

EVIDENCE-BASED HOMEOPATHY

DECEMBER 2024

VSU | DynHom | Unio Homoeopathica Belgica



SUMMARY

Evidence-based homeopathy should no longer be a question today. Knowledge about the nature of homeopathic medicines, their mode of action and their effectiveness has become compelling.

Homeopathic medicines are registered and those for which an indication has been accepted have a level of evidence equivalent to that of any other medicine.

The nature (composition) of homeopathic medicines is now established. Their interface with living organisms can be explained, and their mode of action is known.

The level of evidence of clinical efficacy of homeopathic medicines is similar to that of conventional medicines, although the number of patients included in the studies is smaller than in standard studies.

Traditional knowledge of the use of the homeopathic approach is not called into question by these results; on the contrary, it is reinforced. When science merges tradition, we link a rich past with the modernity of this science. Art is joining science.

INTRODUCTION

REGISTRATION

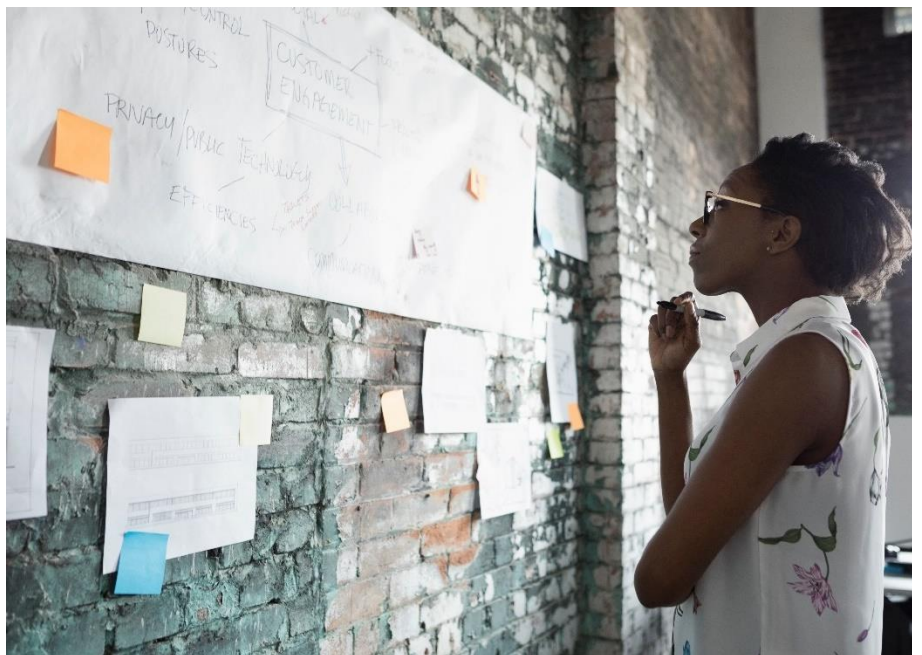
Competence in homeopathy is subject to registration (KB 26 MAART 2014. Koninklijk besluit betreffende de uitoefening van de homeopathie). Homeopathic **medicines** are registered in Europe (Council Directive 92/73/EEC of 22 September 1992 widening the scope of Directives 65/65/EEC and 75/319/EEC laying down additional provisions on homeopathic medicinal products, and updates). The full registration procedure with indication, based on the rules of evidence-based medicine is a national procedure.

RESEARCH

The **level of evidence** of clinical efficacy of homeopathic medicines is similar to that of conventional medicines. Knowledge and publications on the composition of homeopathic medicines and their mode of action are becoming undeniable.

TEACHING

European teaching standards for homeopathy are adopted and already implemented by prestigious schools in Belgium : NBN EN 16872:2016. Services of Medical Doctors with additional qualification in Homeopathy (MDQH). Evidence Based Homeopathy (EBH) aims to link EBM with the ancestral tradition and data built up over the centuries.





EVIDENCE-BASED HOMEOPATHY

- Better understanding of the connection with living world
- Increasing the level of clinical evidence for homeopathy



RESEARCH PRIORITIES

- Basic research on homeopathic medicines
- Provings
- Clinical research



TEACHING PRIORITIES

- Traditional knowledge
- EBH
- Practice and limits taking EBH into account

PURPOSE

BASIC RESEARCH

One of the biggest obstacles to acceptance of the homeopathic system is the potentised homeopathic medicine. This is a primary issue and must be addressed before even considering the results of clinical research. Homeopathic medicines are matter, structure and signal. It is the plausibility check for homeopathy.

CLINICAL RESEARCH

A clinical trial must follow a design that is chosen based on the goals stated in the research protocol. Case studies are homeopaths' favorite method of studying therapeutic results. Sharing their experiences through observations is the best way to convey the specificity, diversity and diagnostic pathways of homeopathic treatment. Randomised clinical trials, even if feasible in individualised homeopathy, impose additional constraints that make implementation complicated, rigid and far removed from the reality of real-life practice. Between these two extremes lies a range of more innovative methodologies capable of reconciling the two approaches.

TEACHING

Homeopathy offers a different approach to the concept of illness and the relationship with the patient. Homeopathic doctors work in the same way as their allopathic colleagues, the only difference being that they incorporate homeopathy into the care given to their patients. The homeopath must be aware of the scope and value of homeopathy and be able to understand and integrate its contribution to patient care; be aware of the scientific implications of the subject, its scientific evidence and underlying arguments; be aware of the limitations of homeopathy; be aware of the use of homeopathy as a complementary therapy in preventive, prophylactic and palliative care; recognise the need to work within a safe medical context and as part of a wider plan of care which must include knowledge of diagnosis, prognosis and conventional treatments.



OUTLINES

**EBH is a look
at new
evidence
without
forgetting the
data inherited
from the past.**

During the registration procedure for homeopathic medicines, quality, safety and efficacy data are all considered. For the full registration procedure, the indication must be demonstrated by scientific publications, which are included in the registration file. The scientific quality of this supporting proof is checked by a panel of experts who are accredited members of the registration committee.

Basic research into the composition of homeopathic medicines has shown that these medicines have an indisputable, specific particulate, ionic and molecular materiality.

Laboratory research on cell, plant and animal models provides conclusive evidence of the effectiveness of homeopathic medicines.

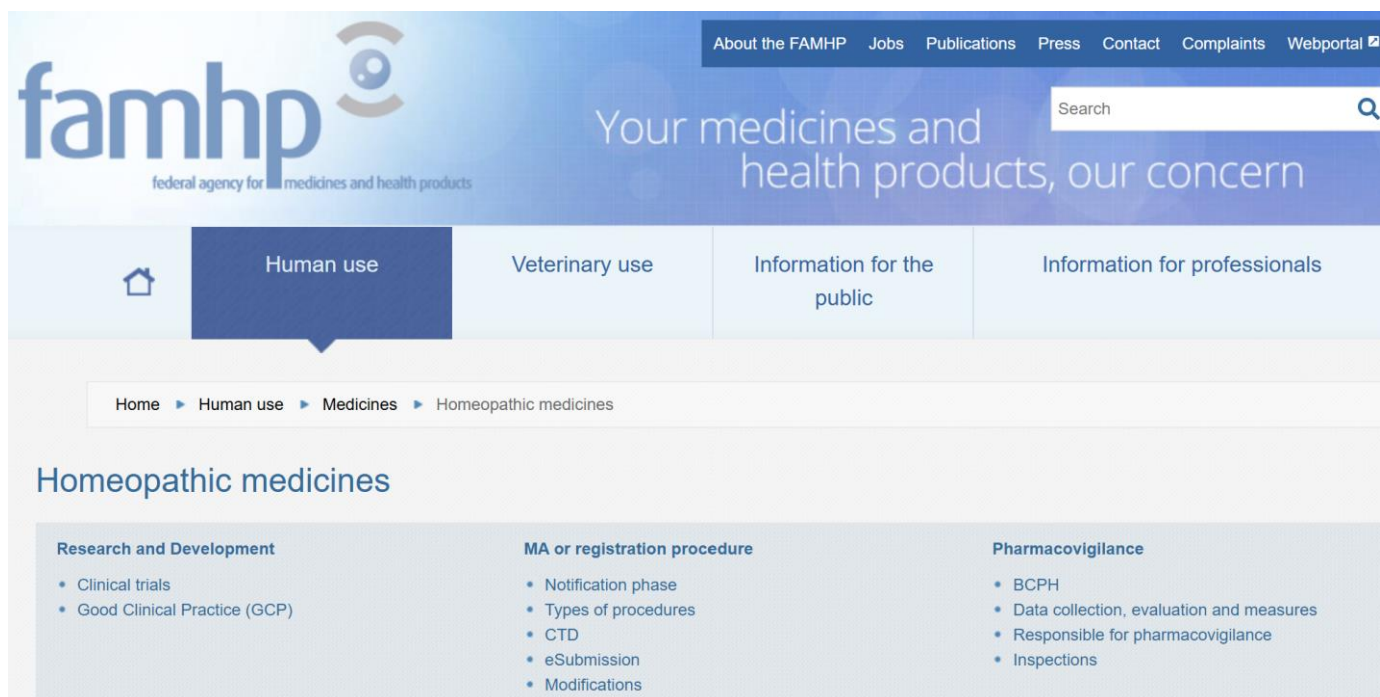
Observational and interventional clinical research, including placebo controls, shows that the level of evidence for the efficacy of homeopathic medicines is similar to that of conventional treatments.

Pure experimentation on healthy individuals (pathogenesis/proving), enabling the identification of the specific symptoms that this homeopathic medicine will be able to treat, is currently carried out using validated protocols with placebo controls. This type of study, which is entirely specific to homeopathy, confirms the validity of this centuries-old Cartesian approach.

Tradition has provided us with an enormous database which cannot be challenged frivolously if we consider the historical effectiveness of this therapeutic approach. The priority then is to confirm, complete and clarify these data by adapting them to the new reality that modern life is bringing us.

In teaching modern homeopathy, we need to consider the new knowledge that research provides us each day. But if tradition must adapt to our new levels of knowledge, it will still be necessary to integrate it into the lectures. This body of knowledge needs to be safeguarded.

HOMEOPATHIC MEDICINES REGISTRATION



COUNCIL DIRECTIVE 92/73/EEC of 22 September 1992 widening the scope of Directives 65/65/EEC and 75/319/EEC on the approximation of provisions laid down by law, regulation or administrative action relating to medicinal products and laying down additional provisions on homeopathic medicinal products.

Homeopathic medicines are subject to registration in Belgium. There are two procedures. The simplified procedure, based on traditional evidence with no therapeutic indication (level III or IV of EBM). The full procedure with indication, confirming that the indication has been demonstrated by publications (**including double-blind studies**) (level I of EBM).

Registration procedure	Number of accepted dossiers today
Simplified (Unitarian)	1474
With indication	72

Information received from FAMPH Novembre 2024

If it is **no longer possible to ignore the existing data (including level I of EBM) as part of the available evidence**. These numbers indicate also clearly that the focus of the registration of homeopathic medicines and Evidence Based Homeopathy (EBH) is not “the indication”.

HOMEOPATHIC MEDICINES NATURE (COMPOSITION)

Homeopathy is controversial and hotly debated. The conclusions of systematic reviews of randomized controlled trials of homeopathy vary from 'comparable to conventional medicine' to 'no evidence of effects beyond placebo'. It is claimed that homeopathy conflicts with scientific laws and that homoeopaths reject the naturalistic outlook, but no evidence has been cited.

A paper about "Plausibility and Evidence" (Ref.1), said: we are homeopathic physicians and researchers who do not reject the scientific outlook; we believe that examination of the prior beliefs underlying this enduring stand-off can advance the debate. We show that interpretations of the same set of evidence—for homeopathy and for conventional medicine—can diverge. Prior disbelief in homeopathy is rooted in the perceived implausibility of any conceivable mechanism of action. Using the 'crossword analogy', we demonstrate that plausibility bias impedes assessment of the clinical evidence. Sweeping statements about the scientific impossibility of homeopathy are themselves unscientific: scientific statements must be precise and testable.

There is growing evidence that homeopathic preparations can exert biological effects; due consideration of such research would reduce the influence of prior beliefs on the assessment of systematic review evidence.

The first plausibility problem is linked to the potentized homeopathic medicines (dilution+dynamization). A common argument used is the "Avogadro number". Homeopathic medicines are so diluted that they are "empty" medicines and as such only a "placebo" effect could be observed.

But are homeopathic medicines empty?

A/ Nuclear Magnetic Resonance (NMR) applied to homeopathic medicines (Ref.2-13).

The specific signature (structure) of homeopathic medicines in water – even in high dilutions – can be identified using NMR relaxation time measurements. If we had only water (the solvent) for all the dilutions and all the stocks, then all the NMR results would be identical. It would not be possible to distinguish one production line from another using double-blind experiments. These results are verified, confirmed and published by several independent teams in the world (France – Switzerland – Germany – United kingdom – Belgium).

We have evidence of an obvious retention of a specific magnetic resonance signal when a substance (lactose, copper, Gelsemium, etc.) is diluted/potentized in pure water. This means that **homeopathic solutions cannot be considered to be pure water**. O₂ is a covariant and not an explanatory variable: this factor itself is too weak to explain the NMR signal specificities in potentized samples. Homeopathic dilutions may thus have a specific material configuration governed not only by the potentized substance but also by the chemical nature of the containers, the chemical nature of dissolved gases and even by the electromagnetic environment. This sensitivity of homeopathically prepared medicines to electromagnetic fields may be amplified by the processes routinely applied during their preparation; because it occurs only when a dynamization has been performed, we may call this phenomenon "dynamic pharmacy".



For Belgium, the measurements were performed in collaboration with UMons (double-blinding systematically applied to all measurements).

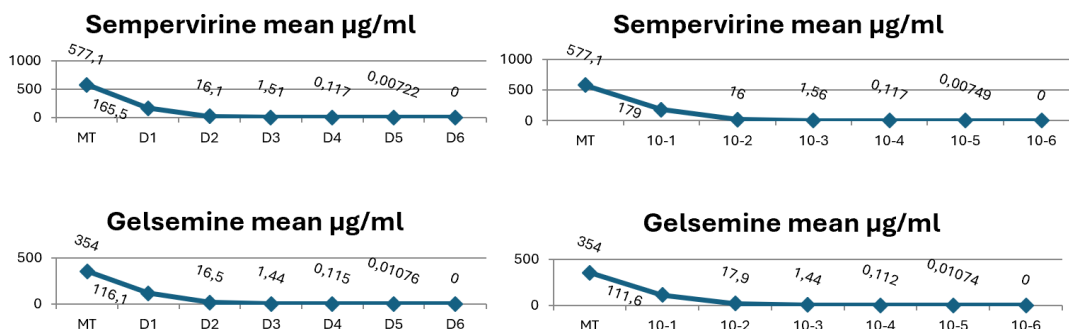
B/ High Performance Liquid Chromatography (HPLC-UV) (Ref.14)

Knowing that it's not pure water is fine, but it doesn't explain what liquid homeopathic medicines really are. Gelsemium as an example of HPLC measurements:

HPLC-UV



- Gelsemium sempervirens
 - HPLC-UV: High Performance Liquid Chromatography using UV detector. Dynamisation versus simple dilution.



- Pas de difference avec ou sans dynamisation / Quantification limite = D6

Up to 6DH the components (markers) of a raw material can be detected by this technique. At 6DH the quantities of these are no longer measurable. From 7DH onwards they can no longer be observed. Dynamisation or simple dilution does not influence these facts. We have the same results for other plants such as Arnica and Belladonna.

For metals such as Cuprum or others, these components are not detectable by EDX (see further) even in the first water-soluble dilution/dynamisation.

In conclusion, the fact that homeopathic medicines are not pure water **is not due to the persistence of the raw material.**

C/ Nano Tracking Analysis (NTA) (Ref.15-29)

There have been numerous publications referring to the presence of nanoparticles in liquid homeopathic medicines. The question then arises as to whether these are simply impurities or whether they are related to each manufacturing line of different raw materials.

