Autumn 2019

The Moredun Foundation

EQUINE NEWS

Equine Grass Sickness Fund

Patron - HRH The Princess Royal **Ambassador -** Mark Johnston **Chairman -** Keith Mason

Nationwide field trial of a candidate vaccine for the prevention of Equine Grass Sickness

BY DR JO IRELAND

Introduction

Scientific evidence suggests that equine grass sickness (EGS) may be associated with the bacterium *Clostridium botulinum (C. botulinum)* type C, which is found commonly within soil and is capable of producing a range of toxins. Several research studies have demonstrated a protective effect of natural immunity to *C. botulinum* type C. Cases of EGS have been shown to have lower antibody levels to *C. botulinum* type C compared to unaffected healthy control horses, and increasing antibody levels to *C. botulinum* type C have been associated with a significant decrease in the risk of EGS. In addition, other clostridial diseases, such as tetanus and botulism, are successfully prevented by vaccination, suggesting that it could theoretically be possible to prevent EGS by vaccination.

Experimental challenge studies are the most commonly used research method to test the efficacy of vaccines for disease prevention; however it is not possible to experimentally reproduce EGS. Therefore, a field vaccine trial represents the only available method of evaluating the preventive effect of vaccination.

This vaccine trial aimed to determine the efficacy of *C. botulinum* type C vaccination in preventing naturally occurring EGS by comparing EGS incidence between groups of vaccinated and placebo-treated horses/ponies. The trial was co-ordinated by the Animal Health Trust, in collaboration with the veterinary schools of the Universities of Edinburgh, Liverpool and Surrey. To ensure that the safety and wellbeing of all participants were protected throughout the trial, the protocol was extensively reviewed by several independent groups of people, and the trial was conducted under an Animal Test Certificate issued by the Veterinary Medicines Directorate.

EGS vaccine trial study design

This was a placebo-controlled randomised trial, using a parallel group experimental design, based on the highest standard protocols used in human clinical trials (Figure 1). To ensure scientific validity, it was a "triple-blinded" study, meaning that all trial staff, participating vets and owners did not know each horse/pony's vaccination status throughout the trial, until after statistical analyses were completed. This procedure is commonly referred to as "blinding" or "masking" and is very important to ensure that the findings of any clinical trial are not influenced in any way by the expectations of people taking part.

The EGS vaccine trial recruited a total of 1,029 horses/ponies residing on 120 participating premises located across England (52.5%) and Scotland (47.5%), which had been affected by a high incidence of EGS cases prior to commencing the trial. Enrolled animals were randomly selected to receive a primary course, comprising three injections at 21 day intervals, of either the vaccine or placebo, followed by annual booster injection(s) (Figure 1). This process is referred to as "randomisation" and its purpose is to ensure that the only major difference between the two groups is whether they receive the vaccine or the placebo. Several risk factors for EGS have been identified in previous research studies and without proper randomisation it could be possible that existing risk factors for EGS might affect the evaluation of the vaccine's efficacy.

The vaccine used in this trial was a *C. botulinum* type C toxoid vaccine, containing inactivated *C. botulinum* type C toxins (rather than the live bacteria). A placebo is an inactive substance containing no medication, used as a control in tests to determine the effectiveness of a medicinal drug/vaccine. The placebo used in the trial had the same appearance and formulation as the vaccine except that it did not contain the active component (the inactivated *C. botulinum* type C toxins), and therefore would not result in an immune response.

