TECHNICAL NOTE TN679 / January 2025

SRUC

Castration and Tail Docking of Lambs

Summary

Castration and tail docking are often performed as routine husbandry procedures, to prevent unwanted pregnancies, and flystrike in sheep. These procedures are painful, and farmers should consider whether they are necessary. This document discusses,

- **The methods of castration and tail docking**
- **Recently developed tools which became available since the first edition of this technical note**
- **The welfare code recommendations relevant to the methods**
- **The legislation covering the techniques**

Introduction

The Animal Welfare Committee (AWC) report on tail docking and castration of lambs (2022) recommends that effective anaesthesia and analgesia should be used routinely for castration and tail docking of lambs, when the methods used are likely to cause significant pain. Any decisions about pain management and its relief should be made in discussions with a veterinary surgeon. In addition, farmers should consider whether castration is necessary for lambs destined for the prime market, prior to December (8-9 months old) when pregnancy is not a major concern, or if ram lambs can be managed separately from ewe lambs to prevent ram lambs using their energy for tupping, rather than growing.

New equipment has been developed and become more widely available in recent years with the intention of providing simple systems which reduce the pain experienced by lambs when castration or tail docking is performed.

Photo by Marion McMillan, (VIO, SRUC Vet Services)

SAC CONSULTING
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Castration

There are two main methods of castration in ram lambs available to farmers,

1) **Rubber ring**
2) **Clamping**

Rubber Ring

Figure 1: Traditional rubber rings
K Williams (SAC Consulting)

The traditional rubber ring or elastrator is applied to the scrotum, above the descended testes with care taken not to cover the lambs' rudimentary teats. The tight ring disrupts blood supply to the entire scrotum, resulting in gradual expiry of nerves and other tissues which eventually drop off. Lambs castrated by this method show marked pain responses for more than an hour after the rings are placed.

Figure 2: Numnuts

A modern combination ring applicator and injector device has been designed called, Numnuts. By dispensing local anaesthetic whilst fitting a ring this is intended to give short-term pain relief following tail docking or castration. However, studies indicate that lambs may still experience longer term pain following castration with the Numnuts method, and so additional analgesia may also be advisable. The manufacturer does not recommend using Numnuts in lambs less than 7 days old, as very young lambs may be too small for consistent and reliable application of the device.

Clamping

Figure 3: Burdizzo

Figure 4: ClipFitter
B Eadie

There are two methods of castration through clamping. This includes the Burdizzo or side crusher, and a new method called the ClipFitter.

These clamping instruments are used to desensitise the nerves and crush the spermatic cords, causing immediate irreversible damage and offering significant pain relief resulting in behaviour in lambs that is indistinguishable from uncastrated lambs within five minutes.

With the burdizzo, each cord is clamped separately. The ClipFitter clamps across the entire scrotum, the tissue dies, and the scrotum is shed (as with the rubber ring). Castration with clamping devices causes the lamb to be infertile and pain responses are rapidly reduced to normal. Because it clamps across the entire scrotum rather than having to clamp each cord separately, the Clipfitter may be easier to use than the Burdizzo. However, both techniques tend to be harder to perform on small lambs.

Farmers considering the use of new equipment and methods should always seek guidance and training from an experienced operator or their veterinary surgeon.

Whilst the testes can be surgically removed this technique is only permitted by a veterinary surgeon in Scotland. The FAWC report (1994) concluded that surgical castration caused significantly more distress than other methods and their 2008 report noted that research had found that the greatest pain response of all methods occurred with surgical castration. Because of this, surgical castration (i.e. using a knife) of any age of lamb may only be done by a veterinary surgeon (see The Prohibited Procedures on Protected Animals (Exemptions) (Scotland) Regulations 2010).

Welfare Codes Recommendations on Castration

- **Farmers and crofters should consider carefully whether castration is necessary within any particular flock. Castration is unlikely to be necessary where lambs will be finished and sent to slaughter before reaching sexual maturity.**

  The procedure should only be carried out when lambs are likely to be retained after puberty and where it is necessary to avoid welfare problems associated with the management of entire males. Account should be taken not only of the pain and distress caused by castration but also the stress imposed by gathering and handling, and the potential risk of infection.

- **Castration should not be performed on lambs until the ewe/lamb bond has become established.**

- **Castration may only be carried out in strict accordance with the law (see box below). The procedure should be performed by a competent, trained operator. Once a lamb is over three months of age, castration may only be performed by a veterinary surgeon using a suitable anaesthetic.**

The Law – Castration

Please note this guidance applies in Scotland only, the legislation differs in other countries.