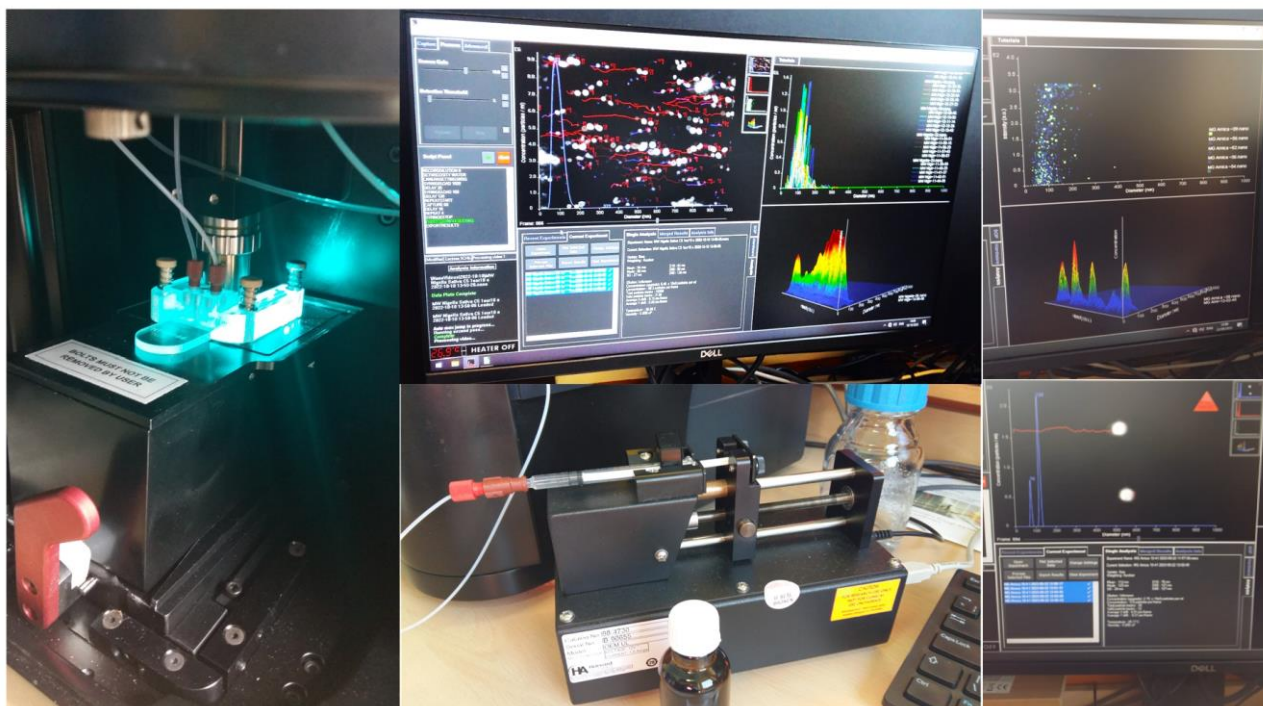
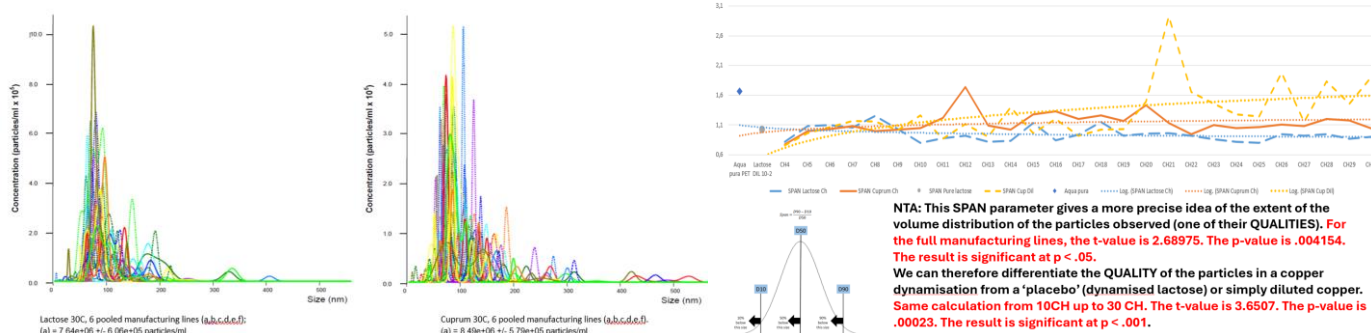


Figure 5: Comparison of number of particles in pure Lactose 30C and Cuprum metallicum 30C.



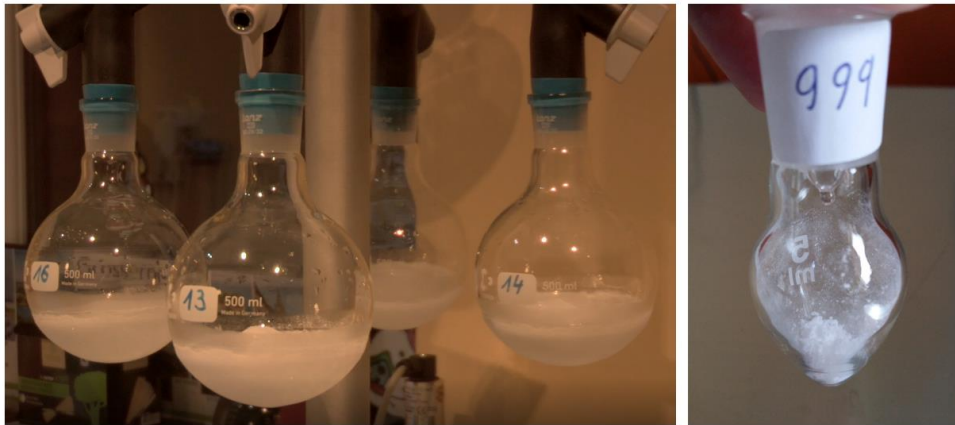
From these measurements we can conclude that the presence of nanoparticles in all homeopathic medicines in solution is definitively established and that **the particle size distribution depends on the starting material used and its manufacturing method.**

All the particle measurements allow us also to observe clear differences in particle characteristics (number, size, size distribution, intensity of scattered light, attraction of particles forming aggregates or chains) depending on the production process of soluble and insoluble raw materials.

These particles are not unspecific impurities, and their specific characteristics stay stable all along the manufacturing process only when a **dynamization process** is added to the step-by-step dilution.

D/ Lyophilization (Freeze-drying process) (Ref.30,31)

Lyophilisation



The presence of dry matter after freeze-drying of any homeopathic medicine is undeniable. It can be isolated, seen (see photograph) and weighted. In homeopathic solutions we have not only particles but also soluble **material in measurable quantities**. A major advantage of freeze-drying is that it preserves the structure of the molecules in solution.

E/ Scanning Electron Microscopy (SEM) (Ref.30,32-36)

Because dry material can be extracted from homeopathic solutions it is worth looking at it systematically with the help of the most advanced microscopes and universities. The Belgium measurements were made blind at the Institute of Condensed Matter and Nanosciences at UCLouvain.

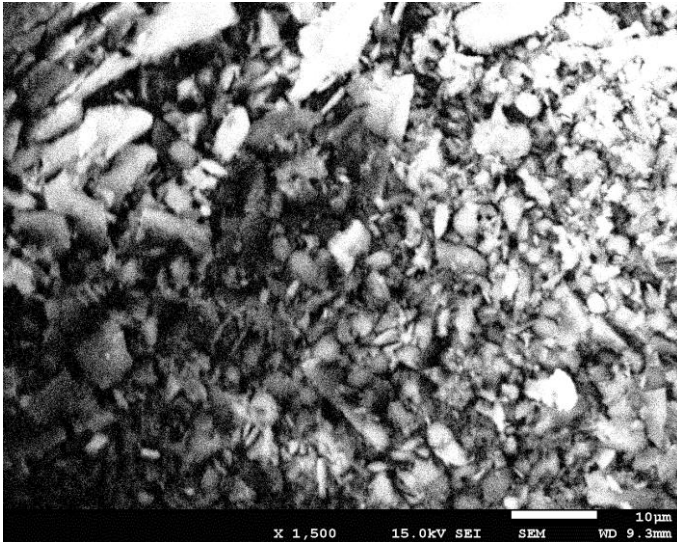


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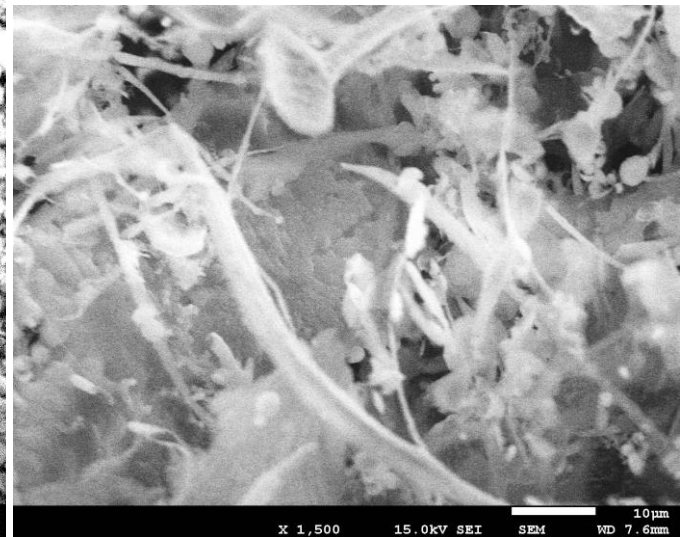


Below, some examples of the microscopic appearance of these materials.

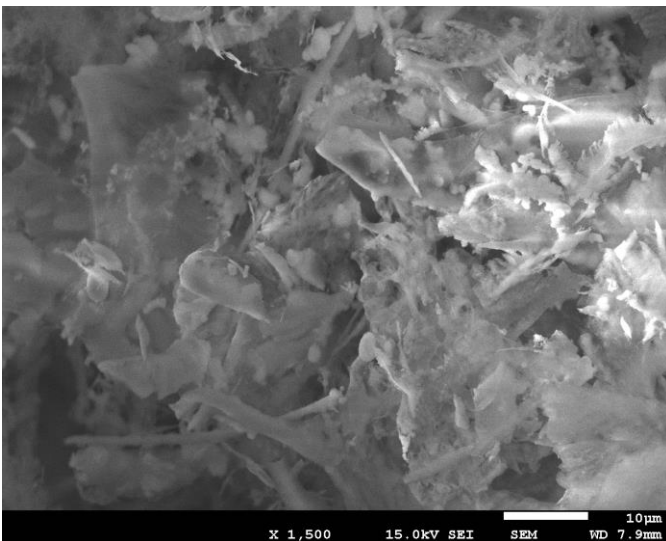
Lactose 24cH



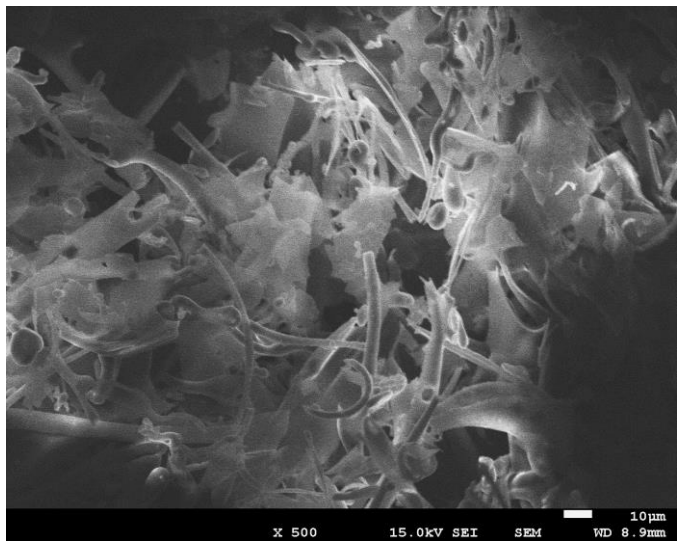
Argentum metallicum 24cH



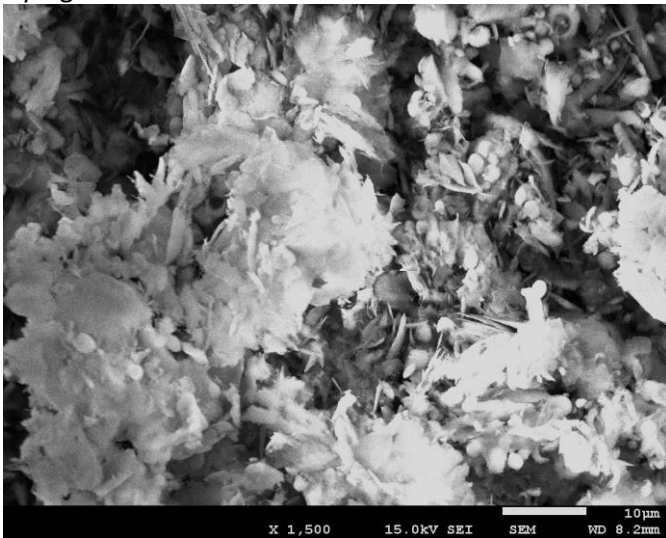
Gelsemium 24cH



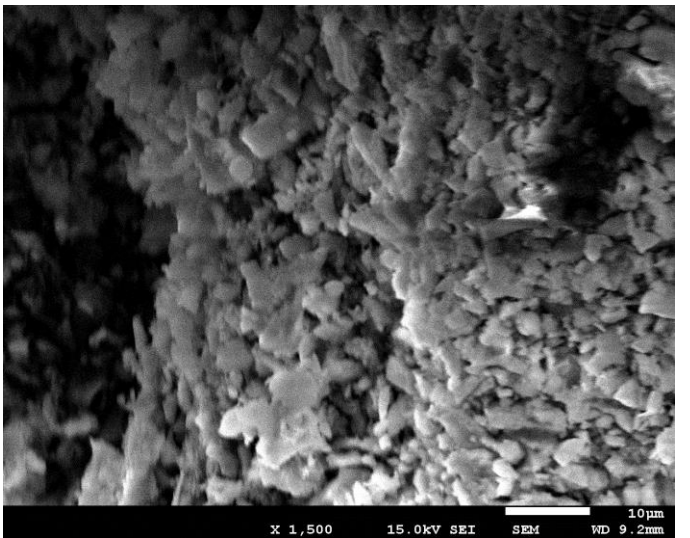
Silicea 24cH



Pyrogenium 24cH



Kalium muriaticum 24cH



After lyophilization, **the crystalline structure** of the harvested **dry matter is specific** to the starting material used for the manufacture of a homeopathic remedy also in High Homeopathic Dynamisation (Dilution).

F/ Energy Dispersive X-ray analysis (EDX) (Ref.30,37-40)

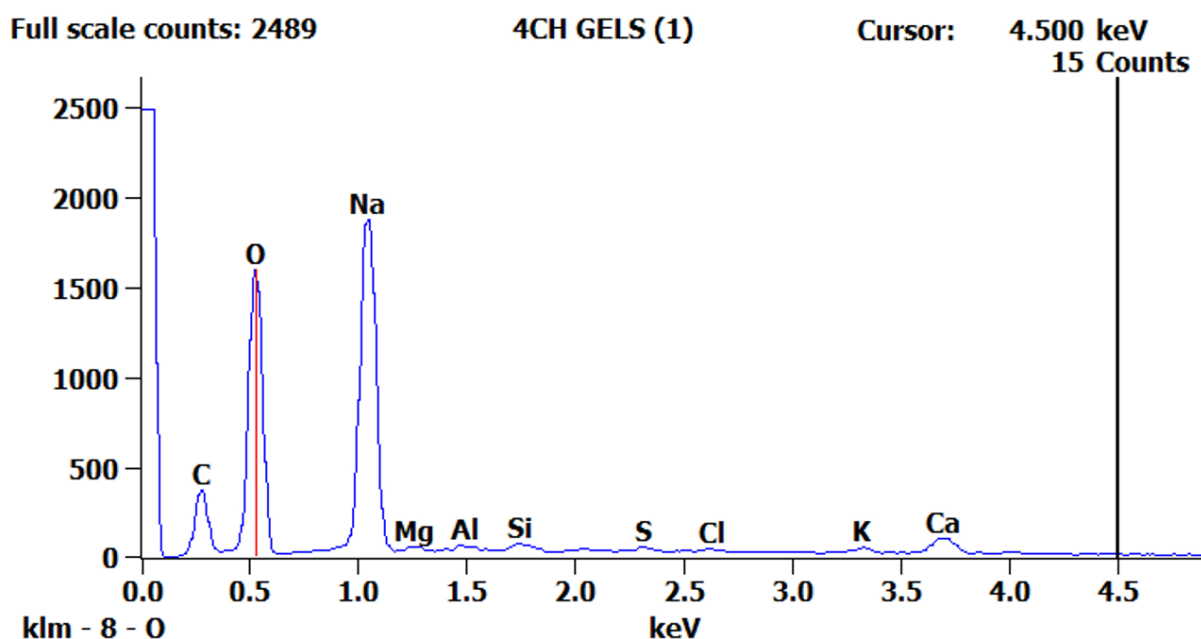
We observe crystalline structures in the matter extracted from homeopathic solutions. The question then arises as to their composition. EDX allows us to make a semi-quantitative assessment of the ions that constitute this material.

