EVIDENCE-BASED VETERINARY HOMEOPATHY

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In organic agriculture, the use of homeopathic remedies in Europe is explicitly recommended: they should be preferred over conventional medicine, according to the corresponding EU organic regulations of the European Commission. While farmers experience daily success with homeopathy, more research is warranted to confirm these results. In this context, the International Association for Veterinary Homeopathy (IAVH) commented on the review by Doehring and Sundrum, published in Veterinary Record (1) in December 2016, in terms of objective reporting.

 Scientific studies and, last but not least, a meta-analysis of randomized controlled trials and a review provide evidence (though limited), of the effectiveness of veterinary homeopathy versus placebo (2-6).

Homeopathic remedies were used to replace antibiotics in the treatment of E. coli diarrhoea in neonatal piglets. This 2010 randomized, placebo controlled, double-blind study (2) of the homeopathic treatment of E. coli diarrhoea in piglets showed that the homeopathically treated group had significantly fewer piglets with E. coli diarrhoea. In addition, the severity of the disease was decreased, and diarrhoea, if it occurred, was of a shorter duration. The study was classified as high-quality by Doehring and Sundrum, as well as by Mathie and Clausen. The repeatability of this study is currently being examined in other study centers.

by Doehring and Sundrum (1). The review by Doehring and Sundrum was thoughtful about research of homeopathy in a farm context in general. However, the conclusion of the authors '... replacing or reducing antibiotics with homeopathy currently cannot be recommended ...' is not warranted. No new findings were added to the existing literature (4-6), and only the need for further high-quality studies can be stated.

Another critical point is that studies are often conducted by people with little or no quality homeopathic training. For example, in only 13 of 48 studies was homeopathic therapy administered by a veterinarian with sound homeopathic training. Correct choice of remedy is essential for effectiveness in homeopathic prescribing!

This review's findings (1) are broadly consistent with the findings of a previous, high-quality, review by Mathie and Clausen (6), published 2014 in the same journal, which clarified that further veterinary research is needed before firm conclusions can be drawn, and any clinical recommendations can be made. This need for further research was subsequently confirmed by another high-quality review by the same authors (5).

A meta-analysis by Mathie and Clausen (4) showed that overall there is a positive trend in the evidence on veterinary homeopathy which is robust upon sensitivity analysis. This positive trend is unchanged whether one considers only the highest quality trials or all existing trials regardless of quality.

- Metanalysis Mathie and Clausen 2015 (4):
- 18 RCTs placebo-controlled, 3 studies were excluded as data could not be read out
- ▶ Pooled OR 1,69 (95% CI, 1,12 2,56), N = 15; P = 0,01
- Significant difference between placebo and veterinary homeopathy, showing a positive effect of veterinary homeopathy

The positive studies showing effectiveness of homeopathy in animals demonstrate that homeopathy may have a role to play in livestock: e.g. as a replacement for antibiotics for treating E.coli diarrhoea in piglets (2).

Considering the global threat of anti-microbial resistance, such promising areas deserve investment in further research, in particular high-quality randomized clinical trials.

In his meta-analysis from 2013 (7), Robert Hahn (Head of Research, Södertälje Hospital Sweden, Professor of Anesthesia & Intensive Care, Linköping University) has stated that, in order to demonstrate that homeopathy in humans does not show effectiveness, more than 90% of the available clinical studies must be excluded or scientifically untenable statistical methods must be applied.

> References:

- ▶ (1) Doehring C, Sundrum A. Veterinary Record 2016; 179: 628.
- ► (2) Camerlink I et al. Homeopathy 2010; 99: 57-62.
- (3) Epstein 2014 http://theavh.org/wp-content/uploads/2014/02/Homeopathy-White-Paper.pdf.
- ▶ (4) Mathie RT, Clausen J. Homeopathy 2015; 104: 3-8.
- ► (5) Mathie RT, Clausen J. BMC Vet Res 2015; 11: 236.
- ▶ (6) Mathie RT, Clausen J. Veterinary Record 2014; 175: 373-381.
- ▶ (7) Hahn RG. Forsch Komplementmed 2013; 20: 376-81.

- bench of Evidence-based medicine. (EBM). Master thesis for graduation as Master of Science, University course in Natural Medicine, Danube University Krems, Department of Health Sciences and Biomedicine, May 2016.
- Research question
- The research question was: Are there studies of evidence grades la and lb that can prove the effectiveness of homeopathy? Only if there are such high quality studies, can homeopathy be called evidence-based medicine.