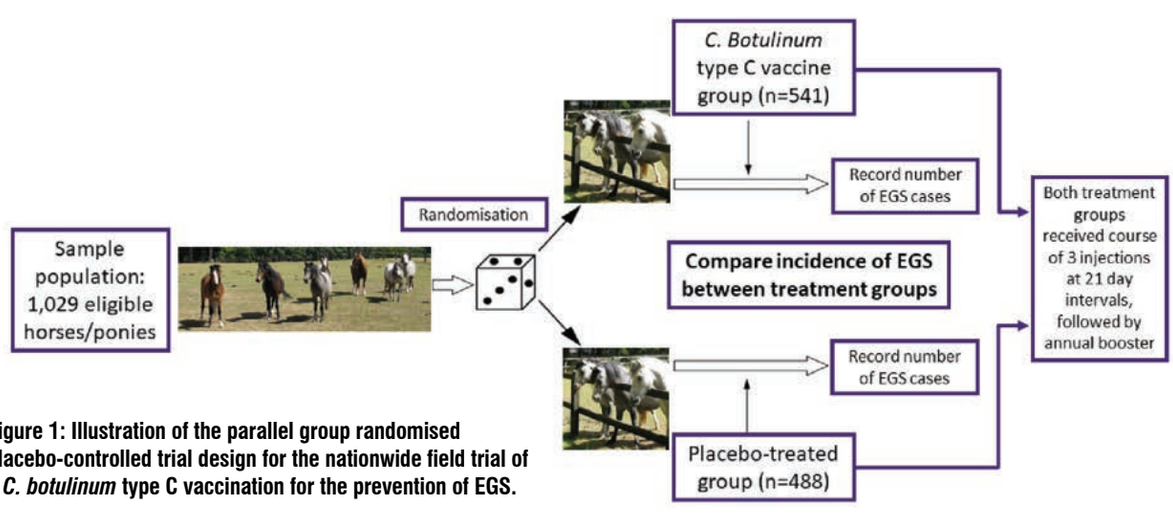

Figure 1: Illustration of the parallel group randomised placebo-controlled trial design for the nationwide field trial of a *C. botulinum* type C vaccination for the prevention of EGS.

Results

The average age of enrolled horses/ponies at the start of the trial was 8 years (ranging from 6 months to 29 years), and prior to enrolment, horse/ponies had lived on their home premises for an average of 2 years (ranging from 1 day to 25 years). At the start of the trial, there were no significant differences between the two treatment groups with respect to any of the horse-level or management-level EGS risk factors assessed.

Both the *C. botulinum* type C vaccine and placebo injection were shown to be safe, with a low frequency of local injection site reactions being reported during the trial, and a very small proportion of these reactions requiring veterinary attention. Although the overall frequency of adverse reactions following injection was considered to be low in comparison to rates reported for commonly used equine vaccinations, these reactions occurred more commonly in the vaccine group (1.8% of vaccinated animals) compared to the placebo group (0.4% of placebo-treated animals).

The majority of animals in the vaccine group had a significant immune response following vaccination; *C. botulinum* type C antibody levels after the primary course of injections were on average 2.5 times higher than those before the first vaccination (Figure 2). Horses/ponies in the placebo treatment group showed little change in their antibody levels following the primary course of injections (Figure 2), as would be expected, since the placebo injection would not trigger an immune response or provide any form of immunity.