An example is a plant called Gelsemium. All dynamisations/dilutions are measured blind and systematically.

EDX or EDS of LYOPHYLIZATES

Energy Dispersive X-Ray Analysis

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Gelsemium 24CH		Zone 1		Zone 2		Zone 3		Mean	Mean error
	keV	Atom Percen	error	Atom Percen	error	Atom Percen	error		
C_K	0,277	34,98	0,07	26,33	0,06	28,64	0,07	29,98	0,07
O_K	0,525	49,61	0,28	51,16	0,26	52,12	0,29	50,96	0,28
Na_K	1,041	9,97	0,14	10,35	0,13	12,07	0,15	10,80	0,14
Mg_K	1,253	0,62	0,12	0,66	0,11	0,8	0,13	0,69	0,12
Al_K	1,486	0,31	0,14	1,55	0,13	0,45	0,14	0,77	0,14
Si_K	1,739	2,67	0,17	3,95	0,16	3,5	0,18	3,37	0,17
P_K	2,013	0,03	0,2	0,08	0,18	0,04	0,21	0,05	0,20
S_K	2,307	0,03	0,19	0,04	0,17	0,04	0,19	0,04	0,18
Cl_K	2,621	0,06	0,23	0,19	0,2	0,08	0,23	0,11	0,22
K_K	3,312	0,28	0,36	0,71	0,32	0,37	0,37	0,45	0,35
Ca_K	3,69	1,43	0,44	4,98	0,4	1,88	0,46	2,76	0,43
		100		100		100		100	
Fit. Breamstrallung			0,3351		0,3332		0,3306		
Fit. ZAF modèle			0,289		0,2972		0,2841		

After all these measurements the conclusion is: “There are **specific atomic compositions** from one raw material to another, especially in the highest dynamisations”.

It is immediately obvious that carbon, oxygen and sodium are the main constituents in all these preparations. However, calcium, silica, aluminium and magnesium are also present in significant amounts.

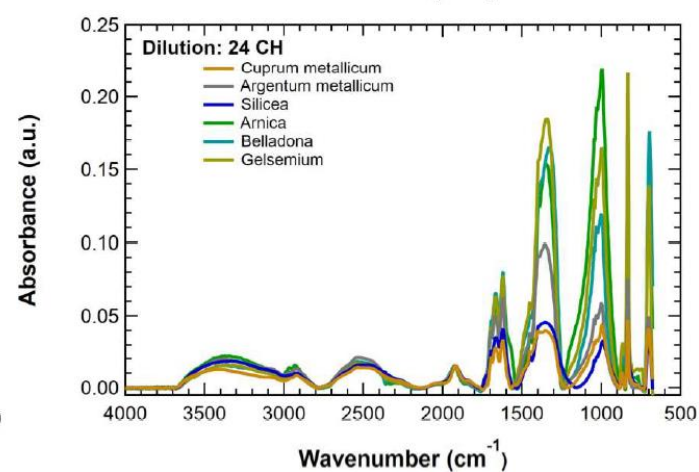
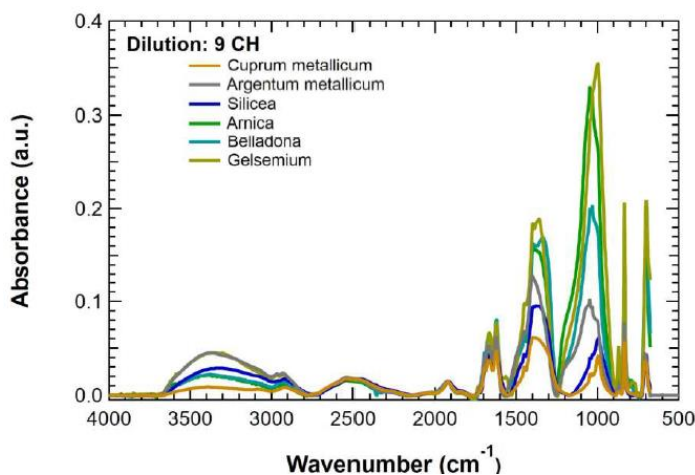
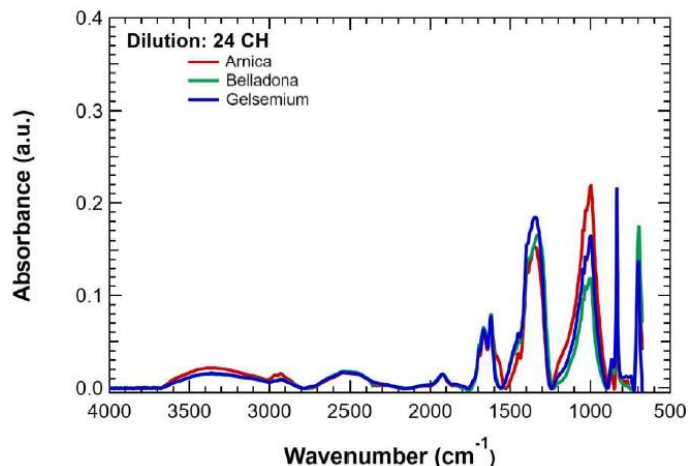
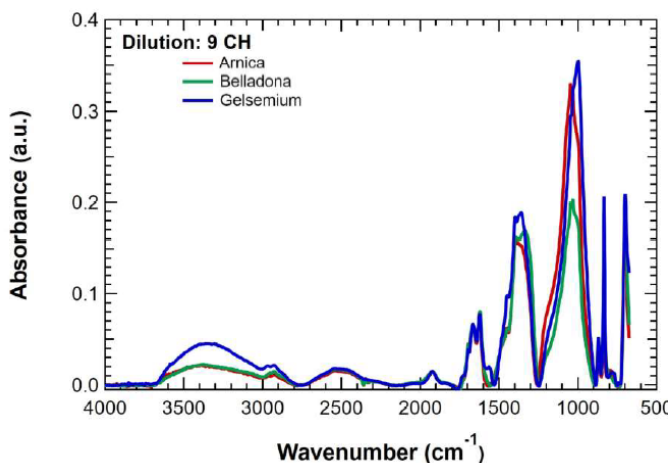
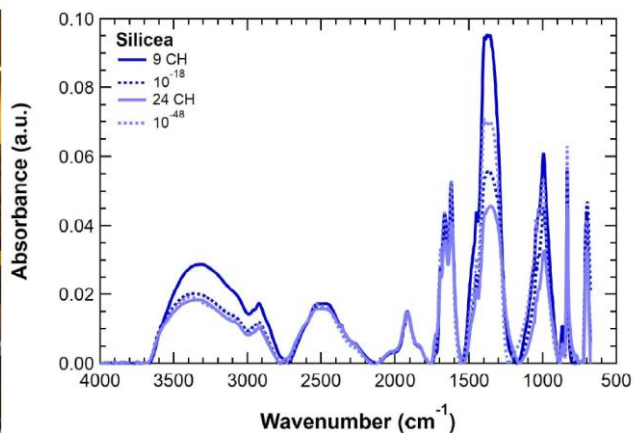
Only the **proportions of these elements vary** from one homeopathic stock to another, but their composition is similar.

G/ Fourier-transform infrared spectroscopy (FTIR) (Ref.30,41-44)

We have an idea of the basic composition of homeopathic medicines. The next question is to look at the molecules that hold these elements. Spectroscopy is the ideal method for this purpose.

FTIR: Silicea

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The molecular composition of the lyophilisates of all homeopathic medicines is similar but with **specific proportions** of carbonates, alcanes and silicates for each remedy. **Sodium hydrogen carbonate is the main component.**

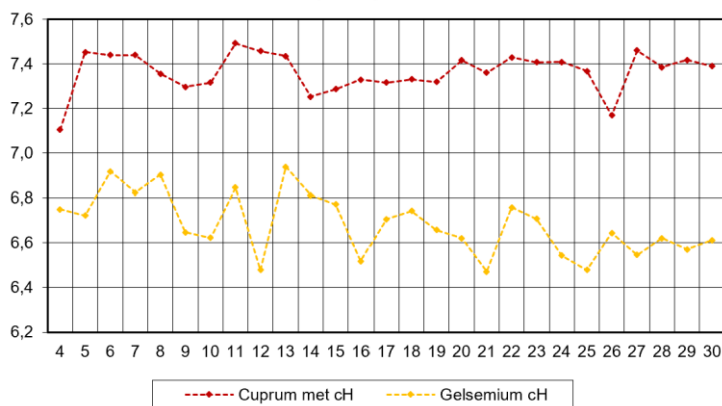
The presence of particular proportions of identical molecules by itself is with difficulty able to explain the specific effects of these drugs. These molecules may carry information, but we cannot say more at this stage.

H/ pH measurements of homeopathic solutions. (Ref.45-51)

Since sodium bicarbonate is part of the basic composition of homeopathic medicines, since this amphoteric molecule is modulated by other elements in its environment and since it incorporates numerous water molecules in complex structures, it makes sense to measure the electric fields in these solutions. One possible approach to this question is pH measurements.



Data pH Cuprum vs Gelsemium



Means of pH measurements expressed in mV (electric fields):

Cup-met	Lact	Bell	Pyr	Pyr-c	Kali-m	Sil	Arg-met	Gels	Arn
-20,8	-18,8	-0,9	+3,2	+11,4	+13,5	+16,7	+16,9	+18,1	+21,7

Statistical analyse (p-values) of our own pH measurements:

	Aqua cH	Ethan cH	Lact cH	Kali-m cH	Arn cH	Bell cH	Gels cH	Cupr. cH	Arg cH	Sil cH	Pyr cH	Pyr cru cH	Arn Dil	Bell Dil	Gels Dil	Sil Dil	Pyr Dil	Pyr cru Dil	
Aqua cH	X	<0,001	<0,05	>0,05															
Ethan cH	<0,001	X			<0,001	<0,05	<0,001				<0,001	<0,001	<0,05	<0,05				<0,001	<0,001
Lactose cH	<0,05		X					>0,05		<0,001									
Kali-m cH	>0,05			X															
Arn cH		<0,001			X	<0,001	>0,05	<0,001											
Bell cH		<0,05			<0,001	X	<0,001							>0,05					
Gels cH		<0,001			>0,05	<0,001	X	<0,001						>0,05	>0,05				
Cupr. cH			>0,05		<0,001		<0,001	X	<0,001	<0,001									
Arg cH								<0,001	X										
Sil cH			<0,001					<0,001		X							>0,05		
Pyr cH		<0,001									X	<0,05						>0,05	
Pyr cru cH		<0,001									<0,05	X							>0,05
Arn Dil		<0,05			<0,05								X						
Bell Dil		<0,05				>0,05								X					
Gels Dil							>0,05								X				
Sil Dil										>0,05						X			
Pyr Dil		<0,001									>0,05						X		
Pyr cru Dil		<0,001										>0,05						X	

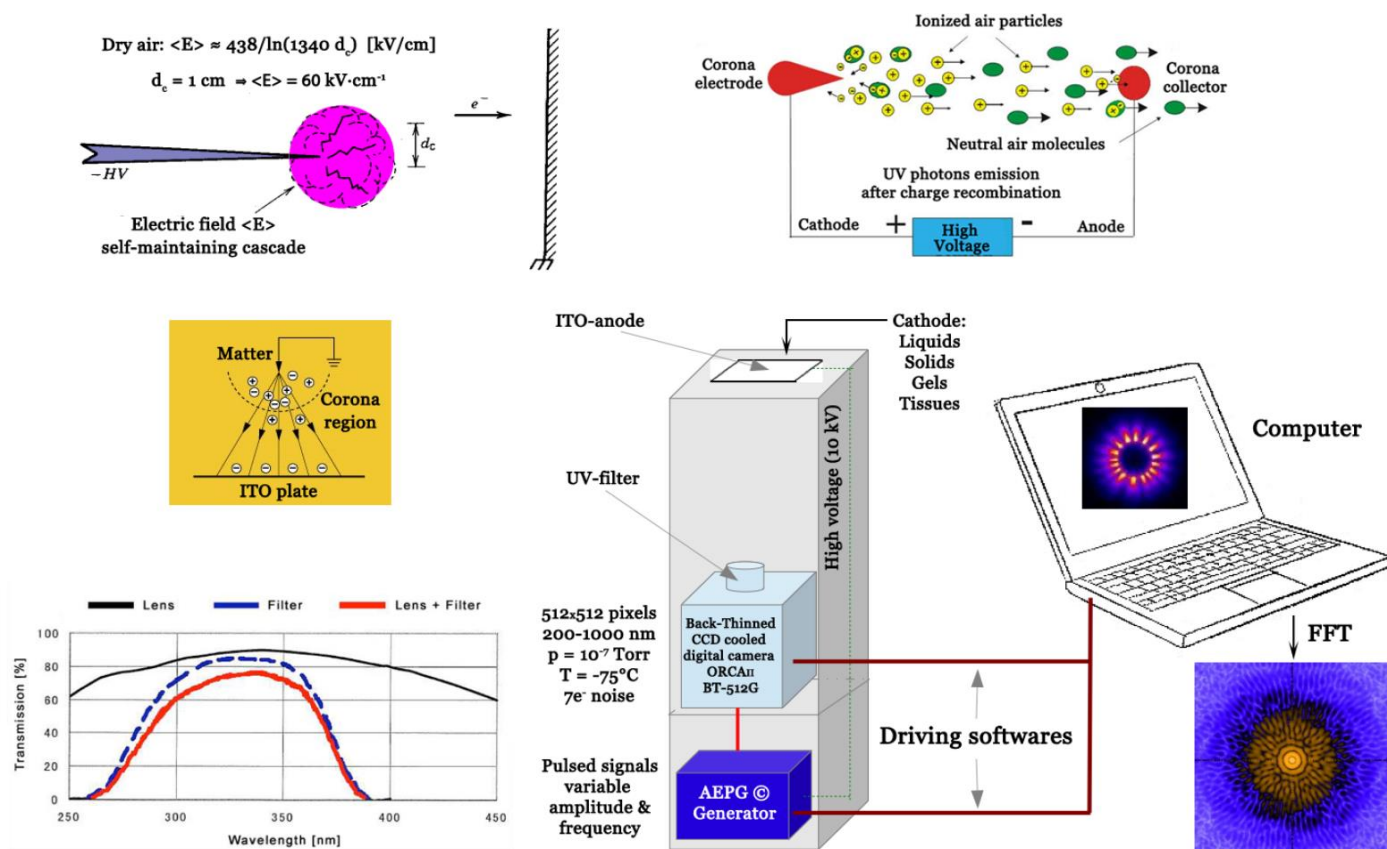
Conclusion: The particular and molecular carriers allow the stabilization of **specific electric fields** for each homeopathic medicine all along the manufacturing process even in the high homeopathic dynamisations. Results are raw material specific, but this technique does not differentiate between simple dilutions and dynamisation (possible with NTA, EDX and FTIR).

I/ Electrophotonic analyse (EPA) (Ref.52,53)

Most of the techniques used so far have limitations that make it impossible to look at homeopathic medicines in the form of impregnated granules or powders. The lactose content is too high to show any differences.

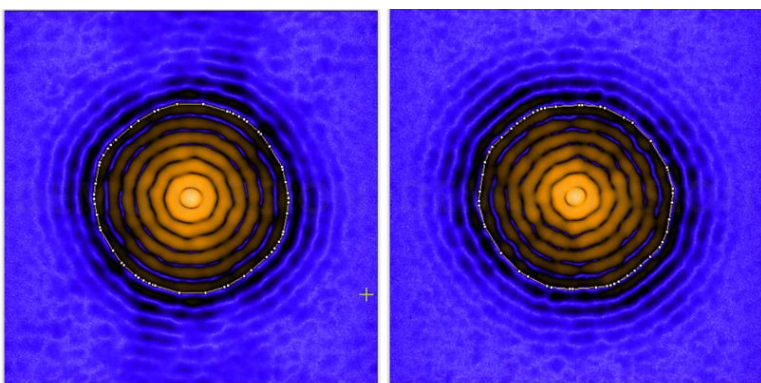
To overcome this obstacle, an innovative technique had to be developed. With the help of the University of Strasbourg (Prof. Marc Henry), the electrophotonic analysis (EPA) technique was developed and validated.

