

Progress Reports for Current Accounts

EHRF - #410629 – Application and viability of coronary band grafting in the horse.

Objectives: To investigate if grafts of the coronary band can be successfully applied to acute and/or chronic lacerations of the coronary band that have a great amount of tissue loss.

Results obtained: Clinically all surgery sites healed. These included the graft sites and the one surgical site left without a graft. These findings raised further questions:

- a) Did the autograft succeed but the allograft fail ?
- b) Did they all fail ?
- c) Can we leave large coronary band defects to heal by second intention ?

Application of findings: Prior to this research, the coronary band was deemed “untouchable” by most people. Without coronary band, no hoof horn grows and without that the horse is ultimately lost. Our results show that an area 2cm wide can be cut out entirely and left to heal by second intention if stabilized in a hoof cast. This information has profound implication for coronary band injuries in the horse.

Deviations from the research plan: Despite adequate healing in the face of complete graft failure, DNA analysis of the healed tissue was performed and compared to that of the recipient horse. These results confirmed our clinical suspicions.

Publications: Travis Smyth T, Roquet I, Plante Y, Hind P and Carmalt JL. Application and viability of full-thickness coronary band grafting in the horse. Vet Surg (Manuscript Submitted March 2013)