- The search identified 9 meta-analyses and reviews (la: Kleijnen 1991, Cucherat 2000, McCarney 2004, Altunc & Ernst 2007, Kassab 2009, Nuhn 2010, Davidson 2011, Mathie 2012 & 2014), of which 4 reviews showed a significant effect of the homeopathic therapy, 3 reviews did not gain conclusive results (positive and negative partial outcomes) and 2 reviews could not prove an effect.
- Of the 22 randomised, double-blinded studies (lb), 11 studies (50%) did show the effectiveness of homeopathic therapy, 3 studies showed limited effects of homeopathy and 8 studies could not demonstrate effectiveness.

- > Results
- ► Homeopathy fulfills the criteria for EBM.
- The effectiveness of homeopathic therapy can be proven in meta-analyses and reviews (evidence grade Ia) and clinical studies (evidence grade Ib), which are the gold standard of evidence-based medicine.
- > Homeopathy is an evidence-based medicine.

Presearch of the crucial question whether veterinary homeopathy works according to the rules for evidence-based medicine (EBM) has to be performed. Currently, there are one out of two evidence class 1a reviews, and one evidence class 1a meta-analysis, stating positive outcome for veterinary homeopathy, as well as one out of two evidence class 1b studies stating positive outcome for veterinary homeopathy, so veterinary homeopathy could be classified as evidence based. More high quality research is certainly needed.

- ▶ (1) Doehring C, Sundrum A. Veterinary Record 2016; 179: 628.
- (2) Camerlink I et al. Homeopathy 2010; 99: 57-62.
- > (3) Hektoen L et al. J. Vet Med A Physiol Pathol Clin Med 2004; 51: 439-446.
- ▶ (4) Mathie RT, Clausen J. Homeopathy 2015; 104: 3-8.
- ▶ (5) Mathie RT, Clausen J. BMC Vet Res 2015; 11: 236.
- ▶ (6) Mathie RT, Clausen J. Veterinary Record 2014; 175: 373-381.

To the Editor of the Veterinary Record

The IAVH is disappointed with how our colleagues try to influence the position of the RCVS in relation to homeopathy (Comparison of veterinary drugs and veterinary homeopathy: part 1; Veterinary Record, August 5, 2017 and part 2; Veterinary Record, August 23, 2017). The many errors and omissions in this paper suggest that it was not reviewed by anyone qualified in veterinary homeopathy.

Premarkably, the authors' critical approach is mainly based on theoretical arguments why homeopathy cannot possibly work. We recognise this approach. It is based on the a priori perceived implausibility of any conceivable mechanism of action, also called plausibility bias (1). This impedes any thorough, unbiased assessment of the clinical evidence. Plausibility bias can even lead to violations of scientific standards of research analysis, as shown by the Australian NHMRC review report that concluded that homeopathy is not effective (2).

A mainstream scientist, Robert Hahn, Professor of anaesthesia and intensive care, concludes: "Clinical trials of homeopathic remedies show that they are most often superior to placebo. Researchers claiming the opposite rely on extensive invalidation of studies, adoption of virtual data, or on inappropriate statistical methods" (3). His conclusion is endorsed by André Wambersie, emeritus professor of Radiotherapy and Radioprotection (4). The fact that unbiased scientists such as these are supportive of homeopathy suggests that the conclusions of the review authors are based on plausibility bias.

Success of homeopathic treatment is based on individualisation. Mathie et al.(5) showed in their meta-analysis of RCTs of individualised homeopathy (in humans), evidence for a specific treatment effect of individualised medicines which is based on RCTs identified as reliable evidence using the established Cochrane risk of bias assessment tool.

Although the precise mode of action of homeopathic medicines cannot yet be explained, fundamental research on animals (e.g. frogs, rats, mice), plants (e.g. wheat, duck weed, peas) and cells (e.g. basophilic leucocytes) has demonstrated that highly diluted homeopathic preparations are able to cause biological effects. We must assume that the placebo effect does not play a role here.

