Papers

Homeopathic prescribing for chronic conditions in equine veterinary practice in the UK

R. T. Mathie, E. S. Baitson, L. Hansen, M. F. Elliott, J. Hoare

Twelve Faculty of Homeopathy veterinarians recorded data systematically at 777 consecutive homeopathic appointments for horses over a period of 12 months. A spreadsheet enabled the recording of information, which included the date of appointment; horse and owner identity (anonymised); sex of horse; main medical problem treated; whether the condition was chronic or acute; whether the appointment was new or a follow-up; owner-assessed clinical outcome on a seven-point scale, ranging from −3 to +3, compared with the first appointment; homeopathic medicine(s) prescribed; and whether any conventional or other complementary/alternative medicine (CAM) was being used concurrently to treat the condition. Data from 289 horses comprised a total of 305 individual conditions identified as chronic in nature, of which 234 had a follow-up assessment. At the final appointment for chronic cases during the study period, 4.3 per cent were receiving conventional medication and 17.1 per cent were being given another CAM treatment in addition to homeopathy. The eight chronic conditions most frequently treated with homeopathy were: arthritis, headshaking, laminitis, chronic obstructive pulmonary disease, sweet itch, dermatitis, sarcoidosis and Cushing's syndrome.

HOMEOPATHY is a 200-year-old therapeutic method involving 'preparations of substances whose effects when administered to healthy subjects correspond to the manifestations of the disorder (symptoms, clinical signs, pathological states) in the individual patient' (Swayne 2000). This principle of 'like treating like', and the prescription of small to minuscule doses of substances that best match the totality of an individual patient's clinical signs, are the key characteristics of classical homeopathic medicine. The evidence base of homeopathy in human medicine comprises a total of 138 randomised controlled trials (RCTs) in the peer-reviewed literature, including 60 reporting positive findings, 10 with negative results and 68 that were inconclusive (Faculty of Homeopathy 2009).

A number of veterinary surgeons in the UK prescribe homeopathic medicines in their daily practice. While non-controlled studies have shown positive clinical outcomes to support this treatment option (Both 1980, Elliott 2001, Varshney and Naresh 2004), very little controlled research has been conducted; fewer than 20 RCTs of veterinary homeopathy in the peer-reviewed research literature were identified. Such studies have mainly focused on farm livestock (Van Wassenhoven 2005); none has involved investigations in horses.

Veterinary research in homeopathy to date has typically studied the effect of a pre-selected homeopathic medicine in groups/herds rather than using individualised prescribing. Some of this work has reported findings in favour of the clinical effectiveness of homeopathy. However, these positive results have been reported only in journals of complementary/alternative medicine (CAM), as opposed to mainstream veterinary literature (Williamson and others 1991, Searcy and others 1995, Albrecht and Schütte 1999).

Controlled research in equine homeopathy is therefore needed, but suitable research targets have, to date, been unclear. It would seem sensible to focus on chronic medical conditions that are frequently treated using homeopathy and where some prior evidence of the clinical effectiveness of homeopathy is available. The purpose of the present study was therefore to provide such baseline information, by reporting systematic observational data from individualised homeopathic treatment of horses in everyday veterinary practice. The study arises directly from an eight-practitioner pilot data collection project carried out over a six-month period in 2005, in which clinical outcomes in horses were too few in number to allow conclusions to be drawn (Mathie and others 2007). The present study involved a greater number of practitioners and was conducted over a period of 12 months; the particular focus was on chronic medical problems, taking into account conventional medical prescriptions and the use of any additional CAM therapies.

The aims of the study were, first, to gain an insight into the chronic equine problems that vets in the UK treat using homeopathy; secondly, to determine owner-assessed changes in severity of the medical problems treated in follow-up appointments; and, thirdly, to identify any trends in disease status and clinical response that might help target future controlled research in homeopathy.

Materials and methods

A total of 12 vets contributed to the study: two were from first-opinion practices, eight were from referral practices, and two were from first-opinion/referral practices; all 12 were based in England. Each vet had a homeopathic qualification (VetMFHom, VetFFHom or CertIAVH). The 12 vets were part of a group of 21 vets who collected equine, as well as canine and feline (data to be published), outcomes data from May 1, 2007 to April 30, 2008. From the first day of data collection, vets were able to record follow-up appointments of cases that had been ongoing for no longer than the previous 12 months.