Unfortunately, the state of health of Professor Marc Henry (who died in November 2024) has prevented these results from being published. The publications were in preparation and will be published posthumously in 2025.



The principle behind these measurements is simple: electrical stimulation of a suspended droplet, or impregnated granule, excites the electrons, which return to their original 'resting' state when the stimulation ceases, eliminating the energy accumulated in the form of light.

If the parameters of the emitted light are the same everywhere, this would mean that all solutions and impregnated granules are similar to neutral solutions or granules. On the other hand, if these parameters are specific to the raw material used and persist throughout the series of dilutions/dynamisations, then we must conclude that these electrons retain some special information.



The white circle with little dots added by the FFT analysis program is aimed to measure the delimited surface about forms and wavelengths intensities. The FFT of the EPI image is performed after setting the intensities in a logarithmic scale. The centre of the image corresponds to the large spatial wavelengths of the image, wavelengths are shorter and shorter going towards the periphery.

Here is an unimpregnated globule (left) and a globule impregnated with pure solvent (right).

In these two images, the structure and the intensity of the light that is emitted are similar.

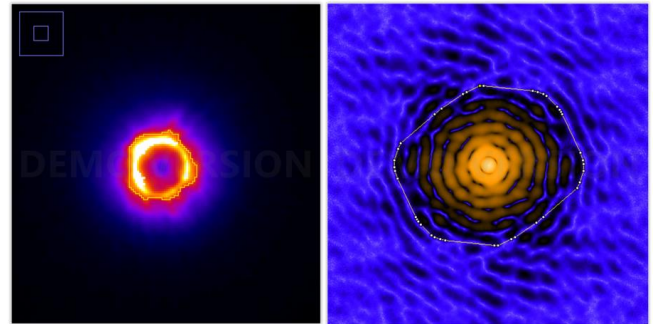
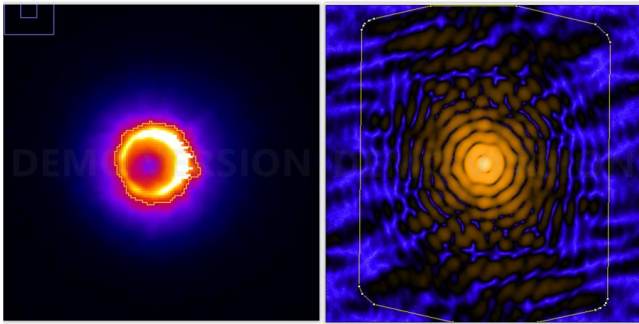
All measurements were performed three times for each numbered sample to ensure double-blind protocol and reproducibility.

Example of results

Specific structure of the emitted light

CUPRUM 30K globule

GELSEMIUM 30K globule



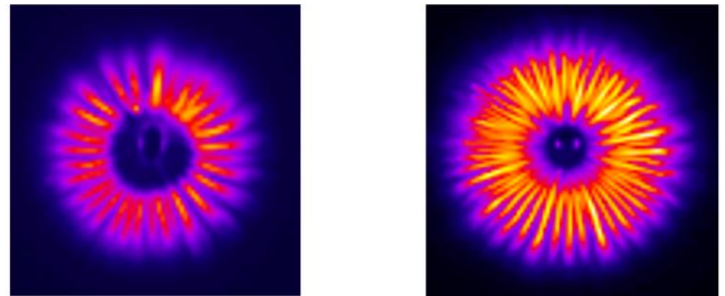
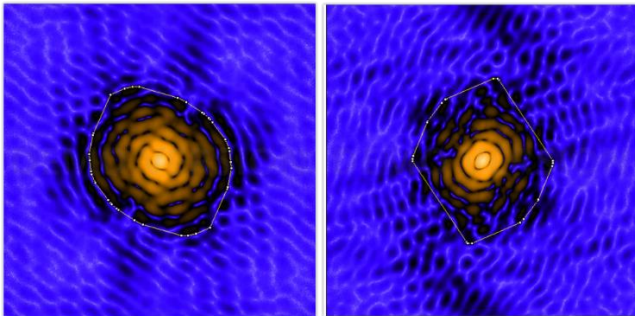
Cuprum 200K globule

Gelsemium 200K globule

Liquid drops

Cuprum 50.000K

Gelsemium 50.000K

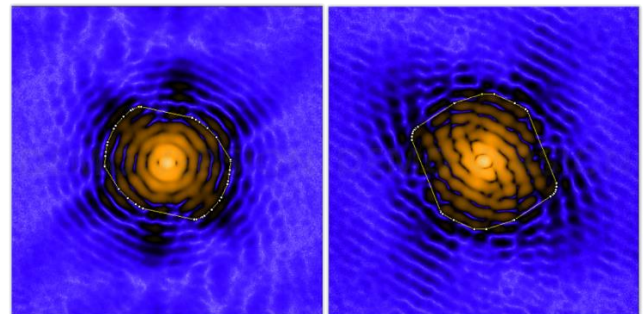
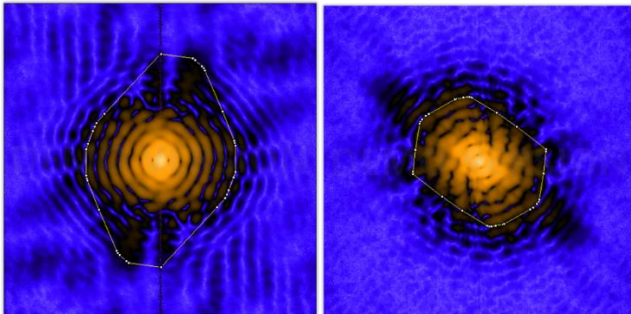


Cuprum 4cH globule

Gelsemium 4cH globule

Cuprum 30cH globule

Gelsemium 30cH globule



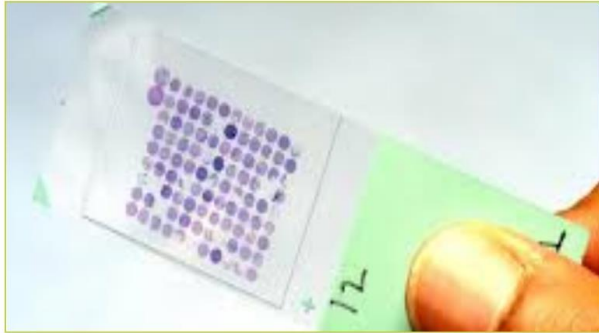
Conclusion: An electrophotonic structured message exists in liquid homeopathic medicines and persists in impregnated globules.

Granules impregnated with cuprum metallicum or gelsemium dynamized solutions are clearly distinguishable using electrophotonic analysis. Hahnemann's and Korsakov's protocols also lead to distinguishable images for the same kind of samples. It was also observed that samples aged of tens of years remains distinguishable from the reference or from fresh samples, evolving with time and evidencing a kind of bonification over time quite similar to that observed with wine and alcohols for example. All electrophotonic images display a characteristic more or less brilliant globular aspect, meaning that samples reacts mainly to the negative pulses of the generator and are insensitive to the positive pulses.

J/ Homeopathy and gene expression (Ref.54-81)

PCR and microarray assays can be used to study how a homeopathic medicine works, just as with conventional medicines. The difference will be that the detection of its epigenetic effects will make it possible to link the associated symptoms detected during the provings (see below). Here are a few examples :

Application of DNA chip technology to demonstrate the efficacy of homeopathic medicines



"in vivo"
"in vitro"

2024

Marzotto et al. *BMC Complementary and Alternative Medicine* 2014, **14**:104
<http://www.biomedcentral.com/1472-6882/14/104>

BMC
Complementary & Alternative Medicine

RESEARCH ARTICLE

Open Access

Extreme sensitivity of gene expression in human SH-SY5Y neurocytes to ultra-low doses of *Gelsemium sempervirens*

Marta Marzotto¹, Debora Oliosio¹, Maurizio Brizzi², Paola Tononi³, Mirco Cristofolletti¹ and Paolo Bellavite^{1*}

GELSEMIUM
(*Gelsemium sempervirens* L.)

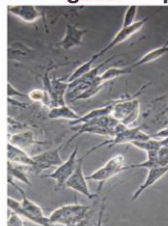


OP racine



2 - 3 - 4 - 5 - 9 - 30 CH

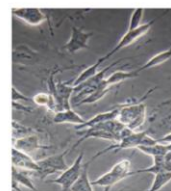
"in vitro"
Human lineages
Neurocytes
45.033 gene chip



SH-SY5Y - IMR-32

GELSEMIUM

Following contact (24h)



+



2 - 3 - 4 - 5 - 9 - 30 CH

56 genes → Modified gene expression

(from 45.033 genes) (49 ↓ 7 ↑)

2024

2024

GELSEMIUM

56 genes → Modified gene expression

- **Neuronal** function genes (TAC4 et GALR2) (2 neuropeptides)
- Genes involved in **olfactory** transduction
- Genes involved in **inflammation process**
- Genes involved in **calcium signalling** (Ca⁺⁺)
-

49 ↓ et 7 ↑

(The prevalence of down-regulation indicate a tendency to reduce cell excitability)

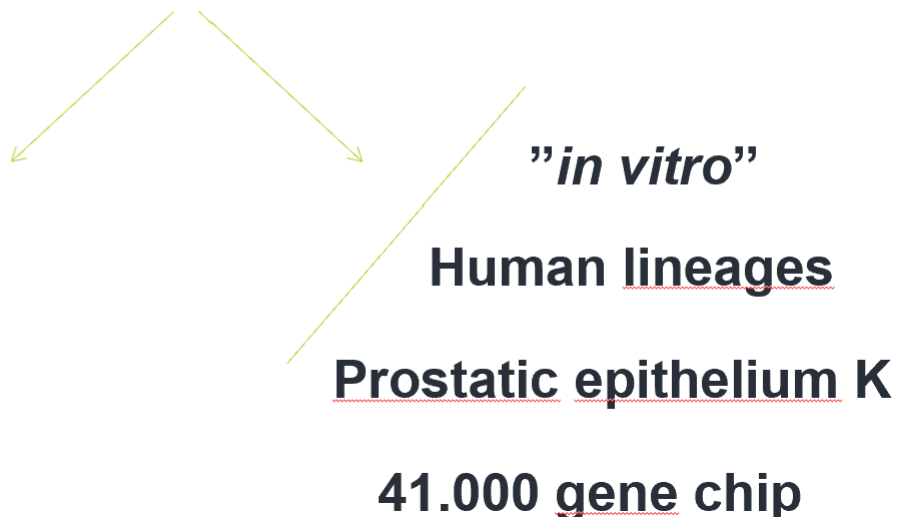
2024

Anxiolytic/headache/affective and emotional shocks/flu

Apis mellifica



TM – 3 – 5 – 7 CH



Impact on gene expression of genes involved in
inflammation / oxidative stress
cytokinaire expression

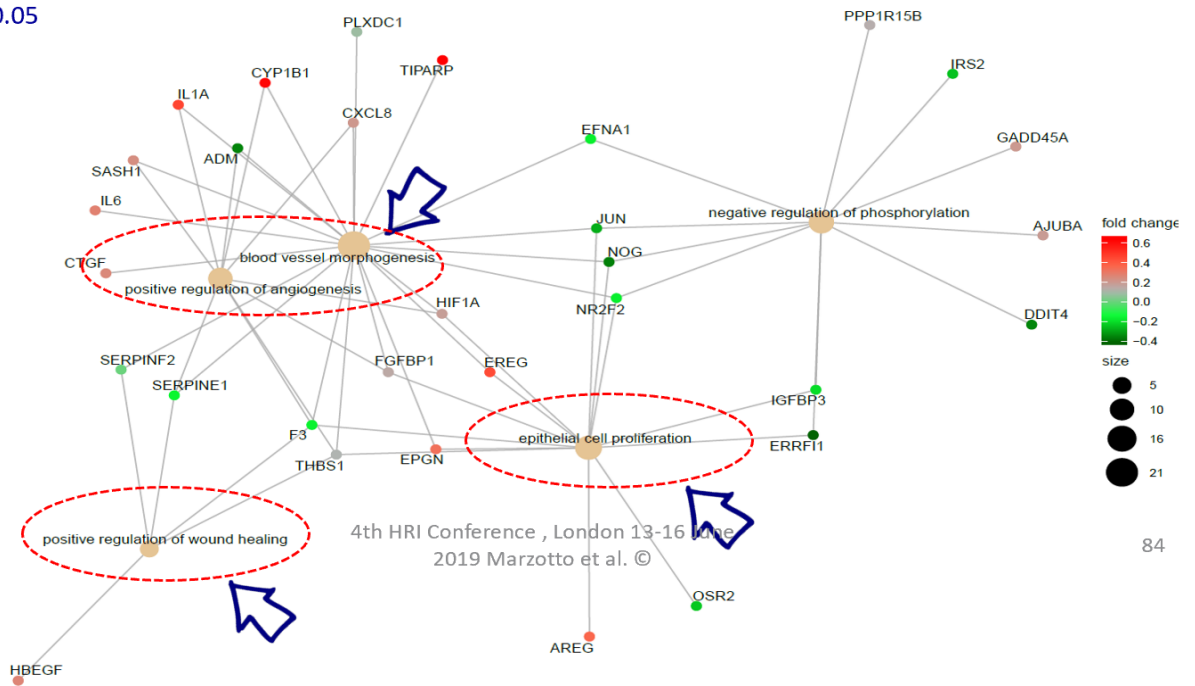
Test compound	Potencies	Cell type	Effect	REF
<i>Canova complex</i>	11D-12D	Mouse macrophages	↑ expression of 45 genes ↑ expression of 102 genes	(Oliveira et al. 2008)
<i>Carcinosinum</i>	MT, 30C, 200C	DLA cells	↑ specific gene expression (p53 pro-apoptotic)	(Sunila et al. 2009)
<i>Arsenicum alb.</i>	30C	Saccharomyces cerevisiae, E. coli	↑ Resistance to arsenicum toxicity ↓ ↑ expression of specific genes (apoptotic, stress response proteins)	(Das et al. 2011; De et al. 2012 of Khuda-B.group)
<i>Carcin., Ruta, Hydrastis, Thuja</i>	200C	DLA cells	↑ Apoptosis, ↓ ↑ Gene expression (whole genome analysis)	(Preethi et al. 2012)
<i>Gelsemium s.</i>	2C, 3C, 5C, 9C, 30C	Human neurocytes SHSY5Y	7 genes ↑ 49 genes ↓ expression (whole genome analysis) ↓ gene expression (RT-Array, 2C)	(Marzotto et al. 2014; Oliosio et al. 2014)
<i>Apis mellifica</i>	3C, 5C, 7C, 15C, 30C	Human prostate RWPE-1	↑ ↓ expression of different groups of genes (whole genome analysis)	(Bigagli et al. 2014, 2016)
<i>Rhus tox.</i>	30X	Primary cultured chondrocytes	↑ gene expression (COX-2), ↓ specific gene expression (collagen II; de-differentiation role)	(Huh et al. 2013)
<i>Arsenicum alb.</i>	45X	Arsenic-intoxicated wheat seeds	↑ Germination ↓ Gene expression levels	(Marotti et al. 2014)
<i>Condurango</i>	30C	H460-non-small-cell lung cancer cells	↓ ↑ expression of specific genes (apoptotic), ↑ Apoptosis, oxidative stress, mitochondrial depolarization	(Sikdar et al. 2014)
<i>Arnica montana</i>	2C, 3C, 5C, 9C, 15C	THP-1 macrophages	↓ expression of TNF, IL1B, CCL5, MMP1 ↑ expression of CXC chemokines and BMP2 (in IL-4 differentiated cells) and Fibronectin	(Oliosio et al. 2016 Marzotto et al, 2016)
<i>Drosera rotundifolia</i>	3D-6D	16HBE bronchial cells	↓ 25 genes ↑ 44 genes, epithelial cell proliferation	(Arruda et al. 2021)

Of course, there are still many remedies to be tested, but these analytical techniques are very costly and, apart from their importance in understanding how homeopathic medicines work, they are not indispensable, since homeopathy treats globalisations of symptoms and will always remain without specific indications. The correspondence between symptoms induced in healthy individuals and those of a specific patient can be explained by epigenetic but does not necessarily need to be systematically demonstrated for all remedies. **Epigenetic is explaining the effects** of homeopathic medicines.

