



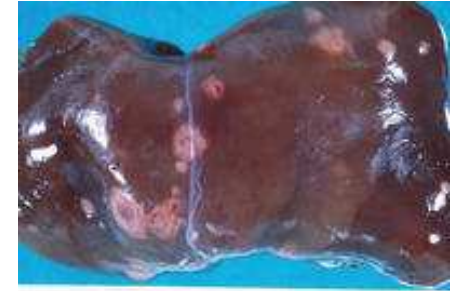
# Campylobacter Vaccine Trial

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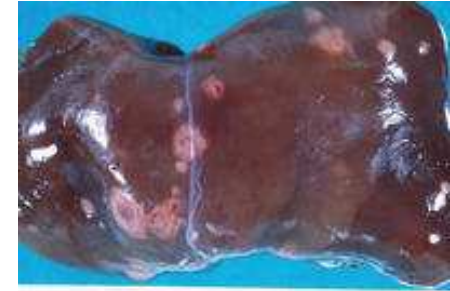
# Background



- *Campylobacter fetus subsp fetus* (vibriosis)
- Abortion in ewes – typically 4-5 mths
- Most common cause of abortion
- Trials in NZ suggest increase lambing % and lamb vigour in “normal” flocks
- Vaccine in Australia – Guardian, now Ovilis C



## Abortion “signs”



- Late pregnancy (last 6 weeks), younger animals - so often “see” it
- Ewes usually fine- occasional metritis
- Placenta opaque
- 25-40% aborted lambs have liver lesions
- Foetal stomach contents, culture from placenta, vaginal discharges





# Alternatives

- Many causes of abortion- need to get it diagnosed
- Toxoplasmosis –strawberry cotyledons
- Listeria
- Etc etc





# Features of Campylobacteriosis

- Abortions occur 7 to 25 days post infection
- Often associated with mob stocking or hand feeding
- Better survival of organism  $<20^{\circ}\text{C}$  –winter
- Ingestion
- Intestinal carriers 18 months
- Ewes at risk at day 105





# Control

- Reducing stock density
- Remove infected sheep?
- Watch mechanical spread , birds?
- Antibiotic treatment?
- Vaccination



# Vaccine

- 2 ml dose (Ovilis C)
- 3-6 weeks apart, either two doses prior to joining or one prior to joining and one post joining
- Repeat annually





# Trial

- 6 flocks in Holbrook district (Holbrook Landcare and Woolworths)
- 250 treated (vaccine), 250 controls (unvaccinated)
- Run as one mob for entire trial
  - Minimise paddock differences, but increase challenge
- Scan, wet dry, lamb numbers (from udder painting)





# Summary

- Winter, spring lambing flocks
- Especially mob stocking, hand feeding
- Need to establish diagnosis
- Difficult to manage – spread out sheep, decrease challenge, antibiotics
- Vaccine