Veterinary Record (2010) 166, 234-237 doi: 10.1136/vr.b4764

R. T. Mathie, BSc, PhD,
E. S. Baitson, BSc,
L. Hansen, DVM, CertIAVH, MRCVS,
M. F. Elliott, BVSc, VetMFHom, MRCVS,
J. Hoare, BVSc, VetMFHom, MRCVS,
Faculty of Homeopathy, Hahnemann House, 29 Park Street West, Luton LU1 3BE

E-mail for correspondence: rmathie@britishhomeopathic.org

Provenance: not commissioned; externally peer reviewed

TABLE 1: Information recorded in a spreadsheet to monitor homeopathic prescribing for horses

Appointment date (day, month)
Unique horse identity number
Horse's name and owner's surname initial
Sex of horse
The main condition being treated (diagnoses not listed or descriptions could be inserted by vets as required)
Whether the condition was 'chronic' or 'acute'
Whether the case had been referred, at some stage, to an RCVS-recognised specialist
Whether, in relation to the previous 12 months, the case was new or a follow-up appointment for the same problem
Owner-assessed change in the treated problem at follow-up compared with the first homeopathic consultation, using a seven-point outcome scale (–3 to +3)
Homeopathic medicine(s) prescribed (excluding its dilutional 'potency') at the consultation
Whether there had been any conventional treatment for the condition (for example, prescription drugs or dietary advice)
Whether another CAM treatment (for example, acupuncture) was currently being administered for the condition
Whether or not appointment was the last for the given problem during data collection*

* Only given on consolidated master spreadsheet

A spreadsheet, based on the pilot study by Mathie and others (2007), was used to enable the practitioner to record the results of consultations. Data were reported row-by-row under the column headings shown in Table 1. Drop-down menus in most cells of the spreadsheet facilitated data entry and precision. A macro enabled automatic recall, at follow-up, of previous appointment data for a given animal.

A medical problem was classified as chronic if it had been apparent for at least three months or was a new condition that would ordinarily last for more than three months. An acute flare-up of a chronic condition was classified as 'chronic'. Cases of homeopathic prophylaxis or 'immunisation' were not recorded. Apart from these exclusions, practitioners were required to record all consecutive homeopathic consultations during the 12 months.

Detailed instructions on using the spreadsheet, and how to ask the owner questions about the horse's clinical outcome, were provided on separate pages. A standard question sequence was applied: 'Compared to the first appointment, are the symptoms better, worse or exactly the same?' If the owner said 'better', the veterinarian was required to ask: 'Has there been a mild, moderate or major improvement?' Responses were scored as follows: +1 Mild improvement, +2 Moderate improvement, +3 Major improvement. If the owner said 'worse', the veterinarian would ask: 'Has there been a mild, moderate or major deterioration?' Responses were scored as follows: –1 Mild deterioration, –2 Moderate deterioration, –3 Major deterioration. Responses of 'no change' or 'unsure' were recorded as 0. Assessment of outcome was therefore made by the owner and all data were recorded by the practitioner. Other measures of assessment, diagnosis or clinical outcome were not systematically recorded on the spreadsheet.

Practitioners were expected to send data to one of the authors (ESB), by e-mail, on a monthly basis. This approach allowed the organisers to check and oversee data, to point out any obvious errors, and generally to maintain contact with the practitioners collecting the data.

Data analysis at the end of the study was by practice (individual feedback to each practitioner) and overall (reported in the present paper). Two to three weeks after the completion of data collection, practitioners were sent a separate questionnaire, designed to gauge their experience of using the spreadsheet and their opinions of the value they attributed to the data collection.

The Chair of the South Bedfordshire Research Ethics Committee (REC) advised that a study of this type did not require REC approval.