Another example:

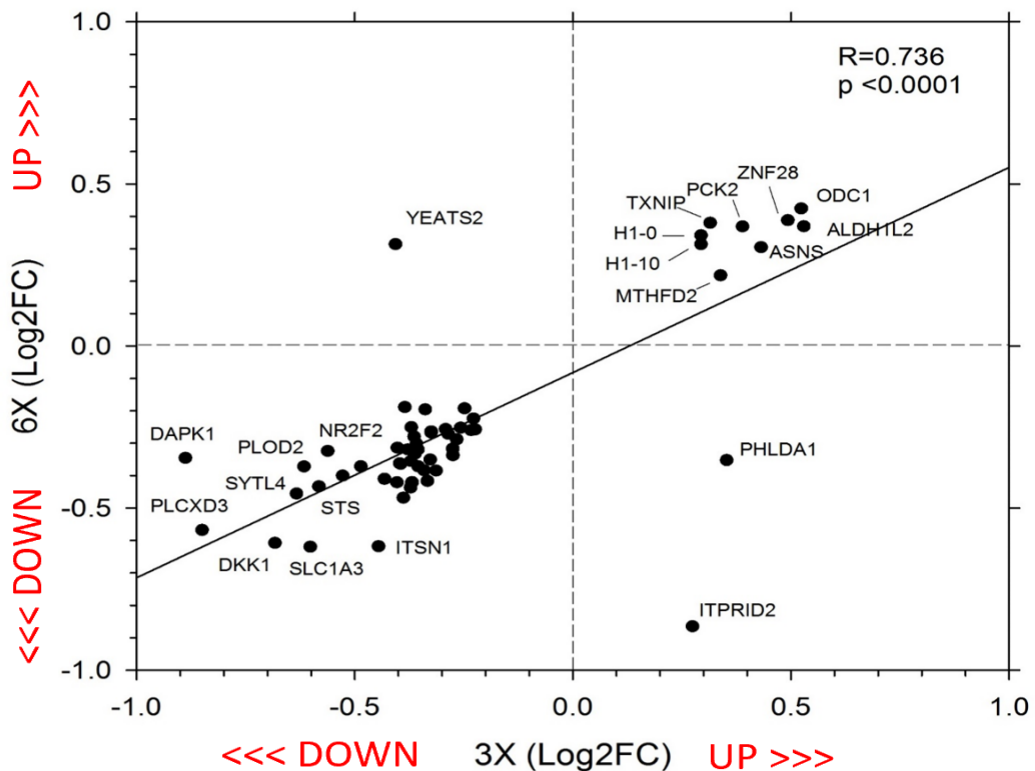
Gene regulatory networks of bronchial cells affected by Drosera 3X

The 5 most significantly enriched **Biological Processes**, padj<0.05



Arruda e Silva et al. 2021 Scientific Reports

Significant changes with Drosera 3X AND 6X



This example illustrates the "complex" action of homeopathic medicines. It does not target a specific gene, but several genes, some of which are stimulated, others of which are slowed down in their activity. This is how homeopathic medicines can act in complex but symptomatically coherent situations.

HOMEOPATHIC MEDICINES LABORATORY RESEARCH

Although there's still a long way to go in understanding the nature and action of homeopathic medicines, the foundations are solid and indisputable. Various *in vitro* and *in vivo* research protocols have been carried out for decades. Since it's no longer possible to ignore the obvious reality of these medicines, it's worth taking a closer look at the numerous results of this repeated and verified laboratory research.

A/ *In vitro* studies (Ref.82-89)



In this section, we investigate the effect of homeopathic preparations at the cellular level. Highly diluted homeopathic preparations are showing measurable effects in cell cultures. Several studies have found that homeopathic agents give rise to apoptosis (programmed cell death). This phenomenon is a normal part of individual tissue development and regeneration. It is controlled by genes that regulate cell division. Apoptosis plays an important role in fetal development, regulation of the immune response, elimination of infected and transformed cells, and regulation of tissue size. Excessive apoptosis can lead to developmental disorders and degenerative diseases, while its absence can lead to autoimmune diseases, long-term viral infections and cancer. Utilization of drug apoptosis is already routine in the treatment of cancer. Drugs for the treatment of degenerative diseases that prevent apoptosis are likely to emerge in the market in the near future. Apoptosis is something you want to achieve when treating cancer. Because cancer is a disease that affects many people and is very serious, researchers have been interested in different types of treatment options. The effect of homeopathy in cancer can also be studied with cell models. The potent homeopathic drug *Lycopodium clavatum* (5C and 15C) has anti-cancer activity on HeLa cells *in vitro*. This has been studied in the Laboratory of Cell Genetics and Molecular Biology at the University of Kalyan, India. The purpose of this study was to evaluate whether homeopathic highly diluted and potent preparations of *Lycopodium Clavatum* (LC-5C and LC-15C) have anti-cancer effects on HeLa cells. Cells were exposed to either LC-5C (diluted below Avogadro's number) or diluted above Avogadro's number (LC-15C). The results revealed that administration of *Lycopodium* had little or no toxic effects on the cells in the bloodstream, but caused marked apoptosis in cancer cells (HeLa), which appeared in the form of initial degradation of DNA. Highly diluted, dynamic homeopathic drugs, both below and above the Avogadro's number, caused cell death in cancer cells, suggesting that these drugs could potentially be used as supportive cancer care. Frenkel's team at the University of Texas (M.D.

Anderson Cancer Center, Texas, USA) performed cell experiments with highly diluted Indian homeopathic preparations (Carcinos, Phytolacca, Conium and Thuja). The preparations were tested with different breast cancer cell lines. The preparations were toxic to the cells, leading to cell cycle breakdown and cell death. Thus, these natural, diluted preparations had biological effects that should be further investigated. The same was also supported by Psorinum 6 x, which triggers apoptosis signals in human lung cancer cells. Studies of the effects of homeopathic Psorinum 6x on cell survival were initially performed in several cancer cell lines, including A549 (lung cancer cell line), HepG2 (liver cancer cell line) and MCF-7 (breast cancer cell line). The experiment investigated the therapeutic effects on cell cycle breakdown, cell death, reactive oxygen radical formation (ROS), and changes in mitochondrial membrane potential (MMP) using flow cytometry and fluorescence microscopy. It was found that treatment of cancer cell lines with Psorinum resulted in increased anti-cancer effects in A549 cells (lung cancer cell line) to a greater extent than in others. Psorinum prevented cell division after 24 hours of treatment and retained the cells in the G1 phase. It also caused e.g. ROS formation, MMP depolarization, morphological changes and DNA damage. The researchers concluded that Psorinum 6 x triggered apoptosis in A549 cells (lung cancer cells) via signaling proteins. Condurango 6C and 30C also trigger apoptosis in lung cancer cells. The more diluted preparation was more effective. The effects of homeopathy on programmed cell death have been extensively studied. Further support for this effect on apoptosis, which is advantageous in the treatment of cancer, has been obtained in e.g. Shagun Arora laboratory at Jaypee University of India. It was found that undiluted and diluted homeopathic preparations were toxic to cultured cancer cells. Homeopathic Sarsaparilla preparations were tested in isolated renal adenocarcinoma cell cultures, the Ruta graveolens preparation in cultured colon cancer cells and the Phytolacca decandra preparation in breast cancer cells. The results showed that all of the homeopathic preparations showed toxic effects in said cell cultures. The undiluted preparations had the best effect, but diluted preparations also served as a starting point of apoptosis. Homeopathic preparations have been shown to be anti-cancer drugs and further research can be encouraged. The homeopathic preparation Calcarea carbonica caused apoptosis in cell cultures from cancerous mice. The study showed evidence of the so-called immunomodulatory mechanism of cell death. In leukemia, homeopathic dilutions of Amanita phalloides have been successfully tested in cell cultures. **There is no placebo effect in cultured cancer cells, so here we have evidence that homeopathy is not just a placebo.** Should homeopathic significance be increased in established medicine, more evidence from well-controlled and high-quality studies is needed.

B/ In Vivo studies (Ref.90-153)

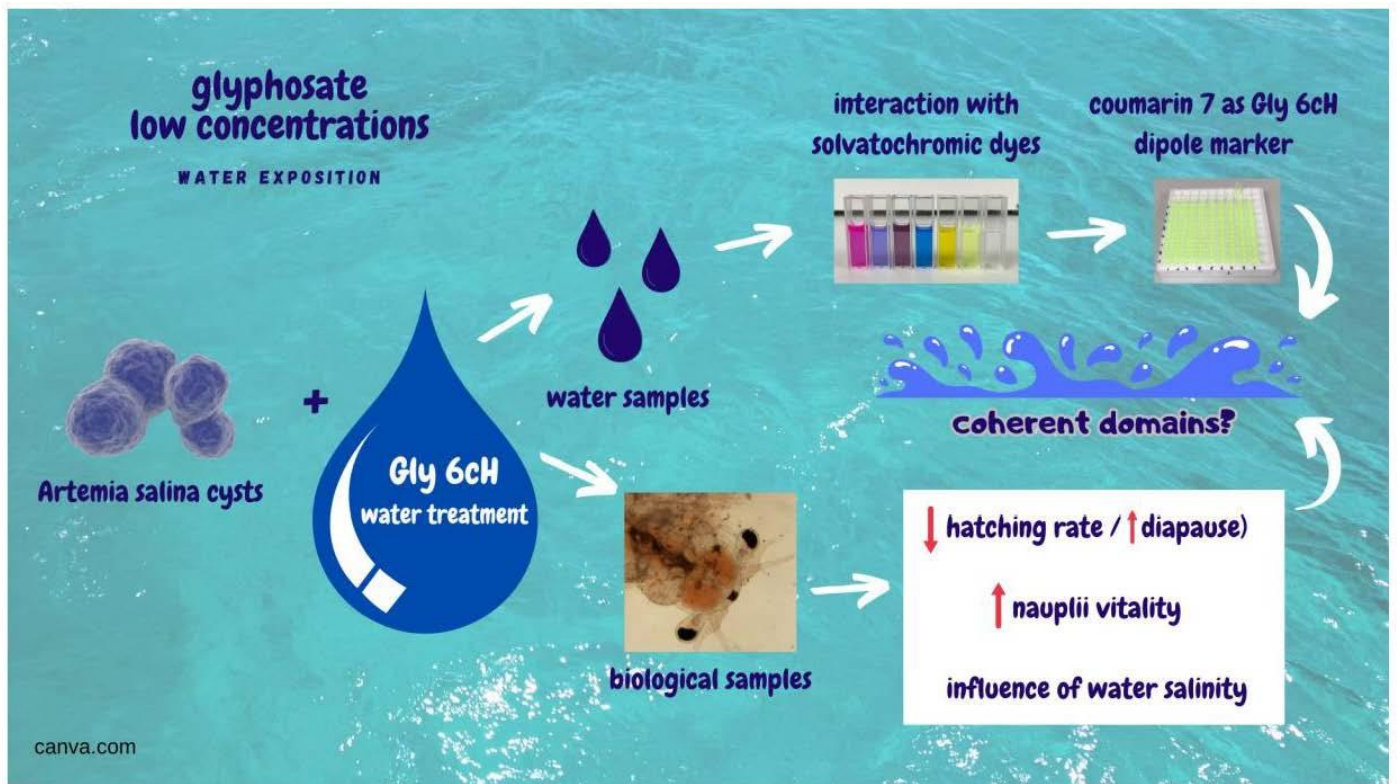
So many in vivo laboratory studies have been published that it is impossible to summarize them all. However, it is important to understand that it is on the basis of these studies that agrohomoepathy has developed in recent times, and veterinary homeopathy much earlier. A particularity of veterinary homeopathy is that individualization can be extended to a whole herd. We will not quote these studies here even if these studies are interesting because they demonstrate once again that a placebo effect is impossible for farm animals such as chickens and turkeys treated in groups.

One example of in vivo research model:

Highly Diluted Glyphosate Mitigates Its Effects on *Artemia salina*: Physicochemical Implications. Prof. Leoni Villano Bonamin (Research Center, Universidade Paulista, São Paulo 04026002, Brazil). *Int. J. Mol. Sci.* 2023, 24(11), 9478.

Glyphosate is an herbicide widely used in agriculture but can present chronic toxicity in low concentrations. *Artemia salina* is a common bio-indicator of ecotoxicity; it was used herein as a model to evaluate the effect of highly diluted-succussed glyphosate (potentized glyphosate) in glyphosate-based herbicide (GBH) exposed living systems. *Artemia salina* cysts were kept in artificial seawater with 0.02% glyphosate (corresponding to 10% lethal concentration or LC10) under constant oxygenation, luminosity, and controlled temperature, to promote hatching in 48 h. Cysts were treated with 1% (v/v) potentized glyphosate in different dilution levels (Gly 6 cH, 30 cH, 200 cH) prepared the day before according to homeopathic techniques, using GBH from the same batch. Controls were unchallenged cysts, and cysts treated with succussed water or potentized vehicle. After 48 h, the number of born nauplii per 100 µL, nauplii vitality, and morphology were evaluated. The remaining seawater was used for physicochemical analyses using solvatochromic dyes. In a second set of experiments, Gly 6 cH treated cysts were observed under different degrees of salinity (50 to 100% seawater) and GBH concentrations (zero to LC 50); hatching and nauplii activity were recorded and analyzed using the ImageJ 1.52, plug-in Trackmate. The treatments were performed blind, and the codes were revealed after statistical analysis. Gly 6 cH increased nauplii vitality ($p = 0.01$) and improved the healthy/defective nauplii ratio ($p = 0.005$) but delayed hatching ($p = 0.02$). Overall, these results suggest Gly 6cH

treatment promotes the emergence of the more GBH-resistant phenotype in the nauplii population. Also, Gly 6cH delays hatching, another useful survival mechanism in the presence of stress. Hatching arrest was most marked in 80% seawater when exposed to glyphosate at LC10. Water samples treated with Gly 6 cH showed specific interactions with solvatochromic dyes, mainly Coumarin 7, such that it appears to be a potential physicochemical marker for Gly 6 cH. In short, **Gly 6 cH treatment appears to protect the *Artemia salina* population exposed to GBH at low concentrations.**



There are hundreds of in vivo research models. With so much evidence of the effects of homeopathic dynamisation, it is really **impossible to deny the effects of these medicines on living organisms.**



HOMEOPATHIC MEDICINES CLINICAL RESEARCH

As we have seen, the scope for research in homeopathy is vast, but mostly beyond the scope of existing knowledge. In the recent past, homeopathy has been investigated for its viability in medical care by a variety of means, the most important of which is clinical research. All levels of evidence have been investigated and published. The cornerstone of homeopathy is the **millions of clinical cases** presented and published at congresses, homeopathic journals and continuing education courses. Case series and the opinions of experts who have published their conclusions based on their clinical experience in the form of 'materia medica' form the basis of this scientific approach. Pragmatic observational studies (quality of life - cost/benefit) are the next logical step. Randomized controlled trials exist but are not a priority in EBH, as will be explained in this chapter.

A/ Single cases publications (Ref.154-165)

In **conventional medicine**, clinical cases are published as a guide or explanation of the best approach to disease diagnosis. Conventional medicines are based on a precise diagnosis of the disease and the same drug (or class of drugs) is offered to all patients with the same diagnosis. This explains the importance of randomized, double-blind trials (RCT) to select the most effective drug for the medical condition in question. The focus of the history will be on the specific symptoms of the disease and the exclusion of any personal or unusual symptoms.

In **homeopathy**, it's the other way round. Once the disease has been diagnosed on the basis of the patient's history, clinical examination and any additional tests, the question of the best therapeutic approach is considered. Now that we know that homeopathic medicines act on epigenetics, we also know their limits. If there are no longer any cells capable of responding to this treatment, a palliative or supportive approach to the problem will be required. For example, after a thyroidectomy, thyroid hormones, not homeopathy, will be the priority. During cancer chemotherapy, homeopathy can only play a complementary role in reducing side effects and improving quality of life. In the case of heart or other organ failure, conventional medicine has made remarkable progress in supporting the failing cells.