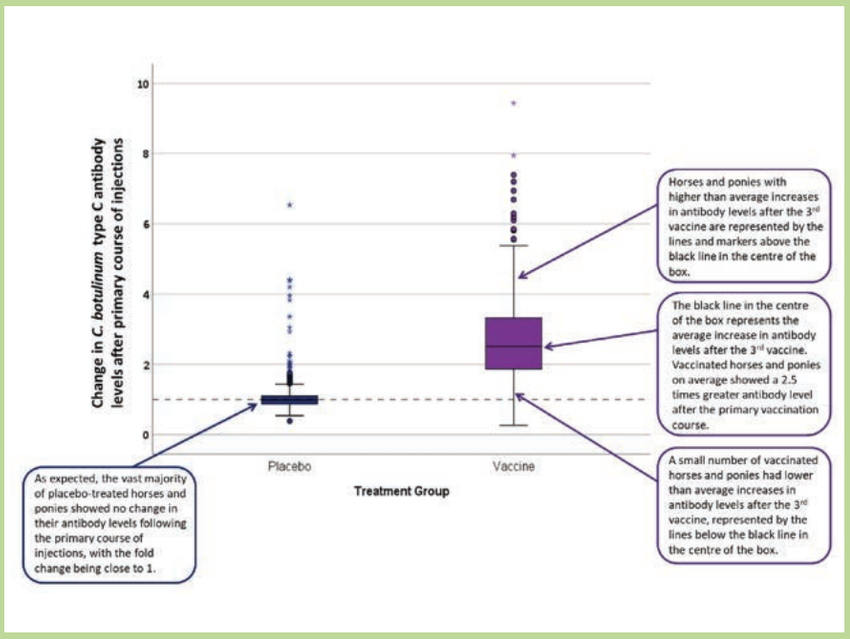

Figure 2: Analysis of *C.botulinum* type C antibodies in the vaccine and placebo treatment groups. This figure shows the change in antibody levels between the blood samples taken before the first injection and those taken approximately 2 weeks after the third injection in both treatment groups. The numbers at the side represent the average antibody levels after the third injection divided by the average antibody levels before the first injection (fold change). The dotted line represents a fold change of one, which means no difference in antibody level following the third injection compared to the antibody level prior to the first injection.

The overall incidence of EGS was considerably lower than anticipated, with only nine confirmed EGS cases occurring amongst enrolled horses/ponies over the entire four year trial period, compared to around 20 cases that were expected in the first two years of the trial. Although it was lower, compared to the placebo-treated group, the risk of EGS was not significantly reduced in the vaccine group, meaning that the trial failed to provide evidence of a protective effect of vaccination in the prevention of EGS. Consistent with previous research studies, both young animal age and low *C. botulinum* type C antibody levels were significantly associated with increased risk of EGS. However, for the first time, findings of the EGS vaccine trial confirmed that that low *C. botulinum* type C antibody levels were found in horses/ponies affected by EGS before the onset of the disease, and the results have highlighted the key role of an individual horse or pony's immune responses in their risk of developing EGS.

Discussion

The nationwide EGS vaccine trial followed years of planning and preliminary studies, and represented a truly unique research project, which would not have been possible without the combined efforts of a large number of funding agencies, horse owners, vets and scientists.

The recruitment methods used were successful in identifying high risk EGS-affected premises; however the time taken to enrol the required number of horses/ponies was considerably greater than anticipated, necessitating an 18 month extension to the trial period. The trial provided further evidence of vaccine safety under conditions of field use, and measurement of antibody levels confirmed an immune response following administration of the *C. botulinum* type C vaccine in the majority of vaccinated animals.

In conclusion, this nationwide field trial failed to demonstrate a significant protective effect of the *C. botulinum* type C vaccine against EGS. Results of the trial corroborated previous research findings, identifying that young horse age and low *C. botulinum* type C antibody levels were significantly associated with an increased risk of EGS. Therefore the association between *C. botulinum* type C and EGS requires further research to determine whether toxico-infection with this bacterium causes EGS, or whether the low *C. botulinum* type C antibody levels seen amongst EGS cases represent a proxy indicator for other possible causes, or for differences in individual animals' immune system responses.

Acknowledgements

The EGS Vaccine Trial team gratefully acknowledge all the charities, other organisations and individuals who contributed funding towards the trial, and all participating horse owners and veterinary practices who made the trial possible.

THE STORY OF COLDWELL FIZZ AND HER BATTLE WITH GRASS SICKNESS

By Laura Carnegie

Fizz was 8 years old and came down with chronic grass sickness at the end of June. The yard we were at had had cases of grass sickness before in several their fields, but not this one. We had moved there in the December so had been there for over 6 months.

Early June – before EGS

I called her when we got the gate and she lifted her head and came wandering down the field to me. I went straight to her head to put her head collar on, while my boyfriend stood back a bit. I then heard him say from over my shoulder, "Why's she shaking..?" It wasn't cold, it hadn't been raining, why was she shaking?! Her stomach was tucked right in, looking really tense and her shoulders and flanks were rippling she was trembling so much. She seemed happy enough, rummaging for sweeties and scoffing polos but the only option really was to call the out of hours vet.

The vet arrived and admitted that the shaking and tension in her stomach did look like typical grass sickness, but of course because there is no test for it we had to rule out everything else first. She took her temperature and it was high but not excessively so. She took her heart rate and again it was high but not so high as to cause alarm. Next she did a rectal exam, then tubed into her stomach and finally took some bloods. That was about all that could be done for the night. Fizz had been sedated and by this time it was after 10pm. The vet said there would be little more that we could do tonight, so we had to just leave her to snooze off her sedation.