In a systematic review and meta-analysis of fundamental research into the effects of highly diluted homeopathic preparations 67 in-vitro experiments in 75 publications were assessed according to specific quality criteria. The majority of these experiments demonstrated effects of highly diluted homeopathic preparations and in almost three quarters of all repeated studies the findings were positive. Also experiments having a high methodological standard demonstrated a clear effect of highly diluted homeopathic preparations (6).

Regarding veterinary homeopathy, the meta-analysis by Mathie and Clausen (7) showed that overall there is a positive trend for the evidence on veterinary homeopathy and that the evidence is robust upon sensitivity analysis, although high-quality evidence comprises only 2 trials. One study provides an example of how homeopathy can be of great importance. In a randomized, placebo controlled, double-blind study (8) for the homeopathic treatment of diarrhoea in piglets caused by the bacterium Escherichia coli (E. coli) it was demonstrated that the homoeopathically treated group had significantly fewer piglets with E. coli diarrhoea.

In June 2017, the EU Commission adopted the new European One Health Action Plan against Antimicrobial Resistance (AMR), which maintains that the use of antibiotics in animals should be minimized as much as possible and highlights the **need for alternatives** to antibiotics. The Commission stated that research into the development of new antimicrobials and alternative products for humans and animals will be supported (9). All potentially effective measures, including homeopathy, must be explored and deployed if we are to overcome the global threat of AMR.

- We strongly believe that the benefit to patients, and our desire and ability to increase our medical tools, should drive the debate in these matters. That also includes an unbiased assessment of any scientific research. Our understanding is that complementary medicine, including homeopathy, has a great potential to contribute to better health of humans and animals. That is exactly the reason why WHO urges member states to include traditional and complementary medicine in their national health policies and systems (10).
- We sincerely hope you will consider these facts and references in your further publications. IAVH & HRI & ECH & EUROCAM

- (1) RUTTEN, L., MATHIE, R. T., FISHER, P., GOOSSENS, M., VAN WASSENHOVEN, M. (2013) Plausibility and evidence: the case of homeopathy. Medicine, health care, and philosophy 16, 525-32 https://www.ncbi.nlm.nih.gov/pubmed/22539134
- (2) AUSTRALIAN HOMEOPATHIC ASSOCIATION, HOMEOPATHY RESEARCH INSTITUTE (2017) Re-Analysis of the Australian report https://www.hri-research.org/resources/homeopathy-the-debate/the-australian-report-on-homeopathy/
- (3) HAHN, R. G. (2013) Homeopathy: meta-analyses of pooled clinical data. Forschende Komplementaermedizin 20, 376-381 https://www.karger.com/Article/Pdf/355916
- (4) WAMBERSIE, A. (2017) Prof Wambersie's words on the work of Prof Hahn regarding the value of meta-analyses in homeopathy http://homeopathyeurope.org/irrefutable-evidence-homeopathy/
- (5) MATHIE, R. T., LLOYD, S. M., LEGG, L. A., CLAUSEN, J., MOSS, S., DAVIDSON, J. R. T., FORD, I. (2014) Randomised placebo-controlled trials of individualized homeopathic treatment: systematic review and meta-analysis. Systematic Reviews 3, 142 https://systematicreviewsjournal.biomedcentral.com/articles/10.1186/2046-4053-3-142

- (6) WITT, C. M., BLUTH, M., ALBRECHT, H., WEISSHUHN, T. E., BAUMGARTNER, S., WILLICH, S. N. (2007) The in vitro evidence for an effect of high homeopathic potencies—a systematic review of literature. Complementary therapies in medicine 15, 128-38 https://www.ncbi.nlm.nih.gov/pubmed/17544864
- (7) MATHIE, R. T., CLAUSEN, J. (2015) Veterinary homeopathy: meta-analysis of randomised placebo-controlled trials. Homeopathy 104: 3-8 https://www.ncbi.nlm.nih.gov/pubmed/25576265
- (8) CAMERLINK, I., ELLINGER, L., BAKKER, E. J., LANTINGA, E. A. (2010) Homeopathy as replacement to antibiotics in the case of Escherichia coli diarrhoea in neonatal piglets. Homeopathy 99, 57-62 www.ncbi.nlm.nih.gov/pubmed/20129177
- (9) EUROPEAN COMMISSION (2017) A European One Health Action Plan against Antimicrobial Resistance (AMR) https://ec.europa.eu/health/amr/sites/amr/files/amr_action_plan_2017_en.pdf
- > (10) WORLD HEALTH ORGANISATION WHO (2013) Traditional Medicine Strategy: 2014-2023 http://www.who.int/medicines/areas/traditional/en/