Homeopathy can therefore be used as a complementary therapy, but it can also be an alternative for patients who do not benefit from, or cannot tolerate, conventional treatments.

To achieve this, the homeopathic anamnesis will include an additional phase. This time, the question is no longer about the general symptoms that led to the diagnosis, but about the individual, particular, singular symptoms, considering their globality and their modalities.

We are well informed about the complexity of the epigenetic reactions of homeopathic medicines. The aim is to find a remedy that can treat all the patient's symptoms at the same time. This explains why different homeopathic medicines may be prescribed for people with the same diagnosis.

Let's take the example of influenza and what you already know from reading this dossier. Epigenetics has taught us that Gelsemium not only stimulates the immune system, but also reduces the activity of genes associated with anxiety. As a result, a patient diagnosed with influenza who is also extremely anxious in general (fearing the worst) can be treated remarkably effectively with this remedy, whereas a patient without this anxiety will not have such a drastic result, another homeopathic remedy will be more successful.

This also explains why RCT studies are very difficult to carry out in homeopathy, because they reject a priori the possibility of individualization (unless a pre-selection of patients is made beforehand, which complicates the study and increases its cost enormously). **RCT studies do not add anything of value to the study of homeopathy in general** and are certainly not a priority for this medical approach. Investment in the controlled collection of clinical cases, pragmatic and epigenetic studies are obviously more important for EBH.

Learning about homeopathy is based on the study of these clinical cases. Priority will be given to how to collect the symptoms of each patient in order to link them to the '**materia medica**', which are summaries of all the symptoms that a homeopathic medicine can treat.

An example of published Gelsemium clinical case (Ref.159):

Case presentation

A 60-year-old, Muslim, married man from low-middle socio-economic status family man presented at our homeopathic clinic with an 8-day history of acute onset painless left upper eyelid ptosis on September 16, 2020. He noticed complete drooping upper left eyelid for 8 days, no closing the left eye or blinking for 8 days, tearing, left eye fatigue, headache occasionally. He did not report any double vision or blurred vision. He had woken with the ptosis and had not improved over the 8 days, with no history of fatigability or variability. Prior to this he had not had any eye problems and was not a contact lens wearer. His medical history included hypertension. He felt fit and well, with no preceding viral illness. He was without fever. He had on eye tumors, diabetes, and history of stroke, cancer, and neurological disorders.

He was always mentally prostrated; dizziness and instability, dullness, sluggishness, difficulty of thinking and comprehending. His complaints came from anticipation. He was nervously drowsiness. He noted that his any kinds of ailments used to come from emotions, bad news, unpleasant surprises. His general sensation and complaints was physically weak. On inspection, left eye was completely covered by the upper eye lid.

His medical investigation tests were RBS-6.3mmol/L, Lipid Profile (Fasting) – S Cholesterol (total)-213 mg/dl, S Triglyceride- 173 mg/dl, S Cholesterol(HDL)-37mg /dl and S cholesterol(LDL)-140mg/dl. The MRI of brain and orbit had shown- No remarkable abnormality detected in brain and orbit.

The context of trying conventional management and taking homeopathic medicine

At first, on September 8, 2020 the patient and his son was going to National Institute of Ophthalmology & Hospital in Sher-e-Bangla Nagar, Dhaka, Bangladesh. He had visited outdoor patient of this hospital for his chief complain of dropping of left upper eye lid for 3 days. Then he also noticed that he had hypertension last for 7-8 years and had no diabetes. The doctor of this department referred him to the Ophthalmoplasty department without giving any medicine. On September 10, 2020, the patient visited for treatment at the Ophthalmoplasty department. The doctor advised him of some medical investigation tests (RBS, serum lipid profile, MRI of brain and orbit) and referred him to the Neuro Ophthalmology department. The patient had done his RBS and serum lipid profile on that day. His medical investigation tests were RBS-6.3mmol/L, Lipid Profile (Fasting) – S Cholesterol (total)-213 mg/dl, S Triglyceride- 173 mg/dl, S Cholesterol(HDL)-37mg /dl and S cholesterol(LDL)-140mg/dl.

After then the patient with his son was going to visit the neurology department (OPD), National Institute of neurosciences and Hospital, Sher-e-bangla Nagar, Dhaka, Bangladesh for conventional treatment on September 13, 2020. This departmental doctor was also advised him of some medical investigation tests (RBS, serum lipid profile, MRI of brain and orbit). Then the patient had done his MRI of brain and orbit report on 15 September, 2020. The MRI of brain and orbit had shown- No remarkable abnormality detected in brain and orbit. The patient was verbally informed by this department without any medication prescription that he would have to undergo surgery on the upper lid of his left eye. During this time, however, **the patient and his family did not want to undergo surgery.** They then resorted to homeopathic treatment as an alternative treatment.

Discussion

Homeopathic approach

Homeopathy is the method of treatment with that medicine which can produce symptom similarity. Homeopathy is a therapeutic approach of medicine that uses substances selected from nature, such as minerals, chemicals, and plants, which are diluted and potentiated. Its aim is to restore the internal order by stimulating the patient's defense mechanisms.

The energy complex of the organism is the capacity of the body to react to overall stimuli, and the symptoms produced by the defense mechanism may appear to protect the inner vital organs. Hahnemann's law of cure states that the symptoms of the remedy and the symptoms produced by the defense mechanism of a patient in a disease state are similar.

Homeopathic approaches are based on the levels of health theory, which implies that each person has a specific energy needed for all vital functions and health maintenance, and this energy is influenced by genetics, environment, thoughts, and treatments. People with a low level of health are more difficult to treat or are less likely to present with a systematic improvement until they are treated with the correct successive remedies for a long period of time; those with a higher level of health can be completely cured in a faster and easier manner.

A homeopathic treatment uses a source substance and passes through a dilution process (potentization) in which the substance is still biologically active by retaining the properties of the initial material.

High potencies are obtained by dilution factors greater than the Avogadro's number ($<10^{-23}$). Although it was thought that these dilutions could not contain any active ingredients, recent studies have proven otherwise by detecting the presence of substances in the form of nanoparticles of the initial material by transmission electron microscopy and electron diffraction.

General approach

Blepharoptosis (or ptosis) is a down-ward displacement of the upper eyelid margin. Drooping of the upper eyelids in adults, most commonly due to separation of the tendon of the lid-lifting (levator) muscle from the eyelid. Most cases of ptosis can be categorized into one of the following five forms: aponeurotic, myogenic, neurogenic, mechanical, and traumatic. The aponeurotic form is the most common type of ptosis in adults and is due to disinsertion or stretching of the levator aponeurosis. Stretching can be caused by normal aging, repetitive eye rubbing, or previous intraocular surgery. Age-related blepharoptosis (ptosis) is one of the common conditions encountered in ophthalmology clinics. It can cause superior visual field defect at primary and downward reading gaze and affect quality of life.

Selection of medicine

We take this patient as a challenge from the very beginning. We collected physical, mental symptoms including all other symptoms of the patient. Some of the symptoms that are more important in the case of ptosis are differentiated Table 1.

Table 1: Repertorial Totality.

Symptoms that are more important in the case of ptosis are differentiated.

- [KT] [Head]Pain,headache in general:Occiput:Sun,heat of: (2)
- [KT] [Mind]Prostration of mind: (2)
- [BN] [Sensation and complaints in general]Weakness:Exhaustion, prostration, infirmity: (3)
- [BN] [Mind]Dizziness and instability of: (4)
- [BR] [Eyes]Eyelids and margins:Drooping (ptosis): (3)
- [BN] [Eyes]Eyelids:Paralysis, drooping, ptosis, etc.: (4)
- [BN] [Eyes]Eyelids:Paralysis, drooping, ptosis, etc.:Upper: (4)
- [KT] [Mind]Dullness,sluggishness,difficulty of thinking and comprehending: (3)
- [BR] [Nervous System]Sleep:Drowsiness: (3)
- [FA] [Ptosis] Ailments from: Emotions: (3)
- [FA] [Ptosis] Ailments from: Bad news, unpleasant surprises: (3)

Then remedy selection was done with the help of a homeopathic repertory by sorted out symptoms

Remedy Name	Gels	Sep	Caust	Con	Phos	Nux-m	Rhus-t	Nux-v	Zinc	Kali-c	Nat-m
Totality	31	21	17	16	16	15	15	13	12	12	12
Symptoms Covered	10	7	7	7	6	6	6	5	6	4	4
[KT] [Mind]Prostration of mind:	2	3		3	3	2	1	3	2		2
[BN] [Sensation and complaints in general]Weakness:Exhaustion, prostration, infirmity:	3	4	3	2	4	3	4	4	1	4	4
[BN] [Mind]Dizziness and instability of:	4	2	1	2	2	2	4	2	3	3	3
[BR] [Eyes]Eyelids and margins:Drooping (ptosis):	3	3	3	3	2	2	2	2			
[BN] [Eyes]Eyelids:Paralysis, drooping, ptosis, etc.:Upper:	4								1		
[KT] [Mind]Dullness,sluggishness,difficulty of thinking and comprehending:	3	3	2	2	3	3	2	2	3	3	3
[BR] [Nervous System]Sleep:Drowsiness:	3		2		2	3	2			2	
[FA] [Ptosis] Ailments from: Emotions:	3	3	3	2					2		

Symptoms: 9 Remedies: 246

Repertorisation: Normal

We then initially selected the homeopathic medicine *Gelsemium* for this ptosis patient to conduct repertory.

Remedy Name	Gels	OP	Sulph	Lach	Spong	Am br
Totality	31	11	10	8	5	4
Symptoms Covered	10	6	4	4	3	3
[KT] [Mind]Prostration of mind:	2	1	3	3	1	1
[BN] [Sensation and complaints in general]Weakness:Exhaustion, prostration, infirmity:	3	1	3	1	2	1
[BN] [Mind]Dizziness and instability of:	4		1	1		
[BR] [Eyes]Eyelids and margins:Drooping (ptosis):	3	2				
[BN] [Eyes]Eyelids:Paralysis, drooping, ptosis, etc.:Upper:	4	1				
[KT] [Mind]Dullness,sluggishness,difficulty of thinking and comprehending:	3	3	3	3	2	2
[BR] [Nervous System]Sleep:Drowsiness:	3	3				
[FA] [Ptosis] Ailments from: Emotions:	3					

Symptoms: 9 Remedies: 6

Repertorisation: Drug Filter+ Hot, Left, Acute, Male

To choose the more accurate medicine, drug filter was conducted by the stage of disease, sex, thermal state of the patient and side of the patient through the homeopathic software Edu Homeopathy. Ultimately we agreed that *Gelsemium* would be a more effective drug for this patient.

Selection of scale and potency

Professional homeopaths frequently use the potencies from the centesimal scale. In the 5th Edition, *Organon of Medicine*, Hahnemann states that the centesimal potencies are quick in their onset and tend to aggravation in the beginning of chronic treatment. He seemed to use his centesimal for the most acute diseases, crisis, or as acute intercurrents during the disruptions of chronic treatment.

We took some criteria for potency selection such as susceptibility, nature of diseases, miasmatic background, seat of diseases, general condition of patient, and history of suppression, paralysis of single parts.

Age of the Patient and Strength of the Vital Force. We tend to use lower potencies, either in single or repeated doses, with babies, with patients who are depleted and weak, and in treating our pets. That said, in cases of severe acute illnesses, or if the lower potencies have been exhausted already, we may use high-potency medicines in these cases. The decision often depends on the clarity of the symptom picture, severity of the symptoms, and compliance.

Treatment and follow-up

Medicine and dose: In the end, with the potentized homeopathic remedy *Gelsemium sempervirens* 30C, the patient was prescribed, chosen according to his symptoms presented at each follow-up visit. In addition, the patient was advised to take *Gelsemium sempervirens* 30°C of 5/7 pills orally thrice a day for a week on September 16, 2020 and asked to present the follow up after one week of finishing the medicine. With the satisfactory outcome, the medicine was suggested to be continued in the same doses for the next week, maintaining the same earlier pattern; topical applications of any other drug were prohibited. After two weeks the patient ptosis signs are recovery 60%. The patient maintained a gradually improving clinical status of ptosis. In two weeks, the patient gained more recovery and strength of left upper eyelid, with no more mentally prostrated; dizziness and instability, dullness, sluggishness, the difficulty of thinking and comprehending. His physical strength came back. The initial ptosis symptoms were completely absent at this point. He started treatment with *Gelsemium* 200C, maintaining the same earlier pattern for the next week.

All of the other symptoms were absent in that week. The acute episode of ptosis was absent and his vision was clear. According to his good clinical status, he does not take at present any homeopathic treatment either.

Result

In this case, the drooping eyelid covered all or part of the pupil of left eye and, interferes with vision.

Administrating *Gelsemium sempervirens* 30C of 5/7 pills orally thrice a day for a week; left eyelid ptosis was improved 60%. The ptosis resolved quickly and the patient remains symptom free 100% at 3 weeks follow-up by next high potency *Gelsemium sempervirens* 200C with same pattern.

Conclusion

We present the case of a 60-year-old man diagnosed with complete unilateral upper eyelid ptosis of left eye initially trying to treat with conventional medications without surgery. After an individualized series of homeopathic remedies, he presented a good clinical outcome, with no clinical signs of the disease. This is one of the first cases of ptosis treated with homeopathy presented in our clinic. Homeopathy is a useful alternative approach to be considered among patients with ptosis. A course of three weeks of homeopathic treatment is associated with significant benefits in patients suffering from ptosis, as conducted by *Gelsemium sempervirens*. Further studies should be continued to assess the efficacy of homeopathic medicine for ptosis.

Any experienced homeopath could offer you hundreds of different clinical cases with many remedies.

Unfortunately, few have systematically evaluated their daily practice.

An extract of systematic review of clinical cases in first line medicine (Ref.160):

For Dr Constantin Hering, the study of a homeopathic remedy must be done in 5 steps (possibility, probability, confirmation, corroboration and clinical verification):

First step: The possibility, one substance provoked some symptoms which sometimes might even be toxic.

Second step: The probability, when this substance, diluted and dynamised, has provoked various symptoms on volunteers in good health.

Third step: The confirmation, when this same substance, diluted and dynamised, given to volunteers in good health, has confirmed some symptoms issued from a previous pathogenesis and provoked probable new symptoms.

Fourth step: The corroboration, this means the examination of the place taken by the probable symptom and its confirmation by the notions actually known of physiology and pathology.

Fifth step: The Clinical Verification, at the bed of the suffering/sick patient, the correspondence of the probable symptom, confirmed and corroborated is verified by the obtained clinical results.

Like in homeopathy, the similar law assigns the efficiency of a remedy to the presence (or the absence) of specific symptoms of a remedy. This method is thus perfectly adapted to the study of this link. The gradient of likelihood which exists between the symptom and the efficiency of the prescribed remedy will be studied (Likelihood Ratio = LR).

- Based on data collection in **daily practice**.
- **LR+** is an indication that a remedy will be effective if the symptom is present, higher is better. LR+ must be >1.
- **LR-** is an indication that a remedy will not be effective if the patient does not have the symptom, more so if LR- is closer to zero. LR- must be <1.
- Reaching the level of « **evidence** ».

Example : **IGNATIA AMARA**

Results are coming from 460 prescriptions of this medicinal product in one individual first line medical practice. Important diagnoses were sadness (16% of the patients); 12% anxiety; 11% over emotional sensitivity; 9,5% nervous gastralgia; 8% overworking; 6,5% nervous automatic movements; 6,5% nervous colitis; 5% ailments from disappointed love; 3% anger. Other diagnoses in degressive order: vertigo, headache, rheumatic, chronic rhinitis, allergies, recurrent infections, etc. Nervous problems are really dominating in this list of diagnoses.

Statistical verification:

This survey is looking at the prevalence of repertory symptoms used for the prescription of IGN in a private practice and the possible link with obtained results.

445 symptoms (32 repertory chapters) could be considered using this method. They are coming from the prescriptions for 172 patients.

LR+ and LR- values are only significant if enough patients are included for the study of each symptom. Therefore we eliminated first symptoms only used for only one patient; we did the same for LR+ values below « 1 ». 92 useful symptoms remained. For 22 symptoms, values are significant of a specific link between the symptoms and remedy efficacy.