24th June, Day 2

The vet came back later the next afternoon but there was not an awful lot that he could do for us. He took her heart rate and temperature again and worryingly they had both increased yet again. He said the only thing we could do was keep her eating as best we could – we had found that she was keen to eat Top Spec Ulsakind soaked to a watery mash that she could just drink, more than eat. This seemed to be working though so we just kept feeding her, each time she finished a bucket we gave her another.

We decided that we would stay with Fizz over night as well. As expected I didn't sleep much that night, listening out for any unusual sounds coming from Fizz's stable. She was obviously not very comfortable and kept lying down and standing up again throughout the night, desperately trying to find some comfort. She kept eating though, a bucket of Ulsakind every two hours all through the night.

When the vet came back first thing the next morning he said she was looking a lot brighter and was pleased to see she had been eating lots and managing to poo normally with it too. He took her temperature and heart rate a final time and they had come down significantly to almost where they were when they were taken the first night – still high, but a lot safer. He suggested that we had a chronic case on our hands but given her alert attitude and general interested nature and the fact that she was eating and pooing meant that we had a good chance of nursing her, but it would be hard work.

We went through Baileys Number 8, Top Spec Linseed Mash, a lot of pony nuts (these were a beneficial way of disguising other feeds that were better for her!), Allen Page Soothe and Gain, Saracen Recovery Mash, Dodson and Horrell Build Up, Baileys Number 21, Blue Chip Pro and Molichaff's Apple Chaff. Ideally what we were looking for was low starch and sugar, high protein, high fibre, high oil and preferably with rehydration qualities and pre/probiotics.

6th July, back out on grass

I took her out for walks most days since she first fell ill, just 5 minutes or so initially to stretch her legs and because it is good for aiding digestion. I gradually introduced periods of grazing inhand for her too, starting with just 15 minutes once a day and building up to 20 minutes three times a day. When I started turning her out properly we started with just half an hour of supervised grazing, where I would sit in the field if it was a nice day, or hover at the gate if it wasn't, just so that I could keep an eye on her, and eventually I accepted she was managing fine and started leaving her unsupervised for longer each day.

13th July, 3 weeks in

I got the vet out again, just for a check, the following Friday, almost 5 weeks after their first visit to see her. I just needed to know what the next steps were. She was really positive but did make an important recommendation to "fill her colon with fibre". Since Fizz wasn't all that confident at eating hay yet she recommended Allen and Page Fast Fibre. The hope was she would munch it overnight while she still wasn't able to have the hay.

20th July, 4 weeks in

She didn't think much of it initially so I still had to continue to mix it with her other favourites to get her to eat it. Gradually she began to show more interest in her hay and thankfully she was able to move down to just the one bucket of feed at night!

13th August

We have now had two visits from the physio. After the first she was reasonably happy with how Fizz was and said that I should start working her on the lunge and bringing her fitness back up, but that she would want to come back in a fortnight to check how she was doing. A fortnight later and after me lunging Fizz for around 20 minutes every other day the physio was back and gave us the all clear to get going again, pending a visit from the saddle fitter because she has obviously changed shape quite a bit.

2nd September

Onwards and upwards! Aiming to make it to the BD Pet Plan regionals this year…take two!

Volunteers Tea Party 2019

A select group of volunteers and fundraisers recently gathered at Moredun to hear grass sickness research and fundraising updates from the Moredun Foundation Equine Grass Sickness Fund.

After a brief welcome by Professor Ian Poxton, a distinguished microbiologist whose work on the association of EGS with Clostridium botulinum led to him joining EGSF in 2003, it was straight into research.

Professor Bruce McGorum gave an enlightening gallop through EGS research, covering the effects of EGS on the equine, including a rather gory video showing an affected equine gut struggling to function following nerve damage. Bruce's main line of EGS research is currently focusing on mycotoxins, of which 14000 species are causing PhD student Luanne Hunt significant brain strain as she seeks to narrow the field of suspects!

