Bovine Trichomoniasis

Bovine trichomoniasis (trich) is a venereal disease caused by the protozoan *Tritrichomonas foetus*. Because trich has no visible symptoms in bulls and few if any symptoms in cows and heifers, it is best to prevent exposure rather than try to control or eradicate the disease.

The primary production and economic impact of trich is on cows because it causes infertility and abortions and often extends the breeding/calving season. The infection is transmitted sexually, not through the environment. Bovine trichomoniasis is not transmitted to people.

Transmission

Bulls become infected by breeding infected cows. The protozoa live in microscopic folds on the surface of the bull’s penis and internal prepuce.

Cows and heifers become infected when they are bred to infected bulls. The protozoa live in the vagina, cervix, uterus, placenta, and fetus. Most infected cows will rid themselves of the infection if they receive an extended period of sexual rest (120 to 150 days). However, the immunity is short-lived so they may become reinfected.
Prevention

To avoid this disease, practice sound biosecurity principles:

- Maintain good fences to control the movement and commingling of cattle.
- Buy only virgin bulls and heifers, preferably from the original breeder.
- Keep the bull battery as young as possible. Older bulls harbor the protozoa more easily.
- Test purchased non-virgin bulls before addition to the herd.
- Consider artificial insemination as a way to avoid introducing trich. Reputable semen companies repeatedly test bulls for many diseases, including trich, to ensure that the semen is not contaminated.
- Implement a defined breeding season. Trich may go undetected in a continuous mating system.
- Identify herd sires, and record the breeding group each bull is exposed to.
- Consider keeping bulls in the same breeding groups for several breeding seasons. Should a false negative (infected) bull be in the battery, the infection would not be spread to uninfected groups.
- To avoid infecting many bulls in one season, consider maintaining small sire groups.
- Avoid buying open or short-bred (less than 120 days) cows.
- Do not commingle replacement cows with the existing herd during the first breeding season.

Control

Infected bulls must be moved to slaughter because there is no effective treatment for them. The remaining bulls in the herd must be held and isolated from female cattle until tested negative. Infected cows must be sexually rested for a minimum of 4 months.

Reference


Questions

1. Explain the measures taken to prevent introduction of bovine trichomoniasis in cow-calf operations.
2. Explain the measures taken to control bovine trichomoniasis in cow-calf herd with multiple bulls when a bull and several cows are found to be infected.

Activity

1. Observe a veterinarian performing a test on a bull for detection of trichomoniasis.