The other symptoms of the table could also have a link with the efficiency of Ignatia amara but more surveys are needed to conclude there.

IGNATIA AMARA							Calcul prevalence						LR + CI 95%	LR - CI 95%
SYMPTOME	N Symp/ databank	Materia Medica (Allen)	Encyclopedia Position Rem./Sympt	Synthesis N Rem	Synthesis Val Rem	N. Pat	a	b	c	d	LR +	LR -		
Abdomen														
Pain, burning	12	No	93/238	148	1	3	3	9	120	2016	5.49	0.98	1,5-20	0,95-1,01
Pain, liver	17	No	89/263	157	1	3	3	14	120	2011	3.53	0.98	1,03-12	0,96-1,01
Rumbling	16	Yes	39/447	310	2	2	2	14	120	2012	2.37	0.99	0,5-10	0,97-1,01
Bladder														
Urination, frequent	17	Yes	21/393	271	3	2	2	15	121	2010	2.20	0.99	0,5-9,5	0,97-1,01
Chest														
Anxiety, region of heart	48	Yes	52/158	140	3	5	4	44	118	1982	1.51	0.99	0,6-4	0,96-1,02
Anxiety (in)	34	Yes	54/249	141	1	3	3	31	117	1997	1.64	0.99	0,5-5	0,96-1,02
Cough														
Nervous	5	Yes	5/104	30	2	1	1	4	122	2021	4.12	0.99	0,5-37	0,98-1,01
Ear														
Noises, hissing	4	Ringing	0/48	41	0	1	1	3	122	2022	5.49	0.99	0,6-52	0,98-1,01
Extremities														
Varices, leg	12	No	0/32	18	0	3	3	9	120	2016	5.49	0.98	1,5-20	0,95-1,01
Perspiration, palm	30	No	61/89	81	3	3	3	27	117	2001	1.88	0.99	0,6-6	0,96-1,02
Eruption, fingers	6	No	0/115	31	0	2	2	4	121	2021	8.23	0.99	1,5-45	0,96-1,01
Cracked fingers	8	No	0/46	27	0	2	2	6	120	2020	5.54	0.99	1,1-27	0,96-1,01
Cramp (s) (in)	11	Yes	64/378	81	1	2	2	9	120	2017	3.69	0.99	0,8-17	0,97-1,01
Heaviness, lower limbs	13	Yes	75/212	198	2	2	2	11	118	2017	3.07	0.99	0,7-14	0,97-1,01
Face														
Eruption, herpetic; Mouth, around	15	No	0/30	20	0	3	3	12	119	2014	4.15	0.98	1,2-14,5	0,95-1,01
Swelling; Lip, upper	3	No	76/104	51	0	1	1	2	122	2023	8.23	0.99	0,8-90	0,98-1,01
Generalities														
Lassitude	297	Yes	82/405	353	2	17	17	280	91	1760	1.15	0.98	0,7-1,8	0,9-1,06
Cold; In general; Aggravated	155	No	46/452	243	2	10	10	145	111	1882	1.16	0.99	0,6-2,1	0,94-1,04
Side; Right side – right	43	No	63/374	229	2	4	4	39	117	1988	1.72	0.99	0,6-4,7	0,95-1,02
Trembling internally	55	Yes	0/108	99	0	4	4	51	118	1975	1.30	0.99	0,5-3,5	0,96-1,03
Contradictory and alternating states	15	Yes	12/43	39	4	3	3	12	120	2013	4.12	0.98	1,2-14	0,95-1,01
Bleeding	7	No	32/273	225	1	2	2	5	120	2021	6.64	0.99	1,3-34	0,96-1,01
Head														
Sensation of; Emptiness; Sensation of; Hollow	13	Yes	14/110	91	1	3	3	10	119	2016	4.98	0.98	1,4-18	0,95-1,01
Pain; forehead, above left eye	6	Yes	100/151	104	1	2	2	4	121	2021	8.23	0.99	1,5-45	0,96-1,01
Mind														
Sensitive - oversensitive (to)	497	Yes	8/467	237	3	37	36	461	85	1566	1.31	0.91	0,98-1,7	0,81-1,02
Sympathetic	326	No	3/107	74	2	27	24	302	96	1726	1.34	0.94	0,93-1,9	0,86-1,03
Desire of; Company	261	No	93/185	130	2	23	21	240	102	1785	1.44	0.94	0,96-2,2	0,87-1,02
Ailments from; Grief	146	No	1/94	90	4	20	19	127	100	1902	2.55	0.90	1,6-4	0,83-0,97
Ailments from; Anger	204	No	5/135	108	3	19	17	187	101	1843	1.56	0.94	0,99-2,5	0,88-1,02
Irritability	289	Yes	14/629	545	1	19	17	272	99	1760	1.09	0.99	0,7-1,7	0,91-1,06
Confidence, want of self	290	No	96/168	149	1	17	17	273	101	1757	1.07	0.99	0,7-1,7	0,92-1,07

CONCLUSION :

Most valuable symptoms to approach systematic efficacy of the prescription of the remedy IGN are ailments from “intense nervous aggression” (mortification, grief, emotional excitement, fright). Anguish is high and is expressed by lump sensation in throat or in oesophagus. Tears are important, burning in abdomen often occurs by overemotional patients always thinking at their grief.

Several verified symptoms are coming from provings; the law of *similar* is as such also verified. Looking at these results, the homeopathic principle of **globality** allows a proposition of the essence of the remedy.

Based on the results of this verification of the symptoms of IGN and use of the statistical “Likelihood ratio” method applied to this databank, we are allowed to conclude that the essence of Ignatia amara is “overemotional reactions” after all kind of “aggressions”. Tears and lump in throat are common. Secondary depressive states are indeed a good indication for this remedy.

Clinical cases are therefore truly the basis of training in homeopathy. There is also the possibility today of placing the anonymised clinical cases on an international database (ex. WinChip), which will allow even better study and confirmation of the traditional knowledge of homeopathy.

B/ Cases series (Ref.166-222)

Observational studies often start from a diagnosis, but treatments remain individualized.

Example of EPI3 survey:

Yola Moride. Methodological Considerations in the Assessment of Effectiveness of Homeopathic Care: A Critical Review of the EPI3 Study. Homeopathy 2022; 111(02): 147-151

Abstract

Background EPI3 is an observational study of a representative sample of general practitioners (GPs) and patients in France, demonstrating that patient characteristics differ according to the prescribing preferences of their GPs for homeopathy. For selected conditions (**musculoskeletal disorders, sleep disorders, anxiety/depression, upper respiratory tract infections**), progression of symptoms and adverse events over follow-up in the homeopathy preference group did not significantly differ from other practice preferences, but there was a two-fold to four-fold lower usage of conventional medicines. The EPI3 study's validity was challenged due to absence of head-to-head comparison of medicines to conclude on a causal association between homeopathy and outcomes.

Methods A critical review of the nine EPI3 publications was conducted, focusing on generalizability, selection bias, outcome measurements and confounding.

Results The conceptual framework of EPI3 rests on a systemic construct, i.e., the homeopathic treatment concept assessed using the type of GP prescribing preference, taking into account the clinical, human and social aspects. The enrollment process enhanced the generalizability of findings. Validated instruments for outcome measurements were used for three conditions, and control of confounding was rigorous.

Conclusion EPI3 was conducted according to best practices. Homeopathy prescribing preference met specific patient needs with less use of conventional medicines and without an apparent loss in therapeutic opportunity.

Example of COVID 19 in Belgium (223)

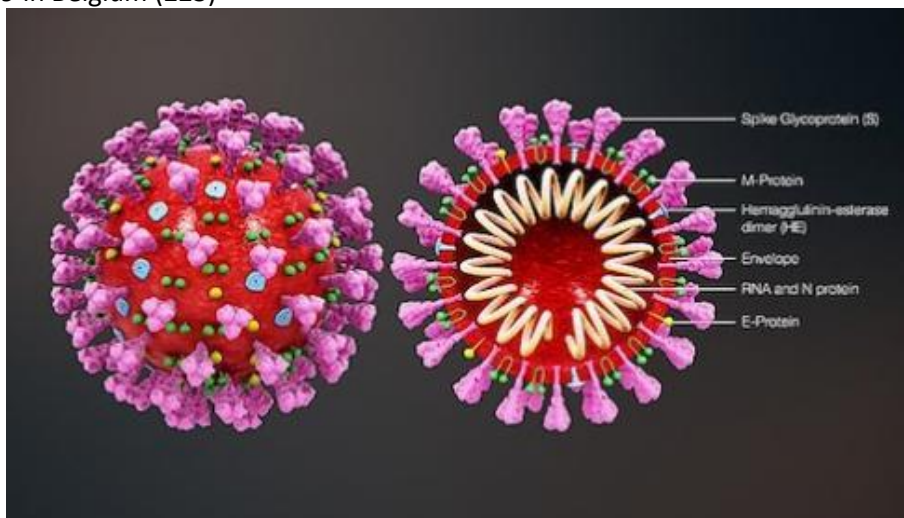


Table 1a: Comparison of market data for the 5 most prescribed homeopathic medicines for COVID-19 epidemic in Belgium.

Homeopathic medicines	March/April 2019	March/April 2020	Comparison 2020/2019
Gelsemium	6451	18729	+190%
Bryonia	2694	15550	+477%
Arsenicum album	2922	18973	+549%
Camphora	48	705	+1369%
Phosphorus	2676	9614	+259%
TOTAL	14791	63571	+430%

Conclusions

From the available data, we can conclude that the use of homeopathy during a pandemic situation such as this COVID-19 epidemic for which not any effective therapy exists and no vaccination is possible can be considered. With this therapeutic strategy, we could acknowledge that no loss of chance to cure occurred for the patients included in this survey; hospitalization has been considered if needed. Comparing to available international data [2-4, 17], a possible shortening of the COVID-19 symptoms can be taken under consideration (Evidence-Based Medicine level 3b - Oxford Centre for Evidence-Based Medicine: Levels of Evidence, March 2009). The population having access to homeopathy during this epidemic period was younger than the general Belgian diseased peoples, and they consulted their HMDs earlier.

Historic data mentioned the effectiveness of the homeopathic approach during pandemics [12-13]. The elderly population (high mortality risk by COVID-19) had no access to homeopathy. Further surveys are needed. The role of the spontaneous healing process must be further studied.

C/ Experts' recommendations: 'Materia Medica' (Ref.224-263)

Historically, experts have compiled all the clinical results in 'Materia Medica' books. There are 'materia medica pura' which bring together all the symptoms obtained from pathogenesis, which we will discuss later, and those which focus on the clinical evidence obtained from treated patients. The example below is of this type.

Many have summarized symptoms in repertories allowing quick reference during consultations. Specialized computer programs are now used for rapid searches to bring all this knowledge together.

An example of introduction to a homeopathic remedy in a 'materia medica'. After this introduction all symptoms treated with success are listed. A 'materia medica' is a mix of intoxication and proving symptoms (see further):

A DICTIONARY OF PRACTICAL MATERIA MEDICA. By John Henry CLARKE, M.D.

Gelsemium.

Gelsemium sempervirens. G. Lucidum. G. Nitidum. Bignonia sempervirens. Yellow jessamine. N. O. Loganiaceé.

Tincture of the bark of the root.

Clinical.—Amaurosis. Anterior crural neuralgia. Aphonia. Astigmatism. Bilious fever. *Brain, affections of.* Cerebro-spinal meningitis. Choroiditis. Colds. *Constipation.* Convulsions. Deafness. *Dengue fever.* Diarrhea. *Diphtheria.* *Dupuytren's contraction.* Dysentery. *Dysmenorrhea.* Emotions, effects of. Epilepsy. *Eyes, affections of.* Fever. Fright. Gonorrhoea. Hay-fever. *Headache.* Heat, effects of. Heart, diseases of. Hydro-salpingitis. Hysteria. Influenza. Intermittent fever. Jaundice. Labour. Liver, affections of. Locomotor ataxia. Mania. Measles. *Meningitis.* *Menstruation, painful;* suppressed. Metrorrhagia. *Myalgia.* Neuralgia. Nystagmus. *Esophagus, stricture of.* *Paralysis.* Paralysis agitans. Paraplegia. Pregnancy, albuminuria of. Ptosis. Puerperal convulsions. *Remittent fever.* Retina, detachment of. Rheumatism. Sexual excess, effects of. *Sleep, disordered.* Spasms. Sun-headache. Sunstroke. Teething. Tic-douloureux. Tobacco, effects of. *Tongue, affections of.* Toothache. *Tremors.* *Uterus, affections of.* *Vertigo.* *Voice, loss of.* Writer's cramp.

Characteristics.—*Gelsemium*, which belongs to the same order of plants as *Nux vomica* and *Curare*, is not only one of the most important additions to the materia medica for whose introduction we are mainly indebted to Hale, but it is also in the first rank of importance among the vegetable polychrests. A drug is of importance in homeopathy not so much by reason of the great number of the symptoms it causes, as by possessing a number of well-marked and clearly characterized symptoms which correspond to symptoms constantly met with in every-day practice. It was this

which at once gave *Gelsem.* a place among the polychrests of homeopathy. Like its botanical relatives, *Gelsem.* is a great paralyzer. It produces a general state of paresis, mental and bodily. The mind is sluggish; the whole muscular system is relaxed; the limbs feel so heavy he can hardly move them. This condition exists in the cases of typhoid that call for it; the lassitude is expressed by the patient; with *Mur. ac.* there is the lassitude, but the patient does not express it. The same parietic condition is shown in the eyelids, causing ptosis; in the eye muscles, causing diplopia; in the esophagus, causing loss of swallowing power; in the anus, which remains open; in diarrhea from depressing emotions or bad news; in relaxation of the genital organs. Functional paralyzes of all descriptions. This is shown again in some features of the headaches. They are accompanied by blurring of the sight, and relieved by a copious discharge of watery urine from a parietic condition of the kidneys. Conversely there may be a desire to urinate during the night, and if the call is not immediately responded to a violent headache supervenes. Post-diphtheritic paralysis; debility after pollutions; great prostration from irritability of seminal vesicles. The mental prostration is typified in "funk," as before an examination, stage-fright, effects of anger, grief, bad news, and is accompanied by drooping eyelids. Alcoholic stimulants relieve all complaints where *Gels.* is useful. Hysterical dysphagia or aphonia, after emotions. Measles and eruptive disorders, with drowsy state, stiff used face, and even convulsions. Convulsions are no less marked in *Gels.* than paralyzes. Erskine White (*H. W.*, xxxii. 501) cured an infant born in convulsions three weeks after its mother had been terribly frightened by seeing her little brother nearly burnt to death. The only guiding symptom was "the child's chin *quivered incessantly.*" In thirty seconds after the dose the quivering ceased; in three minutes the convulsions were at an end. White had to ride twelve miles over mountains to reach the patient after receiving the summons, so the convulsions must have lasted a considerable time. *Tremor* is a keynote of the remedy. *Gels.* is adapted to children and young people; to persons of a nervous, hysterical temperament; to irritable, sensitive, excitable people. The following provings related by Dr. George Logan, of Ottawa (*Med. Adv.*, xxiii. 125) show the power *Gels.* has over the mental sphere. The subject of the first was Mrs. Logan, who describes her experience thus: "A few moments after taking the medicine there is an extreme feeling of restlessness, not able to be still for a second, keep turning and twisting all the time. This is succeeded by intense pain over the right eye, always the right; it seems as if my forehead would come right over my eyes and close them; my eyes feel as if they were turning into my head, roll up all the time. Then a strong inclination to commit suicide. Want to throw myself from a height; invariably think of going to the window and dashing myself down, feel as if it would be a relief. This is succeeded by an inclination to weep, and I generally have a good cry, but before I cry and while the feeling lasts of wishing to throw myself from a height, I clench my hands, and nervous rigors or sensations run all over my body down to my fingers and toes; it seems as if I would lose my senses. Then a great dread of being alone seizes me, and I am afraid of what may happen; think I may lose all self-control. The pain still continues over the right eye, and often the back part of my head seems to have a spot about four inches square that is turning to ice. These feelings are followed by a strong inclination to talk or write, very great exhilaration, and a better opinion of my mental capacity, indeed it seems as if my memory was better, that I can recall almost anything I ever read; nearly always repeat long passages of something to myself that I have read years before. It appears to me that I can remember almost anything I love to recall. Now this is my invariable experience whenever I take *Gelsemium*, no matter whether in the 3rd or 1,000th potency, and I have been in the habit of using it for twenty years. I am writing this under the influence of the drug. I could not give the symptoms so accurately at any other time. As I am getting over the effects of the drug I have to urinate every few minutes. While suffering I like to have people in the room, have a perfect horror of being alone. I find *Cinchona* an antidote for most of the symptoms, but it leaves me much exhausted, thoroughly tired, and with a wish to be quiet."