Lisa Henderson, whose work as Grass Sickness Nurse at the Royal (Dick) Vet is part funded by EGSF, gave an impassioned discussion of nursing chronic cases, touching on the welfare implications of whether to nurse or not. She shared some heartwarming stories about those who have survived, including her favourite, the 'ginger witch'!

Professor Lee Innes presented a short clip about grass sickness from the Moredun 100th Anniversary Film, depicting Moredun's involvement with EGS research, dating from the days when heavy horses were literally the workhorses of Scottish agriculture. Both HRH Princess Anne and Balmoral Highland Pony stud manager Sylvia Ormiston give poignant interviews in the film, bringing home the sheer frustration of struggling to discover the cause, and the tragic loss of prized highland stallions to the disease. Lee is currently working on a project to develop a biobank of samples related to grass sickness which will be held at Moredun, and available to research scientists to interrogate.

On to fundraising, and we were delighted that the Ross-shire Fun Show organizer Yvonne Maclean and a team of her loyal supporters made the long journey down from Dingwall. Yvonne started fundraising after nursing her horse Mal through the disease, and in five years has raised over £45,000!!

Yvonne is a very creative fundraiser, and although her main event is the show, there are an incredible number of associated spin offs, which variously include a Fyrish fancy dress hill climb, the Three Mares Triathlon, Pawel's 1000 Mile Cycle, a dog show, a youngstock show, a dinner dance. I could go on, there is much, much more!

Yvonne protests that fundraising is easy, and stresses the FUN in fundraising. She has made many friends through her efforts, gathering people around her, not only from Ross-shire, but across the UK, and inspiring them to take part.

The theme of FUNdraising continued with a short film of the Harelaw Oniesie Ride. This event grew out of the heartbreaking loss of seven riding school ponies to grass sickness. Each year the children and their parents gather together, all dressed in their favourite onesies and ride the trails around Longniddry. This year they also held a disco night and a Halloween Ride, although it remains to be seen what the ponies think of the ghoulish costumes!

A lovely spread of afternoon tea and the opportunity to network followed, and it was good to catch up with our supporters, both longstanding and new.

As this was a trial event we have been delighted with the feedback, and hope to widen this out on future occasions to help keep our supporters updated on our progress.

LAY SUMMARY: A STUDY OF RESIDUAL LESIONS IN HORSES THAT RECOVERED FROM CLINICAL SIGNS OF CHRONIC EQUINE DYSAUTONOMIA

Elspeth M. Milne, R. Scott Pirie, Caroline N. Hahn, Jorge del-Pozo, Dawn Drummond, Sharon Moss, Bruce C. McGorum

Royal (Dick) School of Veterinary Studies and The Roslin Institute, The University of Edinburgh, Easter Bush Campus, Roslin, Midlothian, EH25 9RG, United Kingdom

Background: Equine dysautonomia (ED) causes degeneration and loss of nerve cells (neurons) in parts of the nervous system that control involuntary functions (autonomic nervous system) e.g. intestinal activity. Approximately 50% of chronic cases recover, but it is unclear how they survive the loss of neurons. The network of interstitial cells of Cajal (ICC) in the wall of the intestine are known to have a "pacemaker" function and in a single previously studied recovered case, an intact network of ICC was found.

Objectives: To assess pathology, autonomic neuron numbers, ICC and degenerative changes in neurons in recovered cases of ED.

Animals: Thirteen horses (group ED), euthanized an average of 10 (range 1-16) years from diagnosis and 6 age-matched controls (group C) euthanized for reasons not connected with the digestive tract or nervous system were studied. All sampling was carried out post mortem and with the owners' consent, and all samples were anonymized for analysis and publication. Horses in both groups were euthanized for welfare reasons and not purely for the study.

Methods: Post mortem findings, neuron counts in microscopic sections of intestinal wall and autonomic ganglia (nerve "junction boxes") and special stains on microscopic sections for ICC and degeneration of neurons in four intestinal sites (two in the small intestine and two in the large intestine).

