

A new approach to pain management at lamb and calf marking in Australia

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Routine marking to improve flock and herd health and is usually performed at 6-10 weeks after commencement of lambing in wool flocks and 4-6 months after commencement of calving in beef herds. It is laborious for producers, rarely involves veterinarians and is painful for livestock, as pain management is not routinely provided. Procedures include vaccination, ear tagging/notching for identification, castration of most males, tail-docking and mulesing of many wool sheep involving removal of perineal skin to decrease the risk of blowfly strike, plus dehorning of many cattle breeds. Concerns with mulesing compromised the marketing of Australian wool and cessation of mulesing by 2010 was promised, this is now recognised as unrealistic. Breeding sheep less susceptible to flystrike may take decades to achieve in commercial flocks, so topical pain relief at mulesing has now been widely adopted and included in a new national system of vendor declaration on the sale of wool to enable wool buyers to select bales from farms using pain management.

In order to assess pain behaviours following surgical interventions, we modified techniques for testing wound sensitivity using two methods of mechanical sensory testing. Animal behaviour pre- and post- surgery was video recorded and assessed using customized numerical rating scales. We have also studied pre-surgical treatments with xylazine and/or carprofen to enhance the impact of the topical anaesthetic formulation applied at surgery.

Results: We have shown that spray-on topical anaesthesia provides effective pain relief for lamb castration if applied into the scrotum, plus onto the tail wound during tail-docking in sheep (Lomax et al, Aust. Vet. J. 88:67-74, 2010). Extension of this work to calf castration and dehorning and use of pre-surgical treatments will be discussed.

Conclusion: Our research on pain management for marking offers a simple yet significant contribution to improved livestock welfare.