Methods of spreadsheet analysis

Upon receipt of completed spreadsheets at the end of the project, the original equine data were filtered for missing or erroneous data and rectified where possible. Terminology for medical conditions not listed in the spreadsheet was reconciled to ensure no duplication or ambiguity. The terms 'atopic dermatitis' (six cases) and 'allergic dermatitis' (eight cases) were analysed together under the single heading 'dermatitis'. Sweet itch (summer seasonal recurrent dermatitis) remained a separate entry. In the five cases where more than a single medical problem was listed together, the condition listed first was the single term used for data analysis. The expression 'laminitis, Cushing's syndrome' was retained, however, as a complete entry. Terminology of homeopathic medicines was also reconciled; the term 'combination' was used to describe a prescription containing more than a single homeopathic medicine.

Appointments data from all 12 vets were then consolidated into a master spreadsheet, into which the following column was added, 'Whether or not the appointment was the last for the given problem during data collection.' This addition enabled analysis based on last appointments only; that is, on the number of individual equine conditions treated, irrespective of whether they were treated by the vet once, twice or more often. The phrase 'individual equine condition' was used because a horse might present with different conditions on a different, or even the same, occasion. If a horse presented at a given appointment with more than one condition, each of which was treated separately by homeopathy, the practitioner reported each on a different row of the spreadsheet. This approach was adopted because a key purpose of the study was to catalogue the frequency and success rate of treating named medical problems, even if the animal exhibited more than one.

The use of pivot tables allowed a convenient approach to data analysis, which focused on chronic cases only. Comparison of proportions was carried out using a chi-squared test. $P<0.05$ was regarded as statistically significant.

TABLE 2: Equine conditions most commonly treated by homeopathy

	Frequency		
Condition	Chronic	Acute	Total
Arthritis	28	1	29
Headshaking	17	3	20
Laminitis	14	5	19
Chronic obstructive pulmonary disease	15	0	15
Sweet itch	15	0	15
Dermatitis	14	0	14
Sarcoidosis	14	0	14
Cushing's syndrome	10	0	10
Mud fever	7	2	9
Tendonitis	6	3	9
Lameness*	7	1	8
Navicular syndrome	8	0	8
Back problem*	5	2	7
Laminitis, Cushing's syndrome	7	0	7
Abscess	2	3	5
Aggression	5	0	5
Cancer – melanoma	5	0	5
Spavin	5	0	5
Urticaria	4	1	5
All others (n=100)	117	32	149
Total	305	53	358

* Conditions or descriptions not included in the original drop-down menu in the spreadsheet

Results

Demographic data

All 12 vets returned spreadsheet data on a regular basis, recording a total of 777 homeopathic appointments for horses over the 12-month period. The 777 appointments represented a total of 358 individual equine conditions. Sixty-nine of the 358 conditions applied to horses that were also presented for treatment on a separate visit (or, in some instances, on the same visit) for a different medical condition; therefore, 289 individual animals were examined in total. The male:female ratio was 174:115.

The most frequently seen individual conditions are listed in Table 2. The table highlights the 19 most common conditions, of 119 in total; the remaining 100 were each seen in four or fewer cases. A total of 305 of the 358 individual equine conditions were chronic in nature.

The single homeopathic medicines most frequently used at the final appointment per chronic case were: Pulsatilla (13 cases), Silicea

TABLE 3: Summary of outcomes scored as +2 or +3 at the final follow-up appointment for the eight most common conditions in horses treated by homeopathy

Condition (number of practitioners)	Number at last follow-up	Score (%) −2 or −3	−1, 0 or +1	+2 or +3	Specialist referral (%)	Conventional treatment (%)	Other CAM treatment (%)
Arthritis (3)	23	0.0	8.7	91.3	39.1	13.0	21.7
Headshaking (4)	15	0.0	6.7	93.3	20.0	0.0	20.0
Laminitis (3)*	10	0.0	0.0	100.0	30.0	0.0	10.0
COPD (6)	13	0.0	15.4	84.6	7.7	0.0	0.0
Sweet Itch (5)	10	0.0	20.0	80.0	0.0	0.0	10.0
Dermatitis (1)	14	0.0	21.4	78.6	0.0	0.0	0.0
Sarcoid (5)	12	0.0	25.0	75.0	25.0	8.3	16.7
Cushing's syndrome (4)	8	0.0	25.0	75.0	0.0	12.5	12.5
All others	129	0.8	11.6	87.6	36.4	3.9	20.9
Total	234	0.4	12.9	86.7	28.2	4.3	17.1