Results: Post mortem findings in group ED were small intestinal dilation (33% of cases), small intestinal muscle wall thickening (33%), stomach lining thickening (27%) and stomach ulcers (36%). Such changes were not seen in group C. Neuron numbers in the autonomic ganglia were significantly lower in group ED (39% lower than group C for cranial cervical ganglion and 44% lower in coeliacomesenteric ganglion). In intestine, loss of neurons was worst in the last part of the small intestine (ileum) (100% lower than group C in the neuron groups under the intestinal lining and 91% lower in the neuron groups between the muscle layers of the wall of the ileum). In ileum and jejunum (mid-small intestine), the ICC networks were not significantly different in the muscle wall of group ED in comparison with group C. Special stains to identify active degeneration of neurons did not provide evidence for ongoing degeneration. The large intestine was almost unaffected for all aspects studied.

Conclusions and clinical importance: Post mortem findings suggested that some horses have short and long-term changes in the stomach and small intestine years after recovery from clinical signs of ED. They can also survive for many years in the presence of severe loss of neurons in the autonomic nervous system, especially the ileum. Intact ICC in the muscle wall of the small intestine may help maintain intestinal propulsive activity in the long term after loss of neurons. Development of therapy supporting ICC function therefore warrants investigation.

Acknowledgements: The authors thank the Equine Grass Sickness Fund for generous financial support and for publicising the study to horse owners. The authors are also grateful to the owners, primary clinicians, and the staff of the Dick Vet Equine Hospital and Pathology Department for their invaluable help. In particular, the study could not have been undertaken without owners' help.

Full article reference: Journal of Veterinary Internal Medicine DOI10.111/jvim.15567 and also available on the Equine Grass Sickness Fund website https://grasssickness.org.uk/research/residual-lesions-study/

VICKI TAKES ON THE LONDON MARATHON

"Nothing I do and no distance I have to run could be as hard as having to nurse him back to full health. That was a marathon in its own right."

For Vicky Sinski the battle she faced nursing her welsh cob Alfie took her to the limits of her endurance.

She writes: He came down with grass sickness in May 2017, two weeks after I completed on my first house, so it was already a busy and stressful time. The house soon fell on the back burner when he went to the vets, where he stayed for nearly seven weeks.

I had the support, not only of my own regular vet at Swale Vets in Richmond, but also Hambleton Equine Practice near Stokesley, which is where he was admitted. It very quickly became a home from home for me as I visited every day (sometimes twice), still working full time, to do as much of the nursing as I could myself. The whole practice were fantastic and Alfie completely stole their hearts I think!

Skipping forward a lot, he managed to gain all his weight back by the following September. It was a slow recovery but that wasn't helped by the winter we had in '17/'18, the worst snow I can remember and no grass. This is a huge problem for us even now, as Alfie can't swallow hay very well and will sometimes choke and sadly he is never allowed more than a few mouthfuls. As a result he lives out full time now, and my fantastic yard owner keeps several fields just for Alfie, so as winter approaches, if I need grass for him I have plenty of options now that hay isn't one of them! I'm very lucky that this is the only 'side effect' he has been left with since his grass sickness. It's not ideal but I know how lucky he is to be here and there are some so much worse off than us.

Writing about it now still makes me emotional, but also makes me realise just how much love and support there is for him (and me, I guess!). I think most people will agree it takes a whole team to nurse a horse with grass sickness. My team was huge and for that I can never thank them all enough. The vets, Alfie's physio and farrier who would visit him at the vets, my amazing yard owner, who still bends over backwards for his needs, my yard friends who helped with 'shifts' (I'm on a big yard with 60 horses!), my local feed shop who ordered in all sorts for us, my family who helped with the vet bills and also my work colleges who supported me when I was a mess at work for so long, and were so patient with me when they knew I needed to be at the yard for Alfie.

It absolutely means the world to me to run for EGSF. The charity offered me so much support and advice when Alfie became ill, as I previously knew nothing about grass sickness. I attended the conference last year up in Scotland at the Moredun Foundation and while it's clear so much is being done, more money is needed to put some of the fantastic research ideas I heard into action.