- ► Effects of homeopathic Anax imperator on behavioural and pain models in mice Mutlu O et al. Homeopathy 2015; 104: 15-23.
- Methods: The aim of this study was to investigate effects of homeopathic Anax imperator (dragonfly) (Anax-i 30c and Anax-i 200c) in the forced swim test (FST), elevated plus-maze (EPM) test, hot plate (HP) test and open field test and examined NPY1 receptor expression, in naive mice.
- Results: Anax-i 30c or Anax-I 200c treatment significantly decreased NPY1 receptor expression, and Anax-i 30c also decreased NPY2 receptor expression.

- Biological evidence for an effect of high homeopathic potencies using biomolecular tools PhD Etienne Capieaux
- ► At 2nd DynHOM Colloquium May 13th, 2017
- Homeopathic medicine is able to influence the expression profile of particular genes of cells when they are in contact with the remedy. Each medicine has its own genes targets.
- Various studies suggest that one of the modes of action of homeopathic medicines, at genetic level, is of epigenetic nature.
- Etymologically, epi-genetic means 'above' the gene, not 'in' the gene. As such the remedy does not change the linear gene sequence's. An epigenetic mode of action does not alter the nature of the gene, only its expression.

- Each homeopathic remedy is assigned to targeted genes but the orientation and the power of the modulation depends of the potentization level.
- The revolution for the homeopathic domain is that this biological action, also for the highest dilutions/dynamizations, is now identifiable by molecular biology technologies such as PCR (also used in criminology), Micro-arrays and heterologous expression.

- > GELSEMIUM Major steps forward were published by the university team of Verona directed by Professor Paolo Bellavite.
- This team established by Micro-arrays the extreme sensitivity to this Gelsemium stock of 56 genes expressed in human neurocytes.
- Among them genes implicated in calcium homeostasis, G-protein coupled receptor signaling pathways, inflammatory response and neuropeptide receptors. This has been verified for a range of potentizations (2C,3C,4C,5C,9C and 30C).

- CUPRUM Several teams of the university of Florence (Pharmacologic and chemistry department among others) have published Micro-arrays results showing a modification of the gene expression profile in a human prostate epithelial cell line after exposition to extremely low copper concentration (from 10-6 to 10-17 Mol/l).
- A set of genes belonging to different gene families were modulated by copper, precisely the families of the heat shock proteins and metallothioneins.

- Changes in gene expression induced by high homeopathic potencies of short nucleic acid fragments PhD Etienne Capieaux
- We have studied the impact of high potentization on baker's yeast. It is an LIVING eukaryotic unicellular organism worldwide used for scientific research.
- It is genetically and biochemically very close of human cells.
- We can see a yeast gene answer to the contact with homeopathic stocks and this in a reproducible manner.
- The gene response is identified by the appearance of a color quantified by measuring its specific absorbance.

- Using the yeast model, we are at the level of the heterologous gene expression and the impact on reporter's genes.
- The information about gene expression is reported through response intensity, a color in this specific case.
- This molecular biology tool, designed for classical experimental studies on high dosed conventional medicines, lend itself remarkably also in homeopathic medicines allowing to objectivize their activities.
- The common point of these diverse experimental approaches is the study on gene expression or gene behavior after contact with high potentized homeopathic medicine.

- ▶ 1. Yes, there is an interaction between the homeopathic medicine and the subject genome when contact is established.
- ➤ 2. Yes, a biologic activity can be started within a LIVING being by a homeopathic medicine.
- > 3. The experimental results presented today on the unicellular yeast is a prove that this biological activity is not a placebo effect.

PROOF OF THE MODE OF ACTION OF HOMEOPATHY IN ANIMALS & HUMANS

- The high-speed train (TGV) « Homeopathy » run on new scientific rails towards new destinations PhD Etienne Capieaux
- Using molecular biology objectifiable methods we have to conclude that: there is an interaction between a homeopathic medicine and patient's genome.
- Indeed, these molecular biology methods, daily used in university centers and hospitals, showed that a homeopathic medicine is able to increase or decrease human and animal gene expression.
- These "in vitro" or "in vivo" experimental observations confirm that a high potentized homeopathic remedy is a medicine, in its classical and noble sense, because it generates a biological activity in the body. Furthermore, the results with "in vitro" unicellular model (Saccharomyces cerevisiae baker's yeast), excludes a simple placebo effect.

