

Participant Information Sheet

Detection of asymmetries and low-grade lameness in perceived sound horses using body mounted inertial sensors (Equinosis Q Lameness Locator)

Participant information

This document contains important information about the study. Please read the information carefully and contact the research team if you have any questions using the contact details provided at the end of the form.

Purpose of the study:

The study forms the dissertation requirements for a Masters in Veterinary Physiotherapy. The aim is to determine the prevalence of asymmetries and sub-clinical lameness in apparently sound sports horses. This is done through detection of these gait adaptations using a BMIS lameness locator (Equinosis Q). This may allow early clinical intervention for appropriate therapy and rehabilitation, including both veterinary medicine and physiotherapeutic techniques, with potentially better outcomes for the animal, improved welfare and decreased loss of performance.

Inclusion criteria:

Sports and leisure horses, including TBs in training, currently in work, aged between 2-20 years old without current history of any observable lameness or musculoskeletal disorder. It is important that the owner/trainer perceives each horse as “sound” to their knowledge. If an obvious lameness (greater than 2/10) is detected during the study, the data collection will be aborted and the data excluded from the study. You will then be referred back to your usual veterinary surgeon for further investigation as necessary. No further investigation will be given at the time of the study.

Procedures:

The data will be collected at your own yard. We will arrange a time to avoid collection of data within three hours following exercise. Data collection immediately prior to exercise is fine. Inertial sensors will be placed on the horse’s poll, pelvis and right foreleg. The horse will be assessed for pre-existing lameness trotting in both directions on a hard, flat surface. Data collection will follow, which also includes trotting the horse up and down in straight lines on both hard and soft flat surfaces for approximately three repetitions to produce the data required. Additional trots may be required if the data is spoilt in any way. It would be helpful if a handler is available to assist with this, otherwise we can arrange for a technician to accompany us. Real time analysis of each horse’s gait will be performed and any asymmetries detected and described. You will be given a brief verbal report for each horse at the end of the examination and a written report will be sent by email.

The procedure will be performed by a qualified veterinary surgeon and veterinary physiotherapist.

Why would you participate?

The study provides the opportunity for gait asymmetries and subtle lamenesses to be detected that are not readily apparent to the naked eye. This will allow for appropriate adaptation to your horse’s current training and competition plans and will allow for appropriate veterinary or physiotherapy input. There is no cost to this service, however any follow up treatment will be charged as normal by your usual practitioner.

Possible risks:

The risks involved in the study are low and involve the repetition of trotting in a straight line in a similar way to which would be performed through a standard veterinary or physiotherapy examination.

What if there is a problem?

The main researcher, a qualified veterinary surgeon and veterinary physiotherapist, will be present throughout the session and will monitor your horse's well-being. If your horse appears lame, uncomfortable or distressed, the session will be aborted. The researcher will have emergency veterinary drugs and equipment on site throughout in case of emergency. Please note, owners are responsible for all costs for any treatment required.

The University has in force the relevant insurance policies which apply to this study. WUC does not provide cover for non-negligent harm to animals involved in research. If you wish to make a complaint or have any concerns about any aspect of the way you or your horse have been approached or treated during the course of this study, please contact:

Dr Roberta Ferro de Godoy (Biomechanics Laboratory Manager): E: roberta.godoy@writtle.ac.uk

Am I able to withdraw from the study?

You are free to choose to participate in the study and you may withdraw from the study at any time. Once the data collection session is completed, it will not be possible to withdraw from the study.

What will happen to the data collected?

The measurements will be unlinked from any information which identifies the owner or horse and then correlated with clinical findings. The results of the study will be published in a WUC dissertation and may be published in peer reviewed journals. If you would like a copy of the study's findings, please inform the research team.

Will my taking part be kept confidential?

All information you provide about you and your horse will remain strictly confidential and your personal details will not be disclosed at any time. Only the members of the research team will have access to the data from the study and only the principal researcher will have access to your information. The data collected during the session will be anonymous and if published in journal articles or elsewhere, will be done without disclosing your personal details or the name of your horse.

Who can I contact if I have any questions?

If you have any questions regarding your participation in the study, please contact:

Dr Lorna Brokenshire-Dyke (Main Investigator, Masters Student in Veterinary Physiotherapy):
E: 98380292@writtle.ac.uk; M: 07909 923243

Dr Roberta Ferro de Godoy (Supervisor, Senior Lecturer in Veterinary Physiotherapy):
E: roberta.godoy@writtle.ac.uk



PARTICIPANT CONSENT FORM

I hereby give consent for _____ (horse's name) to take part in a research study of gait analysis including straight line work in trot.

This will involve placement of inertial sensors on the poll, pelvis and right forelimb and trotting in straight lines on a hard surface.

I understand that my horse will be assessed for the following:

- Lameness
- Gait analysis

To the best of my knowledge my horse is currently in regular work, healthy and sound.

I understand I may withdraw my horse at any stage if I feel it is appropriate to do so.

Data collected for the trial will be anonymous and may be published. I understand that I can ask a copy of the publication if I wish to see the results.

Signed: _____

Print name: _____

Date: _____