For seven chronic cases of laminitis with Cushing's syndrome, 100 per cent of horses achieved a score of +2 or +3 (data from one practitioner). None was on conventional medication.
CAM Complementary/alternative medicine, COPD Chronic obstructive pulmonary disease

(12 cases), Lycopodium (11 cases), Calcarea fluorica (10 cases) and Ledum (10 cases). Another 83 prescriptions for single medicines were used in other cases, and one of various different combinations of medicines was recorded in 46 cases. There was no evidence of matching of a particular homeopathic medicine (or particular combination of medicines) with a specific medical condition; individualised prescribing for each animal was the norm. Each combination preparation was a unique mix of two to six (median two) different homeopathic medicines.

Clinical outcomes

Of the 305 individual chronic cases, 71 were first appointments only and 234 had received at least one follow-up appointment. The outcome score recorded at the last follow-up appointment per case during the 12 months was the single value analysed and presented for that animal within the descriptive statistics below. The 'final' follow-up appointment per case varied between appointment number 2 and 11 (median three). The median number of final outcomes reported per month was 19, with a range of one (in May, the first month of the study) to 49 (July). For the 234 cases, a final score of +2 or +3 (moderate or major improvement) was recorded in 86.7 per cent of cases; a score of −2 or −3 (moderate or major deterioration) was recorded in 0.4 per cent; little or no change (a score of −1, 0 or 1) was noted in 12.9 per cent (Table 3). There were no missing outcomes data at final follow-up.

Scores for each of the eight most common medical conditions are given in Table 3. Higher positive scores (+2 or +3) were achieved most notably (that is, higher than the average, 86.7 per cent, for all conditions) for laminitis (whether or not associated with Cushing's syndrome), headshaking and arthritis. High positive scores were achieved less notably in chronic obstructive pulmonary disease (COPD), sweet itch, dermatitis, sarcoid and Cushing's syndrome. There were no strong negative scores (−2 or −3) in any of these eight (Table 3); the only instance of moderate or major deterioration was a single case of gastritis. For the eight most commonly treated conditions, final outcome scores for each case were recorded at a median appointment number 2 (for headshaking, laminitis and sweet itch) or appointment number 3 (for arthritis, COPD, Cushing's syndrome, dermatitis and sarcoid). Ten of the practitioners submitted outcomes data that included at least one of the eight most common medical problems (one to six vets per specific medical condition).

Of the 234 individual chronic cases at final follow-up appointment, a total of 10 (4.3 per cent) were receiving conventional medication at the last appointment (recorded in the spreadsheet as 'less', 'same', 'more' or 'started'). Table 3 gives information on prescription rates of conventional medicines for the eight most frequently seen chronic conditions; five of the 10 cases were in this group. At this stage, conventional prescribing had been stopped in 16 cases (five of them within the eight most frequently seen chronic conditions). There were 66 cases (28.2 per cent) that had been seen by an RCVS-recognised specialist, and 40 (17.1 per cent) where another CAM treatment was being offered concurrently with homeopathy. These percentages typify the figures for some, but not for each, of the eight most commonly treated conditions; for example, there were no cases of COPD or dermatitis where another CAM treatment was also being administered.

The relationship between moderate or major improvement and whether, at the last recorded appointment, a concurrent conventional treatment or other CAM was being administered, was examined for the 234 follow-up cases. No association was found between the number of outcomes scored +2 or +3 and the concurrent use of conventional or other CAM treatment ($P>0.05$, chi-squared test). The number of outcomes scored +2 or +3 was significantly greater in the 66 follow-up cases seen by an RCVS specialist compared to the 168 that were not investigated in this way (93.9 v 83.9 per cent, $P<0.05$).