PROOF OF THE MODE OF ACTION OF HOMEOPATHY IN ANIMALS & HUMANS

Take home messages

- A dynamized dilution is not a simple dilution.
- Discrimination between homeopathic potentizations of two different medicines is possible even in highest dilutions.
- Tools commonly used in Molecular Biology can be applied to homeopathic remedies and a specific effect (change in gene expression) is demonstrable.
- ▶ The homeopathic medicine is more than a placebo preparation.
- M. V. Wassenhoven, M. Goyens, M. Henry, E. Capieaux, P.Devos (2017).

 Nuclear magnetic resonance characterisation of traditional homeopathically-manufactured copper (Cuprum metallicum) and a plant (Gelsemium sempervirens) medicines and controls. Homeopathy; 1-17.

PROOF OF THE MODE OF ACTION OF HOMEOPATHY IN ANIMALS & HUMANS

- For further information on research in homeopathy please see here – Homeopathy Research Institute: https://www.hri-research.org/hri-research/
- The ECH (European Committee for Homeopathy) and the UK Faculty of Homeopathy:
- http://homeopathyeurope.org/de/research/
- http://facultyofhomeopathy.org/

Conference of Homeopathy Research Institute 2017 in Malta

- It was an amazing conference showing the reality research in homeopathy faces today. It was disillusioning to hear what problems researches face more and more, e.g. professors are told to loose their jobs if they support research in homeopathy, trials declined from ethic committees in countries where homeopathy is thought to be in a safe position, e.g.in Germany just to name two examples.
- So what to do and where to go with research in homeopathy? A panel discussion took place on this topic well known researches from different research areas gave their point of view.
- https://www.hri-research.org/wpcontent/uploads/2017/08/HRI_RIF_34_MaltaConfReport.pdf

Three agreements

- The public has the strongest voice so every single homeopath is asked to talk to his/her patients/patient owners to tell them the situation and ask them for support in order to be able to inform politicians about what is going on with homeopathy at the moment! So that politicians raise their voice for homeopathy in order that we are able to do research in this promising field!
- Basic research is needed to show/explain the mode of action as this is the most commonly used argument - as long as the mode of action is not clarified homeopathy is to be banned sceptics state.
- Clinical research including all kinds of study designs are needed to show homeopathy's efficacy/effectiveness.

- Pr. Robert Mathie showed in his metanalysis of 'pragmatic' randomised controlled trials in humans that individualised homeopathic treatment used as adjuctive therapy is significantly more effective than conventional therapy alone. Studies with homeopathy as adjunctive therapy give best results. This kind of research might be one way forward for research in homeopathy.
- Frass M. et al., Complement Ther Med. 2015; 23: 309-17.
 Influence of adjunctive classical homeopathy on global health status and subjective wellbeing in cancer patients a pragmatic randomized controlled trial

- Dr. Stephan Baumgartner showed highlights from **20 years of basic research** in homeopathy. His five favourised models explaining the mode of action:
- 1.) A bioactivity test metamorphosis of Rana temporaria, meta-analysis of 24 experiments, comparison of effects of Thyroxine 30x to water 30x, reduction of metamorphosis detected in almost all trials
- ▶ 2.) Biocrystallisation assay results will be published by Baumgartner et al
- > 3.) Mouse behavior test published by Bellavite et al 2012 eCAM
- 4.) Healthy duckweed bioassay published by Scherr 2007/2009 in Homeopathy, by Majewesky 2014/2017 in Homeopathy & impared duckweed bioassay published by Jaeger et al. 2010/2011
- > 5.) Nanosized solvent superstructures great work by Demangeat

- Dr. Alexander Tournier gave a great overwiev of physics and homeopathy.
- Many different study designs for clinical studies were shown pragmatic trials (Prof.Michael Frass, Dr. Christien Klein), RCTs (Dr.
 Rajesh Shah, Dr. Emma Macías-Cortés), observational studies,
 prognostic factor research (Dr. Lex Rutten), trials within cohort
 design (Dr. Philippa Fibert) and much more.
- Prof. Dr Cidéli Coelho although human doctors where asking for high-quality studies in animals showing the effectiveness of homeopathy in our patients.