I'm so, so lucky and grateful to still have Alfie. I have owned him for 9 years after buying him as a foal and I don't know how I cope without him. I would love to try and help stop that happening to others in the future and prevent what we had to go through. I get so emotional thinking about it and for me that's what make me sure I can do the London Marathon. The love I have for him, the sadness I have for those who have lost their horses to grass sickness. Also knowing that nothing I do and no distance I have to run could be as hard as having to nurse him back to full health. That was a marathon in its own right.

Vicky & Alfie

To support Vicky's fundraising effort please donate at: https://uk.virginmoneygiving.com/VickySinski

UPDATE***

'I'm really pleased with how my training is going so far, I've improved on all my runs from last year and also managed a 5 minute PB at the Great North Run last month which I'm very pleased with! I've got a 10k this month and a 10miler next month to look forward to.

Fundraising is going well so far I've had a lot of support and people offering to share Alfie's story which is fantastic. At the last count I had approx £350 split between donations from friends and family and on my virgin money page online! My brilliant vets, feed store and farrier all have EGSF charity cans and are spreading the word far and wide! I'm hoping to plan a charity night for March next year to raise and get the marathon excitement going!

If anyone could spare any money to sponsor me it would be hugely appreciated, it would really spur me on, on those cold, wet winter mornings out running when I could be tucked up in bed!

THANK YOU!'

Fundraising Roundup

To see your event featured here please Kate Thomson **email info@grasssickness.co.uk** with details and a photo!

(Another!) Bumper Year of the Ross-shire FUNdraising Team By Yvonne Maclean

2019 has been a pretty busy year up in Ross-shire. We started our fundraising efforts in April with our EGS talk with Prof. Bruce McGorum, Darren cycled the Etape for us and Cari jumped out of a plane. We had our annual dog show this year organised by Sarah Milne, our Laminitis Information evening with the funds raised going to the AHT, and Pawel then cycled from Inverness to Poland! 1000 Miles over 10 days (with one day of rest in there). 1 man and his bike, no support team, no help, and with his only company on leaving, on day 6 where he met with his pal to stay for the night in Germany and then on the day 9 (his birthday) when a couple pals went out to join him for the night before cycling home with him the following day. Pawel raised £1350 which was match funded by LifeScan Scotland bringing his fundraising total to £2700.

Then we had our show! The highlight of the year for me with the usual craziness of the pony club games, the fancy dress, the show jumping fun – this year we had our own EGS jump (made by hubby Merv)! We saw 66 horses remembered on the day and lots of beaming smiles from everyone. The sun shone for the majority of the day and the adult games was just the funniest! They all put their heart and soul into the games and in the process, they raised £831 for the fund through gaining nominations in advance which helped them gain points in advance of the day! A fab effort from our adults who were up for a laugh and fair game.

We are now preparing for our dinner dance and presentation evening where we have more fun planned as well as lots of prizes to give out.

Update* Particular thanks to the donors of auction prizes, especially Sylvia Ormiston, Ruraidh Ormiston and Heather Maclennan, whose donations helped raise over £4000 at the dinner dance!!**

Our fundraising for this year is sitting at approx. £14K at the moment for the year so another fabulous year for all those up North in the Highlands who support our FUNdraising efforts.

EGS takes away any control we have as horse owners. Helping raise funds to secure further research projects whilst having FUN is my way of taking back control and raising awareness at the same time. People don't want to part with their hard earned cash constantly for charity and there are hundreds of very worthy causes out there desperate for funds. Injecting some FUN into raising funds though takes the hard work out of all the begging I do daily, and it is addictive - more and more people are supporting annually and more and more people are wanting to help, so thank you to everyone who has contributed throughout the year. 2019 has been a fabulous year, roll on 2020 for more FUNdraising antics.

Body Shop hamper raises £120

Many thanks to Laura Jane Smith, Area Manager for Body Shop at Home, who put together this gorgeous hamper to raffle, raising £120

Balhagan Grass Sickness Show by Fiona Mackinnon

Many thanks to our Judge Mary Buchan, long suffering steward Caroline Simpson, chief money taker and raffle seller Christina Wallace, stand in stewards Karen Mackie and Amy Rodger, Stephen Hammond Photography and to all our sponsors, raffle and auction donors. Between the auction, show and raffle we have raised £4654!

