

Ring and Remove with Numnuts

Numnuts Combined with Mulsing

Ring and Remove Method

If the producer wishes to remove the tail straight after mulsing rather than having a dying tail rubbing against the bare mulsing wound for 10-14days, he can use the Numnuts + 'Ring and Remove' method as follows:-

1. Use the Numnuts applicator to place a ring on the tail and to inject NumOcaine at the first station on the carousel (giving pre-operative pain relief).
2. Carry out other lamb marking procedures i.e. Numnuts castration, vaccination, ear tags etc.
3. Do the Mulesing operation and apply Tri-Solfen to the wound.
4. Last step – remove tail with a Hot Knife 20mm distal (south) of the ring, leaving the ring in place.

By providing NumOcaine at the first station and the Hot Knife at the final station on the carousel, the local anaesthetic should have 2 or 3 minutes to act before the searing pain of the hot knife is created i.e. *pre-operative* pain relief is provided.

Tri-Solfen provides *post-operative* anaesthesia, so if Numnuts isn't used the lamb must go through the shock of the hot knife before the Tri-Solfen kicks in.

Because it acts as a tourniquet there are advantages of leaving the ring in place:-

1. If the hot knife doesn't cauterise properly (a common problem) the ring prevents blood-loss.
2. The ring prevents infection tracking back up the tail e.g if the lamb rolls in mud
3. Some farmers claim the ring provides a nicer tail finish than the Hot Knife

Using Numnuts and Hot Knife together incurs a small-time penalty. Yet once in the swing of things it doesn't slow production but importantly provides best practice pain relief and infection prevention.

Why?

Numnuts has been developed to be a 'blood free' lamb marking procedure. NumOcaine® is injected directly where the ring is applied to the tail and scrotum. The rings disrupt blood flow to the tail and testicles and acute pain develops around 2 – 5 minutes later and lasts 60-90 minutes.

Local anaesthetic is the best drug for reducing this acute pain and Numnuts could be regarded as a pre-operative pain relief method for subsequent Mulsing or Hot Knifing.

Tri-Solfen contains a post-operative anaesthetic. It requires an open wound with a blood supply to carry the anaesthetic to the nerves that are firing.

The Numnuts development team chose rings as their preferred docking tail method because:-

1. They are blood free.
2. Castration and tail docking with rings provide for a more acceptable image of the red meat and wool industry than the use of a knife, Hot Knife, shears or Burdizzo (think smartphones on farms).
3. Rings are a highly effective, reliable and low cost. Little skill is needed to apply them.

Analgesics registered for sheep such as Metacam and Buccalgesic are useful for chronic pain, yet due to their slower onset, they do little for the acute, thrashing, ischemic pain seen in the first 45mins post ring application.

Very few commercial sheep operations could justify administering analgesics 15-20mins before marking as this would require expensive double handling. Thus, where possible farmers should provide 'multimodal' pain relief i.e. Numnuts + Analgesic in the cradle, to cover both the acute and chronic pain phases.

Illustration showing Anaesthetics and Analgesics alleviating the Ischemic Pain from rubber ring over time.