- One highlight was the "Just one drop" film which was shown to the audience. It is a film showing
- two amazing cases, one of an infection with MRSA healed by homeopathic treatment and one of a child with authism cured with homeopathy
- the history of homeopathy e.g. when homeopathy saved patients from scarlet fever the first epidemic where homeopathy was successfully used
- the documentation of the re-analysis of the Australian report the question what was done to show that homeopathy is not effective was answered:

- e.g. the Australian overview was done twice, the first one showing that homeopathy is effective is hidden from the public
- e.g. high quality trials were excluded due to a patient number lower than 150 or other not known reasons
- e.g. the advisory committee was chaired by Prof Peter Brooks who is a member of a well known anti-homeopathy group
- https://www.hri-research.org/resources/homeopathy-the-debate/the-australian-report-on-homeopathy/

► Focus on objective of the study, NOT the method AND MAKE IT EASY!

>	Research Question	Research Methodology
Description	Use of the Tx in the community	Descriptive, cross-sectional, qualitative
> Safety	Therapy safety in day-to-day practice	Surveillance. Observational.
> Effectiveness	Therapy effectiveness in day-to-day practice	Outcome, pragmatic clinical, comparative
▶ Efficacy	Specific effects of medicines and patient-practitioner interaction	RCTs, Metaanalyses
Mechanism of action	Biological and physical mechanisms underlying the interventions	Fundamental research

▶ Scope Audience

Improving homeopathy/daily practice Homeopathic practitioners

Case reports !!!

Integration of provings

Feedback/input on appropriate proving research methodology

Improving reproducibility
Researchers

Homeopathic practitioners

Academics

General practitioners

Understanding homeopathy
Basic/preclinical research

Researchers
Homeopathic practitioners
Academics

- Facilitate funding "pump priming"
- Request disease orientated organization if Disease-orientated they are open to fund CAM/homeopathy organisations open for Dissemination strategy

 CAM
 - provide info on funding bodies/possibilities
 - educate potential applicants

- ▶ The link to the guidelines for case reports and other studies:
- Case reports: http://www.care-statement.org/
- Other studies: https://www.equator-network.org/reporting-guidelines/

- Homeopathy Research Institute and Carstens Stiftung lead the way with Research into Homeopathic Medicine
- rigorous database of its kind in the world, and the only homeopathy database providing information about the quality of the studies it contains. It is a collaboration between Carstens Stiftung and Homeopathy Research Database.
- https://www.hri-research.org/resources/research-databases/

- Any research IAVH supports should be vetted by the HRI scientific committee
- The HRI scientific committee consists of experts from around the world who understand and participate in research in homeopathic medicine!
- https://www.hri-research.org/about-hri/scientific-advisorycommittee/

Торіс	ltem	HOM-CASE CARE Extension Checklist	Reported on page
Title	1	The wards "cozereport" should be in the title along with what is of greatest in this coze	
Key Words	2	The key elements of this case in 2 to 5 key words	
Abstract	3а	Introduction—What is unique about this case? What does it add to the medical literature?	
	3b	The main symptoms of the patient and the important dinical findings	
	3c	The main diagnoses therapeutics interventions, and outcomes	
	3d	Conclusion—What are the main "take-away" lessors from this case?	
Introduction	4	Brief background summary of this case referencing the relevant medical literature	
Patient	5a	Demographic information (such as age, gender, ethnicity, occupation)	
Information	5b	Main symptoms of the patient (his or her chief complaints)	
	5c	Medical, family, and psychosocial history including co-morbidities, and relevant genetic information	
	5d	Relevant past interventions and their outcomes	
Clinical Findings	6	Neievalin par intervenium and men document. Describe the relevant physical examination (PE) findings.	
	6h1	Clinical history detail (homeopathic symptoms used for decision, etc.)	
Timeline	7	Depict important milestones related to your diagnoses and interventions (table or figure)	
Diagnostic	8a	Diagnostic methods (such as PE, laboratory testing, imaging, questionnaires)	
Assessment	8b	Diagnostic challenges (such as financial, language, or cultural)	
	8c	Diagnostic reasoning including other diagnoses considered	
	8d	Prognostic characteristics (such as staging in oncology) where applicable	
Therapeutic Intervention	9a	Types of intervention (such as pharmacologic, surgical, preventive, self-care)	
	9h2	Type of hameapathy, individualized / Farmula: single- or mult-constituents / Isapathy	
	9h3	Medication(s): Nomenciature (list individual prescriptions or constituents + trade names), manufacture, potency, scale and galenic form	
	9b	Administration of intervention (such as dosage, stength, duration)	
	9c	Changesin intervention (with rationale)	
Follow-up and Outcomes	10a	Cinician-and patient lassessed autoomes	
	10b	Important follow-up test results	
	10c	Intervention achievence and tolerability (How was this assessed?)	
	10d	Advese and unanlicipated events	
	10h4	Objective e-kidence (if applicable)	
	10h5	Cocurence home expathic aggrovation	
	10h6	Possible causal difficultion of changes explicitly assessed / discussed	
Discussion	11a	Discussion of the strengths and limitations in the management of this case	
	11b	Discussion of the relevant medical iterature.	
	11c	The rationale for conclusions (including assessment of possible causes)	
	11d	The main "take-away" lessons of this case report	
Patient Perspective	12	Did the patient share his or her perspective are experience? (Include whenever possible)	
Informed Consent	13	Did the patient give informed consent? Peace provide firequested	Yes No