Scottish Grass Sickness Show by Jean Oudney

Thank you very much to everyone who has supported us - sponsors, helpers, judges and stewards but most of all our loyal competitors who come back year after year - there would be no show without you!! This brings the overall total over the past 10 years to about £23,000 which is amazing!!!

As this is my last show I would like to thank everyone who has helped and supported us over the years - I have loved running the show and I am really proud, not just because of all the money we have raised for the EGSF but also because it's a fun local show that has become a favourite with so many people. The show was started originally after I lost our 4 year old Clydesdale Sykes to acute grass sickness and my cousin suggested we do a sponsored ride to raise money for the EGSF. I suggested a horse show would be better because I had prior experience in running a breed show in the past and I felt the area could do with a fun local horse show good for novices and young horses, and the Scottish Grass Sickness Show was born. I've made so many friends and met so many nice people and horses over the past 10 years and I really hope it will continue in the same fashion to raise money and provide a fun local show for many years in the future. I am not sure what is happening at the moment but I will tell you when it is confirmed!

Thank you Brooklyn Robertson

Very well done to enterprising Brooklyn from the Haflinger Trekking Centre, who managed to raise an excellent £30 by making and selling greetings cards

Kessock vets take on The Beast!

Congratulations to the team from Kessock Vets who took on the gruelling Loch Ness Beast Race, and survived to raise over £650, thank you!

Strathearn Eventing Grass Sickness Hunter Trials

Huge thanks once again are due to Sarah Houlden and the team at Strathearn Eventing for once again holding the Grass Sickness Spring Hunter Trials. This year a very generous £550 was donated to grass sickness research. Thank you to all the competitors and volunteers whose efforts made this day a stupendous success!

Thank you!

To each and every one of you who have given so generously of your time and money to help us in our quest to discover the cause and a means of prevention of this devastating disease and further improve the treatment of chronic cases

Special Thanks to the following organisations for their support

Achnaharry Stud
AM Pilkington Trust
Ardene House Vets
B&F Commercials Ltd
Balhagan Equestrian Grass Sickness Show
Balmoral Highland Pony Stud
Border Highlands Club
British Riding Clubs Area 22
Burnside Livery
Central Scotland Highland Pony Group
Collessie Stud
Cousland Livery
Glenfoot Show
Haflinger Trekking Centre
Harbro
Harelaw Equestrian Centre
Heald Town Highland Pony Stud
Hendersyde Park
Highland Horse Fun
HLM Trailer and Driver Training
Horse & Country Collectables
Kessock Equine Vets
Leven Valley Riding Club
London Horse Sitters
Pentlands Science Park
Perth Racecourse
Ross-shire EGS Fun Show
Scottish Grass Sickness Show
Strathearn Eventing
Strathearn Pony Club
The Moredun Foundation
The Royal (Dick) Vet

WINNERS OF THE HEIDI AWARD 2019

Congratulations to recently retired EGSF Committee members Dorothy Thomson and Joyce Kent, who received the 2019 Heidi Award for Supporter of the Year. Dorothy and Joyce served on the Committee for fourteen years as lay members, overseeing many important research projects, having both suffered the loss of horses to grass sickness. Dorothy and Joyce were presented with their awards at the Volunteers Tea Party by EGSF Chairman Keith Mason and Sam Seath, in memory of the Seath Family's horse Heidi, who was lost to grass sickness. Thank you to Dorothy and Joyce for their valuable input into the battle against grass sickness, and to the Seath Family for their generous sponsorship of this annual award.

EGSF Details

You are receiving this newsletter as a supporter of the Equine Grass Sickness Fund. If you would prefer not to receive it please contact the EGSF office to unsubscribe.

Thank You to our Volunteers

We could not do what we do without you!

If you would like to help out at future above events please contact Kate in the EGSF Office. It is always great fun helping out, and your support enables us to raise money for our research effort.

To receive Equine News by email please contact the office. Please pass your newsletter to a friend.

For further information please contact
The Administrator, Equine Grass Sickness Fund
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Tel: 0131 445 6257 email: info@grasssickness.org.uk
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