EAE) or ovine enzootic abortion (OEA)). If infected, in most humans it leads to a mild flu-like disease, but in pregnant women it can cause a severe life-threatening disease in the mother and lead to stillbirth or miscarriage of the unborn child.

Organism

*Chlamydophila abortus* (previously known as *Chlamydia psittaci)*

Incidence and Transmission

*Chlamydophila abortus* infections are the most common cause of abortions in sheep in the UK. However, ovine chlamydiosis is very rare in humans in the UK. It is generally only seen in people who have very close contact with sheep or goats.

Infected sheep and goats often have no symptoms and the only sign of disease is the birth of weak or stillborn lambs in the last 2–3 weeks of pregnancy. The bacteria infect the uterus and are present in the afterbirth of infected animals. Humans are infected by inhaling infected material present in aerosols or dust. The risk of infection is greater indoors. Infection can also occur from contact with contaminated clothing or boots.

It is not thought to be spread from person to person.

A live vaccine is available which can prevent infection in sheep and goats. However, people can become infected if they have close contact with recently vaccinated animals or have an inoculation injury.

Occupations and processes where ovine chlamydiosis may present a risk

Occupational exposure to *Chlamydophila abortus* may occur in those who:

- are in contact with infected animals – particularly during lambing;
- work with materials or products from infected animals – particularly the afterbirth from infected sheep and goats;
- are in contact with contaminated clothing; or
- are in contact with recently vaccinated animals or have a vaccine inoculation injury.

Occupations where there may be a risk of occupationally acquired ovine chlamydiosis include:

- farmers – particularly sheep and goat farmers during lambing;
• veterinary surgeons – particularly delivering lambs or inoculation injury during animal vaccinations; and
• abattoir workers, meat processing plant workers and butchers.

Clinical Information

The incubation period is generally 5–14 days.

Infection may result in no symptoms or there may be flu-like symptoms, including headache, fever and a non-productive cough and occasionally there may be other symptoms including photophobia, vomiting and sore throat.

Anyone with severe symptoms who has been in close contact with sheep or goats should seek medical attention. Antibiotic treatment is available.

The disease is very serious in pregnant women, particularly in the second half of the pregnancy. The disease tends to affect multiple organs, including the liver and kidneys. Stillbirth or miscarriage tends to occur 3–8 days after the onset of symptoms, although if the pregnancy survives there is long term risk to the child.

Any woman who has symptoms, has been in close contact with sheep and goats and who is or thinks they may be pregnant should seek immediate medical attention. Antibiotic treatment is available but is not always effective in severe cases.

Control

The following control measures reduce the risk of infection:

• Pregnant women should avoid contact with lambing sheep.
• Pregnant women should avoid contact with the live vaccine available for sheep or contact with recently vaccinated sheep.
• Animal birth products should be disposed of appropriately.
• There is a vaccine available for sheep.
• Good occupational hygiene practices should be followed, especially washing with warm water and soap.
• A suitable disinfectant should be used.
• Suitable protective clothing should be worn.

Further Information

Public Health England – Chlamydophila abortus

Defra – Advice to pregnant women during lambing