CLINICAL

Homeopathic and integrative treatment for feline hyperthyroidism — four cases (2006—2010)

Sara Fox Chapman*

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Hyperthyroidism is a frequent veterinary problem, particularly in elderly cats. Homeopathic treatment and other integrative modalities were provided for four hyperthyroid cats whose owners did not want conventional treatment. Symptomatic homeopathic treatment with *Thyroidinum* was helpful in one cat. All cats were prescribed an appropriate individualized homeopathic remedy. All four cats showed resolution of clinical signs; three attained normal thyroid hormone levels. Three cats later received acupuncture and/or herbal medicines; two cats later received symptomatic homeopathic remedies. Two cats are thriving after over 3.5 and 4.25 years of treatment; two were euthanized for unrelated problems after 3 and 4 years of treatment. Homeopathic and complementary therapies avoid the potential side effects of methimazole and surgical thyroidectomy, they are less costly than radioactive iodine treatment, and they provide an option for clients who decline conventional therapies. *Homeopathy* (2011) 100, 270–274.

Keywords: Hyperthyroidism; Feline; *Thyroidinum*; Constitutional; Individualized; Veterinary; Homeopathy

CASE REPORTS

Clinical Resolution of Nasal Aspergillosis Following Therapy with a Homeopathic Remedy in a Dog

Shelley Epstein, VMD, Robert Hardy, DVM, MS, DACVIM

ABSTRACT

A 6 yr old, male, neutered Weimaraner was treated homeopathically for nasal aspergillosis after failing to respond to two treatments of topical (intranasal) clotrimazole and oral amoxicillin trihydrate/clavulanate potassium. Computed tomography, rhinoscopy, fungal culture, and cytology previously confirmed the diagnosis. At presentation for homeopathic treatment, the dog had aggressive left-sided sinusitis and rhinitis with destruction of nasal turbinates and severe bouts of epistaxis. Erosion and depigmentation of the nasal planum were evident. After two treatments with homeopathic aurum metallicum, resolution of clinical signs occurred and clearance of the aspergillosis organisms was documented by computed tomographic scan, rhinoscopy, and histopathology. Homeopathic aurum metallicum may be beneficial in treating cases of canine nasal aspergillosis.

(J Am Anim Hosp Assoc 2011; 47:■■■-■■. DOI 10.5326/JAAHA-MS-5560)

IAVH's activity in the domain of politics - such as in debates on the registration of homoeopathic medicines - and the representation of the interests of veterinarians involved in homoeopathy on national & international level (World Veterinary Association, WVA) is understood to be work for the general good of veterinary homoeopathy. Moreover, there are benefits and services available to our members. These include:

- Inclusion in the international search list for homoeopathic veterinarians
- Contact with working teams of colleagues (Homeopathy Research Institute, HRI) engaged in homoeopathic research
- Veterinary homeopathic discussion forum on the website
- Higher training courses given by certified teaching personnel, congresses, symposium together with European Committee for Homeopathy (ECH)
- Acquisition of the internationally recognised IAVH veterinary homoeopath certificate
- Newsletter appearing every quarter-year, Materia medica project, Veterinary Repertory project





THANK YOU FOR YOUR ATTENTION!

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