Questionnaire responses

Nine of the 12 vets subsequently completed a questionnaire, recording their experience of using the spreadsheet and other aspects of the data collection process. All of the respondents had found the spreadsheet practical to use; six of them had used Excel previously. The outcome question sequence seemed to be understood by clients, and it proved easy for all but one vet to score the stated outcomes on the seven-point scale. The vet in question stated: 'I found the long-running cases difficult to score because they often fluctuated over time; also with terminal cases the outcome is going to be −3 but often the animal's demeanour has improved or side effects lessened and their "passing" has been made easier.' All nine respondents found it useful to have recorded clinical data systematically in this way.

Discussion

The project identified a number of chronic medical problems of horses that are frequently treated using homeopathy, as well as the changes reported by the owner associated with treatment in each case. Among the group of eight conditions commonly observed in the present study, the most noteworthy findings were the high positive outcomes recorded in laminitis (whether or not associated with Cushing's syndrome), headshaking and arthritis. To the authors' knowledge, the only previous systematic study of outcomes in equine homeopathy has been in Cushing's disease, which reported positive results (Elliott 2001). A carefully designed programme of controlled research – particularly in any of the most frequently reported conditions in this study – is warranted, as it is important to confirm or refute evidence from observational work alone.

The overall rate of moderate or major improvement (outcome scores of +2 or +3) in 86 per cent of equine follow-up cases is considerably higher than the 61 per cent reported in the pilot data collected from several species including cats, dogs and horses (Mathie and others 2007), or the 50 to 68 per cent recorded in equivalent outcome studies of homeopathy in human beings (Spence and others 2005, Mathie and Robinson 2006, Robinson 2006). These findings could be viewed as supporting a positive impact of homeopathy in horses with long-term health problems. Veterinary homeopaths often consider that horses respond especially well to homeopathic treatment; a previous study in homeopathy (for Cushing's disease) reported better response rates for horses than for dogs (Elliott 2001). The authors do not aim to support or contest this belief with the findings of the current study, but the work supports the relevance of further research into equine homeopathy.

Despite analysing data from 234 follow-up cases, the number of chronic conditions in each diagnostic group is small, and positive bias will inevitably arise from the study design, where the outcome scores were purely the owner's assessment, and the horses were included because their owners sought homeopathic treatment in the first place.

It is the experience of some veterinary practitioners that many owners try homeopathy after everything that conventional medicine has to offer has been unsuccessful, a view supported by the fact that so few of the horses (4.3 per cent) were concurrently receiving any conventional medication for their chronic conditions. In human medicine, conditions like this have been termed 'effectiveness gaps' (Fisher and others 2004), and are areas where CAM therapies are commonly sought by patients. Some people clearly have a similar approach to their animal's healthcare. However, this cannot explain why horses seem to have higher positive outcome scores than dogs and cats, for example, including those based on the data collected for dogs and cats in the present study (unpublished data). It is undoubtedly the case that not all owners would agree on what constitutes moderate or major improvement.

An observational study of this nature, by definition, involves no controls and is therefore unable to take into account other factors such as regression to the mean, or improvement or decline of clinical signs over time. Moreover, the present analysis did not reflect the absence of follow-up data from 71 first appointments, for which the response to homeopathy was unknown. The particularly high proportions of positive outcome scores for some of the equine conditions described in this study should be considered in relation to the high outcome scores in general; their absolute magnitudes are of lesser importance. A causal relationship between homeopathy and reported outcome is not our inference here.

Sceptics sometimes argue that the apparent success of homeopathy in diseases that are difficult to improve using conventional medicines is founded on misdiagnosis. In the present project a note was kept of cases that, at some stage, had been referred to an RCVS-approved specialist for the presenting complaint; this was the situation in 28.2 per cent of chronic cases overall. This proportion reflects the relatively small number of veterinary specialists in the UK and the fact that referral would generally not be considered relevant in some conditions. Nevertheless, it is notable that the number of outcome scores of +2 or +3 was greater in horses with additional specialist diagnosis than in those without such input.

