Arthritis and polyarthritis

Key messages
- Arthritis in sheep can have significant economic impacts at slaughter through carcase condemnation.
- Arthritis (and polyarthritis) in sheep causes inflammation of the joints (often in the legs).
- Infection usually occurs in lambs when bacteria enter through broken skin.
- Carcases containing arthritis found during processing can be partially or completely condemned.

What is arthritis?
Arthritis in sheep is an inflammation of the joints (usually in the legs). When multiple joints are affected, the condition is referred to as polyarthritis.

Most cases of arthritis start in lambs, before weaning, as a result of bacteria entering the body via broken skin. The bacteria circulate in the bloodstream and eventually settle and multiply in the joints.

Economic impacts
Arthritis (and polyarthritis) can reduce wool and meat production and in severe cases cause deaths. Arthritic carcases are partially or totally condemned.

Infection and diagnosis
Several different types of bacteria cause arthritis in sheep. Entry of bacteria of can occur:
- at or soon after birth through the umbilical cord
- through ear/tail/castration (marking) wounds
- through mulesing or shearing wounds
- through wounds as a result of other husbandry procedures, or via dog bites.

Affected joints become swollen and hot and the sheep become lame. This lameness can become permanent due to the damage caused to the joint surface and capsule. The knee, elbow, hock and stifl e joints are commonly affected.

Identification of the specific bacteria requires early laboratory examination of the joint fluid to test for the presence of bacteria.

Treatment and prevention
- Antibiotics can be effective if given early (when the infection has been present for less than two weeks), before extensive damage occurs to the joints.
- Effective hygiene at lambing and lamb marking includes rotating lambing paddocks, marking lambs in temporary yards in a grassy paddock and using clean, sharp knives and disinfectant.
- Minimise risk of infection by reducing stress on the lamb, which can be caused by bad weather, mustering and separation from mothers.
- Some bacteria, such as erysipelas, can be prevented through vaccination.

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