

Diagnosis with Public Clinical Prevention of Brucellosis

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Introduction

The disease is caused by various bacteria of the family Brucella, which tend to infect a specific animal species. However, most species of Brucella are able to infect other animal species as well. It affects cattle, swine, sheep and goats, camels, equines, and dogs. It may also infect other ruminants, some marine mammals and humans [1]. The disease in animals is characterized by abortions or reproductive failure. While animals typically recover, and will be able to have live offspring following the initial abortion, they may continue to shed the bacteria. Brucellosis is typically spread when the animal aborts or gives birth. High levels of bacteria are found in the birth fluids of an infected animal. The bacteria can survive outside the animal in the environment for several months, particularly in cool moist conditions. They remain infectious to other animals which become infected by ingesting the bacteria [2]. The bacteria also colonize the udder and contaminate the milk. Brucellosis is an important disease in wildlife, infecting feral pigs, bison, elk and European hares. The reservoir of disease in wildlife complicates eradication efforts. Symptoms in humans include intermittent or irregular fever, headache, weakness, profuse sweating, chills, weight loss and general aching. Infections of organs including the liver and spleen may also occur. Veterinarians, farmers, and abattoir workers are vulnerable to infection as they handle infected animals and aborted foetus or placenta [3]. Brucellosis is one of the most easily acquired laboratory infections, and strict safety precautions should be observed when handling cultures and heavily infected samples, such as products of abortion. In horses, it causes a condition called fistulous withers or poll evil, a swelling of the neck or back. Infected pregnant mares may either abort or give birth to weak and vulnerable foals. As the disease becomes closer to being eliminated, a test and stamping-out program is required to completely eliminate it.

Discussion

Human brucellosis is best prevented by controlling the infection in

animals. Pasteurisation of milk from infected animals was an important way to reduce infection in humans. Surveillance using serological tests, as well as tests on milk like the milk ring test, can be used for screening and play an important role in campaigns to eliminate the disease [4]. As well individual animal testing both for trade and for disease control purposes is practiced. The importance of brucellosis is that it causes poor reproductive performance, due to abortions, infertility, and retention of placenta, stillbirth or birth of weak offspring. It results in huge economic losses to dairy, sheep, goat and pig farmers. Brucellosis is a zoonosis highly infectious for humans causing a disease often called undulant fever or Malta fever, since it was first recognised in Malta during the 1850s. Brucellosis is a highly infectious zoonosis for humans [5]. The spread to humans most often occurs by drinking raw milk from infected animals. It causes a severe debilitating disease in people.

Conclusion

Veterinarians, farmers, and abattoir workers are vulnerable to infection as they handle infected animals and aborted foetuses or placentae. Human brucellosis is best prevented by controlling the infection in animals. Pasteurisation of milk from infected animals is an important way to reduce infection in humans.

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