# Lambing

# Lambing Part 2 - Lambing Problems

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## Incomplete cervical dilation (ringwomb)

The true incidence of ringwomb is difficult to determine because in most situations the onset of first stage labour has not been noted, especially in overcrowded, housed flocks and extensive pasture-managed systems. It is probable that some dystocia cases are classified as ringwomb but merely represent over-zealous assistance during early first stage labour.

A working definition of ringwomb could be "the presence of an incompletely dilated cervix more than six hours after first appearance of the foetal membranes (allanto-chorion) at the vulva". Typically, the entrance to the womb is only 3 to 5 cm in diameter allowing passage of only two or three **fingers**.

If no progress has been made in 10 to 15 minutes, continued manual interference will simply lead to contamination of the foetal extremities, posterior reproductive tract and uterus with an attendant risk of contamination of the peritoneal cavity when the lamb is delivered during the corrective caesarean operation. Various smooth muscle relaxants have been used in ringwomb sheep but there is no compelling evidence that they are effective.

# Head and only one front leg presented - leg back



Fig 1: Early detection of a leg back is much easier to correct because the lamb's head is still within the maternal pelvis.

To correct this situation, the retained front leg lying alongside the lamb's chest must be brought forwardbefore any traction is applied to the lamb even in the case of a multiple litter (twins or triplets). Correction of this malposture involves pushing the lamb's head back within the ewe's pelvis, flexing the

shoulder, elbow, and carpal joints of the lamb's retained leg then carefully extending the carpus and elbow joints in that order which presents the foot at the pelvic inlet. Gentle traction applied to both forelegs should result in delivery of the lamb within 30 to 60 seconds.



Fig 2: Leg back (early intervention) - the retained (left) front leg lies alongside the lamb's chest and must be brought forward before any traction is applied to the lamb.



Fig 3: Right leg back (late intervention) - the lamb is dry and its head is beginning to swell.



Fig 4: The lamb's head has been well lubricated and pushed back into the ewe's posterior reproductive tract using steady pressure to allow the retained leg to be brought forward.

## **Bilateral shoulder flexion (Hung lamb)**

The head is presented through the vulva but both forelegs are retained alongside the chest.



Figs 5 & 6: A hung lamb can easily be missed on casual inspection of the lambing group.



Correction of this malposture involves gentle repulsion of the lamb's head into the vagina using plenty of obstetrical lubricant. The shoulder, elbow, carpal and fetlock joints of one foreleg are flexed in that order, and then carefully extended in the reverse order: fetlock, carpus (knee) and elbow joint in that order which presents the foot at the pelvic inlet.

Repulsion of the lamb's head is greatly facilitated after sacrococcygeal extradural lignocaine injection

by a veterinary surgeon which blocks the reflex abdominal contractions of the ewe. The lamb's head and tongue may remain swollen for a few hours and it is prudent to stomach tube these lambs to ensure that they receive sufficient colostrum before six hours-old, if not sooner.

#### Posterior presentation

First stage labour proceeds normally but there is much reduced straining during second stage labour because the lamb does not become fully engaged within the ewe's pelvis to stimulate the powerful reflex abdominal contractions. These ewes are examined because the ewe has made no progress since first noted in first stage labour 2 to 6 hours previously. Digital examination of the vagina reveals the lamb's hooves facing the roof of the vagina (not the floor) and the hocks can be felt by progressing forward.



Fig 7: Lamb in posterior presentation - the lamb's hooves facing the roof of the vagina (not the floor).

Also you can tell the difference between fore feet and hind feet in the case of two lambs presented simultaneously by the fact that the carpus (knee) and fetlock joints flex in same direction in the fore leg, whereas the hock and fetlock joints flex in opposite directions in the hind leg.



Fig 8: Necropsy reveals trauma to the rib cage at the costochondral (bone/cartilage) junctions in a large singleton lamb delivered in posterior presentation.

Trauma to the rib cage at the costochondral (bone/cartilage) junctions is common in large lambs (especially singletons) delivered in posterior presentation. Fractures of the ribcage can severely impair respiratory function and may cause death. It has also been suggested that lambs which sustain rib fractures during delivery are more prone to respiratory disease/pneumonia.



Fig 9: Necropsy reveals liver rupture and extensive haemorrhage as the cause of death in a Cheviot lamb delivered in posterior presentation.

Excessive traction of lambs in posterior presentation can also cause rupture of the liver with rapid death in those breeds such as the North Country Cheviot and Texel which have a relatively short sternum thus exposing the liver to potential trauma.

# Posterior presentation with bilateral hip extension (breech presentation)

Signs of second stage labour, such as powerful abdominal straining, are not observed when the lamb is in breech presentation because the lamb does not enter the maternal pelvis, rather the lamb's pelvis/tailhead becomes lodged at the pelvic inlet.



Fig 10: Occasionally, the lamb's tail may protrude for an inch or so through the ewe's vulva.

As for ewes with lambs in posterior presentation, these lambing difficulties are detected by diligent shepherds recognising the signs of first stage labour which have not progressed to second stage labour. Sometimes these dystocia cases are not recognised for 24 to 48 hours after the lambs have died and the ewe becomes sick. Indeed, the lambs rapidly become emphysematous (swollen with gas), and may result in death of the ewe in neglected cases.

Correction of a breech presentation involves extending the hips while the distal limb joints (stifle, hock and fetlock joints) are fully flexed to protect the uterus. In this manner a breech presentation is first converted to a posterior presentation and then the lamb is delivered as described above. Singleton lambs are rarely presented as a breech delivery.

Correction of the breech presentation is facilitated by gently repelling the lamb into the body of the uterus. Great care must be taken during extension of the hip joints especially if the uterus is clamped down around the lamb. Large quantities of lubricant squirted into the uterus helps considerably. There is a risk of an unskilled person to rupturing the uterus during these manipulations and if there is any doubt regarding correction of the presentation veterinary assistance must be called. Once again, extradural lignocaine injection administered by a veterinary surgeon facilitates the various manipulations during correction of the breech posture by blocking the powerful abdominal contractions.

# Prolonged second stage labour

Examination should also take place of those ewes which appear to have stopped straining after two or more hours. Reasons for cessation of abdominal straining include fatigue, lamb in either posterior presentation or posterior presentation with bilateral hip extension (breech presentation), simultaneous presentation of two lambs, ewe continually disturbed, or other reasons.

### Simultaneous presentation of two lambs

There are many possible combinations of heads and legs when two lambs are presented simultaneously. It is necessary to identify which leg corresponds to which head by tracing the leg to the shoulder region, and then to the neck and head. Once both legs and head have been correctly identified they should have lambing ropes applied to identify and ease retrieval and the other lamb is gently repelled as traction is applied to the first. Only gentle traction should be necessary to deliver a twin lamb in this situation; if little progress is being made it is essential to check that you have selected the correct anatomy.

## Lateral deviation of head.

Often the lamb is dead. Both feet are presented in pelvis with lateral deviation of head. Lambing ropes are applied to the foetal limbs, limbs and neck are gently repelled and a wire head snare is placed behind the lamb's ears and around the poll. The head is then drawn into the pelvic inlet just after the forefeet enter the pelvis. Plenty of lubrication is needed if the lamb is dead and its fleece is dry.

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