An Intervention Study to Minimise Footrot in Sheep

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Introduction

Footrot

- Caused by *Dichelobacter nodosus* in association with *Fusobacterium necrophorum*
- Major welfare concern costing the UK sheep industry £24 million each year
- Novel hypotheses for management of footrot proposed in 2003


Footrot

Project aims

- To test the hypothesis that rapid treatment of sheep with clinical signs of footrot or interdigital dermatitis reduces the prevalence and incidence of footrot

Materials and Methods

Study design

- Two-year within farm randomised control trial 2005 & 2006
- Sheep stratified by age, body condition and foot inspection and allocated into two paired intervention and control groups
- Paired groups inspected for lameness daily in year one, twice weekly in year two
- Lame sheep with interdigital dermatitis and footrot treated according to intervention or control protocols

Intervention protocol: immediate treatment with parenteral and topical antibiotics

Control protocol: foot trim and topical antibiotic spray within 1 week of being seen lame, parenteral antibiotics in severe cases

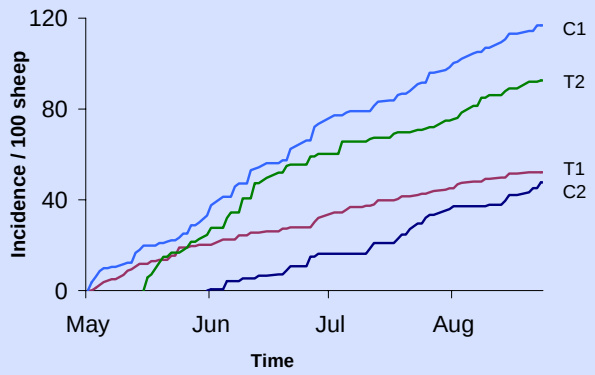
Data collected

- Presence and severity of lameness
- Lesion type and severity, body condition and treatment
- Bi-annual foot inspection

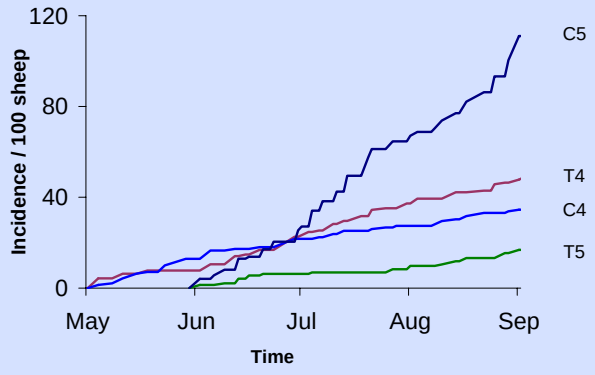
Results

Cumulative incidence of lameness in ewes
lambing to weaning

2005

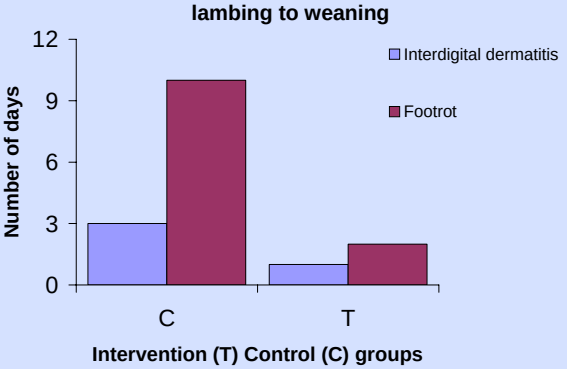


2006



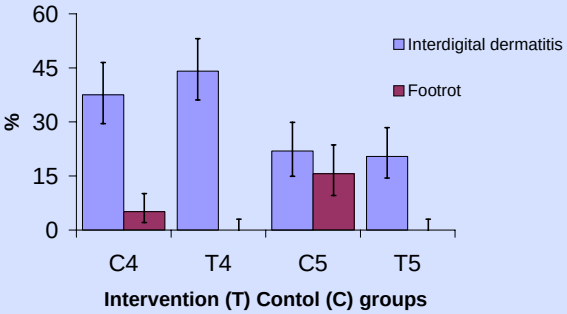
- Initial stratification successful
- Incidence of lameness significantly lower / not significantly different in intervention groups cf. paired control groups

Median time to recovery of lameness in ewes
lambing to weaning



- Time to recovery significantly lower in intervention groups cf. paired control groups

Prevalence of footrot and interdigital dermatitis lesions at final foot inspection



- No footrot lesions in intervention groups at final foot inspection cf. 10% in control groups

Conclusions

Prompt treatment of individual lame sheep with footrot and interdigital dermatitis using parenteral and topical antibiotics significantly reduced the incidence and duration of footrot

Acknowledgements

- Funded by Defra (AW1021)
- Farm management and staff
- Project research staff