The 12-month duration of data collection benefited the project, addressing the limitation of the six-month pilot work (Mathie and others 2007). A full course of homeopathy appointments per horse, particularly in chronic cases, was more likely to have been achieved in the longer time frame. The new data were also less likely to have been distorted by seasonal factors, although the number of final outcomes recorded per month did vary during the year, with numbers atypically low at the beginning of the project in May. Seasonality is a potentially important issue in conditions such as headshaking (Mills and others 2002), laminitis (Donaldson and others 2004), sweet itch and other allergic problems. Well-controlled research on such conditions would ensure that suitable outcomes were focused on the relevant symptomatic season; any improvement due to treatment rather than season could therefore be discerned.

Research methods for future controlled investigation have been informed by the present work. The study confirms, for example, that individualised prescribing is the usual approach to homeopathic management of horses (MacLeod 1988, Sumano López and others 1999). Given that all 12 practitioners were trained in the classical (Hahnemannian) school of homeopathic methods, this finding is not surprising. The authors placed no importance on recordings of homeopathic dilutional 'potency' or whether the medicine was changed during treatment, emphasising simply the last medicine prescribed per case. Use of a particular homeopathic prescription for all horses with a given medical condition is therefore unlikely to feature in the study design of a controlled trial, making it problematic to conduct explanatory research on specific treatment effects (Weatherley-Jones and others 2004, Paterson and Dieppe 2005). A possible solution to issues of this nature has been investigated in a recent pilot trial of homeopathy in canine atopic dermatitis, in which individualised remedies that seemed effective in an initial observational phase were compared with a placebo in a second, randomised and blinded, phase of a two-phase study design (Hill and others 2009). Placebo design per se may be a lesser issue in veterinary trials than in human studies (Hektoen 2005).

Focused research normally benefits from the use of a condition-specific outcome measure. The measure used in the present study was a generic seven-point Likert scale. Measurement scales of this kind have been validated in other research settings (Gordon and others 2003). In the present study, which aimed to provide trends in outcome for any condition or clinical sign, allocating a score of ±2 or ±3 was sufficient. Future controlled research would ascribe specific time-points for outcome assessment; in a non-controlled study such as the present one, horses were necessarily assessed at variable follow-up intervals. Clearly established categories of diagnosis and objective, blinded, evaluation of outcomes would also be appropriate features of future condition-specific research.

It should be re-emphasised that, despite accumulating 777 homeopathy appointments in 289 horses over a 12-month period, outcome data for any given chronic medical condition were derived from 28 cases at most (arthritis), with data per condition provided by no more than six vets (for COPD) and even by just one vet (for dermatitis). Generalisation of the present outcome data to a wider population of homeopathic veterinary experience should therefore be made with some caution. Nevertheless, the findings do provide a useful basis for targeting controlled research of suitable types of case. Pilot research involving close collaboration between homeopathic and conventional veterinary specialists, as evidenced by the recent study on canine atopic dermatitis (Hill and others 2009), will be essential in pursuing such targets.

Acknowledgements

The authors thank the practitioners for taking part in data collection: Trevor Adams, Chris Almond, Sue Armstrong, Neil Coode, Tim Couzens, Claire Davies, Chris Day, Mark Elliott, Peter Gregory, Nancy Morris, Ilse Pedler and Cheryl Sears. The work was funded by the British Homeopathic Association.

References

ALBRECHT, H. & SCHÜTTE, A. (1999) Homeopathy versus antibiotics in metaphylaxis of infectious diseases: a clinical study in pig fattening and its significance to consumers. *Alternative Therapies in Health and Medicine* **5,** 64-68

BOTH, G. (1980) Report on an experiment in practice to treat fertility disturbances in swine with homeopathic preparations. *Deutsche Tierärztliche Wochenschrift* **87,** 460-461 (In German)

DONALDSON, M.T., JORGENSEN, A. J. R. & BEECH, J. (2004) Evaluation of suspected pituitary pars intermedia dysfunction in horses with laminitis. *Journal of the American Veterinary Medical Association* **224,** 1123-1127

ELLIOTT, M. (2001) Cushing's disease: a new approach to therapy in equine and canine patients. *British Homoeopathic Journal* **90,** 33-36

