



Interim Report on a trial to study the use of Vitex agnus castus extract (Evitex) on cases of Pituitary Dependent Cushing's Disease (PDCD)

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Protocol

The trial began in November 2001 and is ongoing as additional animals have been included in the study. The trial closed to new cases in March 2004. 120 horses and ponies are included in the study. All animals showed clinical signs of PDCD and had blood concentrations of endogenous ACTH (eACTH), insulin, cortisol and glucose measured before joining the trial. Those with eACTH concentrations of greater than 50 pg/ml were eligible for inclusion in the trial. Animals were given Evitex at the manufacturer's recommended dose rates i.e. 40 ml per day for animals less than 800lbs, 60 ml per day for those between 800 lbs and 1150 lbs and 80 ml per day for those over 1150 lbs. No other alterations in the usual management was instituted and no other drugs were given to the animals during the trial period. The only exceptions were drugs such as acepromazine and phenylbutazone should the animals suffer laminitis. The owners were required to submit quarterly reports as to the animal's clinical condition, noting the following parameters; occurrence of hair loss, diet, daily water consumption, weight (using a weightape), occurrence of laminitis or other medical problems. In addition photographs of the animal were also requested to accompany each report. At the end of the 12 month trial period a final report was required and a retest to measure eACTH, insulin, cortisol and glucose.

Preliminary Results

To date 25 animals have completed their year of trial period alive and their owners have submitted full reports including the final blood test results. This group consisted of 13 mares and 12 geldings whose ages ranged from 14 to 26 years. The dose was increased in four animals which had shown no alteration in demeanour or clinical signs at the recommended dose after 3 months of treatment. None of these received more than double the recommended dose. 68 animals are currently part way through their trial period. 27 animals died or were humanely destroyed during their 12 month trial period and final blood tests were not available.

Clinical signs

All owners reported improvement in the demeanour of the animals, they became more active, less depressed and the term rejuvenated was often used by owners. 22 owners reported that the animals shed their thick coats during the early part of the trial period and the next year's coat was more normal in appearance. 20 animals were reported to have shown reduced polydipsia and hyperhidrosis. Two of the 25 animals suffered one or more episodes of acute laminitis during the trial period. One horse which had been dangerously aggressive showed a marked improvement within a month of starting to receive Evitex, in the words of the owner he is now a pussy cat!

Laboratory results

12 animals showed a reduction in eACTH during the period of the trial though only 2 animals had final concentrations of less than 30 pg/ml. 9 animals showed an increase in eACTH and the concentration in 4 animals did not alter during the trial.

9 animals showed a reduction in plasma insulin concentration during the period of the trial, 7 of which had concentrations of less than 50 UIU / ml in their final samples. 13 animals showed an increase in plasma insulin while the concentration in 3 animals did not alter over the 12 months.

13 animals showed a reduction in plasma cortisol over the trial period to less than 155 nmol/L in their final sample. 10 animals showed a rise in cortisol and the plasma cortisol did not alter in 2 animals during the trial period.

Discussion

This trial is not complete and the results to date have not been subjected to statistical analysis, yet the preliminary findings are interesting. The majority of the 25 horses were chronic founder cases which had prior to joining the trial suffered recurrent episodes of acute laminitis, only two cases were so affected during the 12 month trial period. The horses which did not survive the period of the trial were euthanased or died due to a variety of serious systemic diseases which commonly affect geriatric equines with PDCD. In many cases inclusion in the trial was a “last ditch” attempt which these owners were prepared to undertake. There appears to be no trend towards normalisation of plasma concentrations of eACTH, insulin or cortisol during the trial period, which may suggest that the changes observed in the animals are not be related to the effects of any of these parameters. The most consistent finding reported by the owners was the lifting of the depression which all of these cases showed, they became more energetic, interested in their surroundings and appeared to enjoy life again.

Case 4 Before Evitex

Hyperhidrosis was a constant clinical sign in this horse



Case 4 After Evitex

The hyperhidrosis has resolved



Case 7 Before Evitex showing hirsutism



Case 7 After Evitex treatment



Case21 Before Evitex showing hirsutism, depressed attitude and pot bellied conformation



Case21 After Evitex, clinical appearance and attitude are much improved





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