VACCINATION LESIONS

KEY MESSAGES

1. Vaccination lesions are scars or abscesses at vaccine injection sites.
2. The incidence of vaccination lesions increases with poor technique and hygiene.
3. Vaccination lesions need to be trimmed at the abattoir, with the losses dependent on size and location of the reaction.

What are Vaccination Lesions?

Vaccines are essential to assist in preventing major production diseases like ovine Johne's disease (OJD), cheesy gland and clostridial diseases. Vaccination reactions are normal with some vaccines like Gudair®, however vaccination lesions can be caused by incorrect technique, poor hygiene or using contaminated vaccine. The injection of a small amount of bacteria or dirt with the vaccine results in infection which can lead to an abscess forming.

Disease on farm

The prevalence of vaccination lesions varies between farms and is largely dependent on the injection technique. An abscess may develop initially as a soft swelling progressing to a hard, reddened area with wool loss around the swelling occurring in some instances. The abscess may burst releasing pus which is likely to get struck depending on the time of year.

How does it occur?

Vaccines are designed to be given under the skin, not in the skin or muscle or around the spinal cord. The chance of an injection reaction increases in dusty yards, with wet sheep and when using blunt or dirty needles.

Disease picture at the abattoir

Vaccine lesions, which are relatively common, are trimmed from the carcass. This has the least impact if vaccination is high up on the neck, behind the ear. Reactions associated with the spine or leg muscle result in more significant, costly trimming and loss of carcass/dressed weight.

Image provided by Peter Windsor from the OLIVER database of the Faculty of Veterinary Science, University of Sydney

Treatment

It is possible to treat individually affected animals but this is seldom economically viable. Discharging abscess can be drained or flushed and cleaned and protected against fly strike. Prevention is the focus of control with good hygiene and correct technique.

Prevention

Correct vaccination technique is important. Ensure everyone who is vaccinating is using the correct technique. Assuming that a contractor or employee is using the correct technique can lead to disasters.

- Always read instructions and follow the manufacturer's instruction.
- Inject under the skin. Most vaccinations, with the exception of the scabby mouth vaccine, are designed to be injected under the skin (subcutaneous), not into the skin or into the muscle. The injection should be easy, if there is resistance, this may indicate the needle tip is not in the space beneath the skin but in the muscle or in the skin.
- Correct length needle. It is essential to use the correct length needle for the job. The recommended needle length is ¼" or 6mm but it is best to check the manufacturers instruction.
- The correct position. Ideally, vaccinations should be given high up on the neck, behind the ear. If a reaction was to occur it will be trimmed from a low value cut.
- Inject into dry clean skin using clean, sharp needles. Always avoid injecting wet sheep if possible.
- Use sharp needles. All needles go blunt so replace needles frequently and avoid contact with dirt. A vaccinator gun holster can be used to avoid needles ending up in the dirt and reduces the chance of self-injection.
- Clean up. When finished, ensure vaccination equipment is cleaned and sterilized.

Self-injection is quite common and can be dangerous especially with the OJD vaccine, Gudair®. Guarded, "safe" vaccinating guns should be used, to reduce the chance of self-injection.

If used and kept under the correct conditions, vaccine pouches can usually be sealed and used again for a limited time. Read the label or product insert carefully and follow the manufacturer's recommendations.