FACULTY OF HOMEOPATHY (2009) Randomised controlled trials in homeopathy. www.facultyofhomeopathy.org/research/rcts_in_homeopathy. Accessed April 9, 2009

FISHER, P., VAN HASELEN, R., HARDY, K., BERKOVITZ, S. & MCCARNEY, R. (2004) Effectiveness gaps: a new concept for evaluating health service and research needs applied to complementary and alternative medicine. *Journal of Alternative and Complementary Medicine* **10,** 627-632

GORDON, S., AMEEN, V., BAGBY, B., SHAHAN, B., JHINGRAN, P. & CARTER, E. (2003) Validation of irritable bowel syndrome Global Improvement Scale: an integrated symptom end point for assessing treatment efficacy. *Digestive Diseases and Sciences* **48,** 1317-1323

HEKTOEN, L. (2005) Review of the current involvement of homeopathy in veterinary practice and research. *Veterinary Record* **157,** 224-229

HILL, P. B., HOARE, J., LAU-GILLARD, P., RYBNICEK, J. & MATHIE, R. T. (2009) Pilot study of the effect of individualised homeopathy on the pruritus associated with atopic dermatitis in dogs. *Veterinary Record* **164,** 364-370

MACLEOD, G. (1988) The Treatment of Horses by Homoeopathy. C. W. Daniel.

MATHIE, R. T., HANSEN, L., ELLIOTT, M. F. & HOARE, J. (2007) Outcomes from homeopathic prescribing in veterinary practice: a prospective, research-targeted, pilot study. *Homeopathy* **96,** 27-34

MATHIE, R. T. & ROBINSON, T. W. (2006) Outcomes from homeopathic prescribing in medical practice: a prospective, research-targeted, pilot study. *Homeopathy* **95,** 199-205

MILLS, D. S., COOK, S., TAYLOR, K. & JONES, B. (2002) Analysis of the variations in clinical signs shown by 254 cases of equine headshaking. *Veterinary Record* **150,** 236-240

PATERSON, C. & DIEPPE, P. (2005) Characteristic and incidental (placebo) effects in complex interventions such as acupuncture. *British Medical Journal* **330,** 1202-1205

ROBINSON, T. W. (2006) Responses to homeopathic treatment in National Health Service general practice. *Homeopathy* **95,** 9-14

SEARCY, R., REYES, O. & GUAJARDO, G. (1995) Control of subclinical bovine mastitis. Utilization of a homoeopathic combination. *British Homoeopathic Journal* **84,** 67-70

SPENCE, D. S., THOMPSON, E. A. & BARRON, S. J. (2005) Homeopathic treatment for chronic disease: a 6-year, university-hospital outpatient observational study. *Journal of Alternative and Complementary Medicine* **11,** 793-798

SUMANO LÓPEZ, H., HOYAS SEPÚLVEDA, M. L. & BRUMBAUGH, G. W. (1999) Pharmacologic and alternative therapies for the horse with chronic laminitis. *Veterinary*

Clinics of North America. Equine Practice **15,** 495-516
SWAYNE, J. (2000) Churchill Livingstone's International Dictionary of Homeopathy. Churchill Livingstone. pp 105-106
VAN WASSENHOVEN, M. (2005) Priorities and methods for developing the evidence profile of homeopathy. Recommendations of the ECH general assembly and XVIII Symposium of GIRI. *Homeopathy* **94,** 107-124
VARSHNEY, J. P. & NARESH, R. (2004) Evaluation of a homeopathic complex in the clinical management of udder diseases of riverine buffaloes. *Homeopathy* **93,** 17-20
WEATHERLEY-JONES, E., THOMPSON, E. A. & THOMAS, K. J. (2004) The placebo-controlled trial as a test of complementary and alternative medicine: observations from research experience of individualised homeopathic treatment. *Homeopathy* **93,** 186-189
WILLIAMSON, A. V., MACKIE, W. L., CRAWFORD, W. J. & RENNIE, B. (1991) A study using Sepia 200c given prophylactically postpartum to prevent anoestrus problems in the dairy cow. *British Homoeopathic Journal* **80,** 149-156