

Peripartal metabolic adaptations in naturally scrapie-infected and healthy ewes

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Hypothesis

Biochemical changes in blood metabolites due to peripartal adaptations might differ between naturally scrapie-infected and healthy ewes.

CONCLUSIONS

- ✓ Pre-clinical prion disease hardly affected blood substrates around lambing.



PrPsc deposits in rectal biopsy

MATERIAL AND METHODS

Animals

- **Rasa Aragonesa** ewes (n=22, BCS= 3.2) naturally scrapie-infected (**S**; *in vivo* diagnosed by rectal biopsy and confirmed *post-mortem*) or healthy (**H**) were controlled during the transition period.

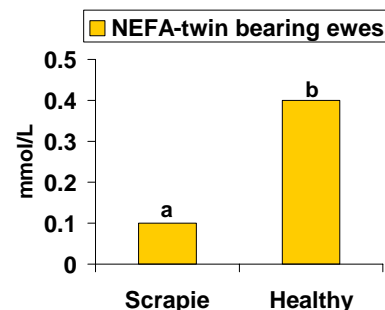
Measurements and analysis

- Blood samples were collected at weeks -2, +1 and +2 relative to lambing to determine plasma triglycerides (TRIG), cholesterol (CHOL), non-esterified fatty acids (NEFA), β -hydroxybutyrate (BHB) and urea.

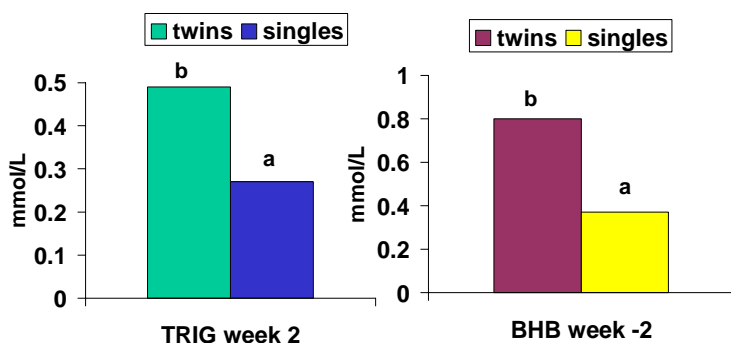
RESULTS

Disease effect:

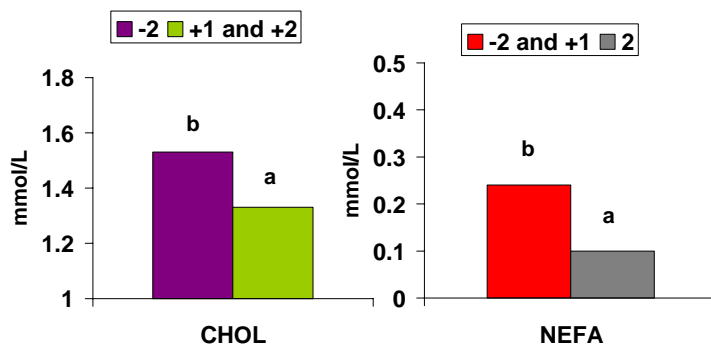
- Plasma TRIG, CHOL, BHB and urea did not differ between **S** and **H** ($P>0.05$).
- Plasma NEFA were lower in **S**-carrying twins than in their **H** counterparts



Number of foetus x Week effect:



Week effect:



Within each parameter, different letter denote statistical differences ($P<0.05$).

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