Under the Protection of Animals (Anaesthetics) Act 1954, it is an offence to castrate lambs which have reached three months of age without the use of an anaesthetic. Furthermore, the use of a rubber rings, or other device, to restrict the flow of blood to the scrotum or tail, is only permitted without an anaesthetic if the device is applied during the first week of life.

Under the Veterinary Surgeons Act 1966, only a veterinary surgeon may castrate lambs which have reached the age of three months.

Under the Prohibited Procedures on Protected Animals (Exemptions) (Scotland) Regulations 2010, surgical castration of any age of lambs may only be done by a veterinary surgeon. Clamping methods such as burdizzo and clip castration are allowed in Scotland on lambs up to three months of age since when performed effectively, significant relief from pain occurs within minutes of the technique being performed.

Age of lamb	Rubber Ring / Numnuts	Burdizzo / ClipFitter	Surgical
Under 7 days old	✓*	✓	Vet only
Between 7 days and 3 months	With anaesthetic only	✓	Vet only
Over 3 months	X	X	Vet only

Table 1: Castration – The Law

* The manufacturer does not recommend the use of Numnuts in lambs under 7 days of age.

Tail Docking

Methods for tail docking include,

1) **Rubber ring or elastrator**
2) **Cautery e.g. docking with a hot iron which cuts and cauterises**
3) **Applying a clip**

Cutting the tail off with a knife is illegal. This "surgical docking" causes bleeding which may be excessive if not controlled and risks infection and prolonged wound healing, so is not permitted by farmers. Surgical docking may only be carried out by a veterinary surgeon (see the Prohibited Procedures on Protected Animals (Exceptions) (Scotland) Regulations 2010).

Rubber Ring or Elastrator

This is a tool for bloodless docking. It is used to apply a rubber ring to the tail. The ring cuts off blood supply to the tail, eventually causing it to shrivel and fall off. Using this method, as with castration, lambs show marked pain responses. The application of rubber rings on lambs older than seven days old is permitted but only in combination with provision of an anaesthetic. Using an applicator that simultaneously applies a ring and administers an anaesthetic (e.g. Numnuts) may help reduce the pain of tail docking.

Hot Iron

A tradition hot iron or an electric docking iron which cuts and cauterizes the tail simultaneously, are permitted for use by farmers. Evidence indicates that the pain response is like that associated with the rubber ring method. As the tail is removed at the time of the operation, the AWC takes the view that this method is preferable to the rubber ring method for older lambs with larger tails.

Clip

Use of a clip which is fitted to dock tails with a special applicator (e.g. ClipFitter) is permitted without the use of anaesthetic in Scotland in lambs up to three months of age. The procedure is less painful than when a rubber ring/elastrator is used, and tails are shed faster. A bloodless castrator such as a burdizzo has a crushing, but not cutting mechanism, and a knife is used to cut off the tail. This method of using a burdizzo is not legal under the Prohibited Procedures on Protected Animals (Exceptions) (Scotland) Regulations 2010).

Figure 5: Clipfitter on testicles and being applied to the tail (B Eadie)

Welfare Code Recommendations on Tail Docking

Farmers and crofters should consider carefully whether tail docking within a particular flock is necessary. Tail docking may be carried out only if failure to do so would lead to subsequent welfare problems because of dirty tails and potential fly strike.

Tail docking must be carried out only in strict accordance with the law (see box below). The procedure should be performed by a competent, trained operator.

The Law – tail docking

Please note this guidance applies in Scotland only, the legislation differs in other countries. The Prohibited Procedures on Protected Animals (Exceptions) (Scotland) Regulations 2010 allow tail docking by producers only if crushing tissues using rubber rings or other device, or using a hot iron. Surgical docking of lambs (of any age) may only be carried out by a veterinary surgeon.

Sufficient tail must be retained to cover the vulva in the case of female sheep and the anus in the case of males.

Age of lamb	Rubber Ring / Numnuts	ClipFitter	Hot Iron if cuts & cauterizes	Surgical
Under 7 days old	✓*	✓	✓	Vet only
Between 7 days and 3 months	With anaesthetic only	✓	✓	Vet only
Over 3 months	X	X	X	Vet only

Table 2: Tail Docking – The Law
* The manufacturer does not recommend the use of Numnuts in lambs under 7 days of age.

Further Information

Scottish Government Codes of Practice for the Welfare of Sheep –
Health - Welfare of sheep: code of practice - gov.scot (www.gov.scot)

Farm Advisory Service - **FAS TV Series 4 Ep2 - Tail Docking & Castration in Lambs (youtube.com)**

Robinson, A & Eadie, B 2024, 'Correct application crucial for safety of ClipFitter device', Veterinary Record, vol. 194, no. 12, pp. 482-483. - **https://doi.org/10.1002/vetr.4424**

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