Dr. Logan adds that he first gave the patient *Gels.* 2 for insomnia and headache. It produced the symptom "wishing to throw herself from a height" so markedly that he was alarmed lest she should carry it out. A year or two after, wishing to give the remedy again, he gave two pellets of the 30th, with the same result. He next prescribed the 1,000th, and the result of that was the proving now related. Here is the second case in Dr. Logan's words:

"I gave Mr. Dorion, since Dr. Dorion, of St. Paul, five or six, drops of *Gelsemium* 1st for some ailment the nature of which I fail now to remember. Within a few hours after taking the *Gelsemium* I was sent for to see Mr. Dorion, who, I was told, was 'insane.' He was brandishing a sword in a threatening manner, and frightening all the occupants of the house. On my arrival at his room, I found him in the position of 'shouldering arms' with his sword. I playfully admired his military appearance, and thus secured the dangerous weapon, very much to the relief of his fellow-boarders. It then occurred to me that the symptoms were produced by *Gelsemium* and placing him in charge of one of the boarders, I returned to my office in order to procure the antidote, of which I was unaware at the time. I gave *Cinchona* 30 each half-hour, which, in the course of two or three hours brought him all right again." J. H. Nankivell drank two ounces of tincture of *Gelsem.* instead of a glass of sherry. He walked a few feet with assistance and in another minute his legs were paralyzed. He dragged himself to the bedside with his arms, but they were unable to help him to bed, into which he had to be lifted. As long as he lay quiet there was no trouble, but on the least exertion there were excessive tremors. Vomiting occurred during the next twenty-four hours. Temperature

rose to 101.5° F. Heart's action very violent and intermittent (possibly an aggravation of existing disease). All the muscles of the eyes were affected, but of voluntary muscles those of the right side suffered most. Prolonged conversation involved paralysis of upper lip. There was somnolence; absence of mental excitement; and good appetite. The effects passed away in the order of occurrence, from below upwards; but after the arms had recovered, vision was not perfect for twenty-four hours. A patient of mine once took a drachm of the tincture for a headache. On going out he could not tell which side of the street he was on. He was near St. Paul's Cathedral and saw two cathedrals instead of one. The following case of poisoning was recorded by Dr. Edward Jepson (*Brit. Med. Jour.*, Sept. 19, 1891, p. 644). Although *Gels.* was given with other drugs, and on the last occasion with one of its antidotes (quinine), which probably saved the patient's life, the symptoms are unmistakably those of *Gels.*:

"About two months ago Miss W., aged about forty, an inmate of my house, was seized with very severe neuralgia about both temples. I gave her tincture of *Gelsemium* 10 minims, with a bismuth mixture to be taken every two or three hours. After taking this for about a day and obtaining no relief, but rather she grew worse, being, as is described, 'nearly mad with pain', I gave her the full dose of the tincture of *Gelsemium*, according to Squire's *Companion of the Pharmacopia*, 1882, and Whitt's *Materia Medica*, third edition, namely, 20 minims in a quinine mixture. This was taken every three hours, but with only moderate relief, three or four doses having been taken during the night. At about eight o'clock the following morning Miss W. was able to speak pretty well, and said she thought she was better. At about nine o'clock she was speechless and in the greatest distress of mind and body; there was total loss of power in the tongue; it could not be protruded, she could not articulate, and with very great difficulty could she swallow the brandy and water we forced upon her. There was alteration in vision; she could not distinguish us clearly, and the pupils were widely dilated. She had uncertain power over the muscles of the hand and arm, so that she could not write her name. All this time she was perfectly conscious, and nodded her head in answer to questions. She was greatly alarmed as to herself, and, as she informed us afterwards, she thought she was about to have a fit. Not knowing of any special antidote for *Gelsemium* and seeing that there was no time to lose if we wanted to avert any increase of the paralysis, it fortunately came into my mind to give her a subcutaneous injection of *Strychnine*, using 1 minim of the liquor *Strychnine*, or 1-120th part of a grain. Ten minutes after this the change for the better was most marked; there was return of power in the tongue and in the hands, and an improvement in the vision. I again injected a minim of the *Strychnine*, and with further improvement in the condition of the patient. After this she took food and stimulants, and all paralysis disappeared. The vision was not perfectly restored for some hours, the pupils being less dilated. She had some return of the neuralgia, and was very weak for a few days, but eventually she quite recovered, and has had altogether better health since this event than she had prior to it." *Gelsem.* in the attenuations is a great neuralgic remedy. I have cured among other cases one of neuralgia of the anterior crural nerve. The paralysis of the tongue recalls another condition, trembling of the tongue, which is one indication for *Gels.* in typhoid, in which it is a leading remedy. The tongue is only thinly coated, and has not the dark streak of the *Bapt.* tongue. The *Gels.* face is flushed crimson, but not quite as *besotted* as that of *Bapt.* There is excessive weakness and trembling, but the consciousness is not so clouded. In coryza and hay fever *Gels.* has an important place. Early morning sneezing and streaming colds are a strong indication. The characteristic headache of *Gels.* begins in the occiput and spreads over the whole head, settling down over eyes. Dizziness and dim vision, and dizziness rising up from occiput and spreading over whole head, with depression, from heat of summer. Headache with stiff neck, < in morning; > urinating; preceded by blur before eyes, drowsiness with headache, difficulty in keeping eyes open, dull headache over eyes to vertex and occiput, with irregular action of eye-muscles. Neurotic symptoms in cigar-makers, impotence, palpitation. Many symptoms occur in connection with the sexual organs, male and female. [J. H. Allen (*H. P.*, xiii. 244) cured a case of hydrosalpingitis, of gonorrhoeal origin, with *Gels.* 1m. The symptoms were: Feeling of fulness and heaviness in uterine region, cramp-like pains during menses, sharp pains moving from uterus to back and hips. A languid aching in back and hips a day or so before menses; great weakness and loss of power in lower extremities; very little pain after menses began. Lump in throat which she cannot swallow. After menses, pains in back of head and spine. Pains running up back of neck, with a feeling of tightness in the brain; irritable, easily angered. Fever in afternoon, twitching of muscles. Menses last eight days; for first three days appear natural, but afterwards very light-coloured, like serum. The tumour, which was in the left side of abdomen, disappeared in three months, improvement having set in from the first.] Dysmenorrhoea; epileptiform convulsions at menstrual period; rigid os in labour; chill, beginning in hands; or feet; and running up back. There is < both before, during, and after menses. Itching of skin; eruption like measles. Sensations of lightness: of head, of body. Sensation as if the head were enlarged; as if there were a tape round the head; as if the skin were contracted in the middle of the forehead; sensation from throat up into left nostril like a stream of scalding water; sensation as if a lump were in esophagus; load in stomach as if stomach were quite gone; as if the uterus were squeezed by a hand; as if he would die; as if the blood ceased to circulate as if the heart would stop unless he kept moving; as if a knife were thrust through from occiput to forehead; as if eyes were jumping out of head; as if a lump were in throat which could not be swallowed. The stools of *Gelsem.*, whether loose or constipated, are mostly yellow, like the

flower. The color comes out also in the colour of the tongue, and bilious symptoms generally. Wants to lie down and rest. Wants to be held, that he may not shake. Motion < most symptoms; > muscular pains; > heart. Rising from seat = pain in heart. Shaking head > heaviness of head. Lifting arms = trembling of hands. Playing piano = tired sensation in arms. (J. G. Blackley pointed out the suitability of *Gels.* to writer's cramp and professional paralyses. I have relieved with it cases of Dupuytren's contraction.) Great distress and apprehensive feeling at approach of a thunderstorm. Heat of sun or summer <. Hot applications > pain back of head. Must be covered in all stages of the paroxysm. Complaints from sudden change from hot or dry to damp air. Catarrh occurs in warm, moist, relaxing weather. < Damp weather; cold, damp atmosphere; > cold, open air; < from fog. Cold drinks are vomited immediately; warm or spirituous drinks can partially be swallowed. "> From stimulants" is a very general characteristic.

Relations.—*Antidoted by:* Atrop., Chi., Coff., Dig., Nux. mos. In cases of poisoning, artificial respiration and faradisation of respiratory muscles. Foy found Nitro-glycerine a perfect antidote in one case. Jephson antidoted his case with Strychnine. *It Antidotes:* Mag. phos. *It antagonises:* Atrop., Op. *Compatible:* Bap. (in typhoid, influenza); Ipec. (in dumb ague). *Compare:* Bell. (labour); Caulo., Caust. (complaints of women); Coccul., Con., Curare (paralysis); Fer. phos. (fever); Phos. (effect of thunderstorms); Ol. an., Verat. (headache): Borax (sense of falling). Bry. (typhoid; dreads movement, *Gels.* because he is so weak, Bry. because movement < pains); Hyper. (< from fog).

Causation.—Depressing emotions. Fright. Anger. Bad news. Sun. Heat. Damp weather, warm or cold. Thunderstorms. Alcohol. Self-abuse.

D/ Pathogenesis / Provings (included in Ref.224-263 + Ref.264-267)

A proving is the testing of a potentized substance to find out which symptoms that substance is capable of producing and hence curing.

A proving is conducted on volunteers who are in a reasonable state of health (provers), and who do not know what substance it is they are taking. Doses are repeated until provers start to experience symptoms of a change in state. The provers record everything they experience, whether physical, emotional, mental, or even spiritual, as long as the change in state persists. At the end of the proving all the records are compared to find the physical symptoms, states of mind, feelings, and experiences that the provers have had in common, which can reasonably be attributed to the emerging signature resonance of the substance.

“Provings are the pillars upon which homeopathic practice stands. Without accurate provings all prescribing indications are bound to be vague guesses at best, and pure fiction at worst. There is no other way to predict the effect of any given substance as a remedy with any degree of accuracy, and the use of signatures, toxicology or fancy ideas cannot approximate the precise knowledge gained by a thorough proving.” -The Dynamics and Methodology of Homeopathic Provings by Jeremy Sherr, MCH, FSHom, RSHom.

Nowadays, the homeopathic drug proving trial is to be conducted as a multi-centre, randomised, double-blind, placebo-controlled phase 1 trial. Subjects and investigators are not only blinded to the group allocation process but also to the identity of the drug.



The link with epigenetics is evidence.

As example, the epigenetic study shows that *Gelsemium s.*, a medicinal plant used in traditional remedies and homeopathy, modulates a series of genes involved in neuronal function. A small, but statistically significant, response was detected even to very low doses/high dilutions (up to 30c), indicating that the human neurocyte genome is extremely sensitive to this regulation.

Proving summary:

DRUG PATHOGENESIS

- Gelsemium acts primarily on the central nervous system, specifically targeting the motor nerves.
- It induces a state of general paresis (partial paralysis) and affects both voluntary and involuntary motor functions.
- The remedy also causes mental sluggishness and stupor, leading to a state of complete relaxation and prostration of the muscular system.

KEY CHARACTERISTICS

- **Dullness, Drowsiness, and Trembling:** These are the hallmark symptoms of Gelsemium and are observed throughout its effects.
- **Motor Paralysis:** Gelsemium is known as a great paralyzer, causing complete relaxation and prostration of the entire muscular system.
- **Fear and Excitement:** Symptoms often arise from emotional excitement, fear, or receiving bad news.
- **Thirstlessness:** The patient typically has no thirst, even during fever.
- **Headache Relief through Urination:** Headaches often improve after profuse urination.

After clinical verification an author concluded :

Based on the results of this verification of the symptoms of GELS and use of the statistical “Likelihood ratio” method applied to this databank, we are allowed to conclude that the essence of Gelsemium sempervirens will include anxiety from grief or future events. Lassitude is a common symptom. Anxiety in stomach is verified even if it is not a symptom described in provings.

Pathogenesis is therefore the keystone of a modern and traditional homeopathic approach. The art of medicine, so well described in the past, has rejoined the modernity of today's science.

E/ Randomized Controlled Trials (RCT). (Ref. 270-299)

Although the double-blind method is well known to homeopathic doctors and is used in provings and basic research in homeopathy, because of the need for individualized treatment, it is not the best method for evaluating the efficacy of homeopathy. A homeopathic remedy is not prescribed according to an indication, but according to the patient's symptoms.

However, if the principles of homeopathy are respected (especially individualized treatment), the results are obvious.

The **ultimate conclusions** of the various audits of RCT homeopathic publications are clear: “The quality of evidence for **positive effects of homoeopathy beyond placebo** (high/moderate/low/very low) was high for individualized-Homeopathy (I-HOM) and moderate for ALL-HOM and not I-HOM. There is no support for the alternative hypothesis of no outcome difference between homoeopathy and placebo.”

“The available Meta Analyses of placebo-controlled randomised efficacy trials of homoeopathy for any indication (PRETHAIs) reveal significant positive effects of homoeopathy beyond placebo. This is in accordance with laboratory experiments showing partially replicable effects of homoeopathically potentised preparations in physico-chemical, in vitro, plant-based and animal-based test systems.”

CONCLUSIONS

Teaching homeopathy is a real challenge. After the classical approach, you have to learn to listen and hear the patient in a global, detailed and individualized perspective.

This is an **art** that must then be combined with the vast knowledge accumulated and published by the ancients and the insights of **modern science**.

This dossier provides a comprehensive and wide-ranging overview of all homeopathic knowledge. The **clinical cases** (clinical verification) are a huge database that we must learn to manage. Together with pathogenesis, they form a solid foundation where past data is not replaced by new data, but constantly enriched. It's the basis of Evidence Based Homeopathy. The emergence of AI will certainly help us manage these databases even better in the future.

The **nature of homeopathic medicines** and how they work is becoming increasingly understood. Today, even for indications that are not priorities for homeopathy, we can say that the **evidence is at the same level as that of conventional medicine (EBM)**. Indeed, considering "Cochrane" database, Placebo effects in RCTs on individualized homeopathy did not appear to be larger than placebo effects in conventional medicine (Ref.300).

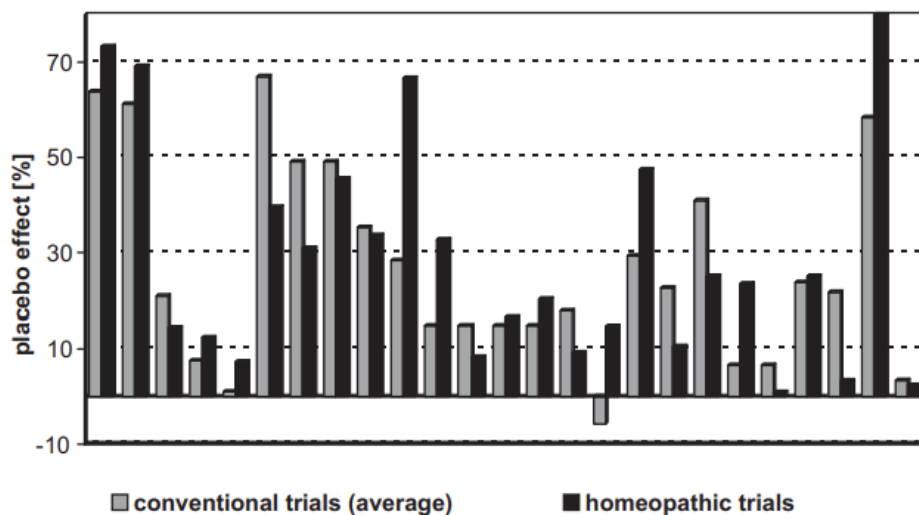


Figure 2 Placebo effects in 25 matched sets of RCTs on classical homeopathy and conventional medicine.

It is also important to consider the limits of homeopathic treatment, to know when it can be alternative, complementary or supportive. We have all the knowledge we need to make good use of it.

As stated at the outset, this dossier does not attempt to provide all the existing evidence. It provides the framework of evidence within which homeopathy works. Learning homeopathy will never end with a cycle of courses but is a lifelong learning process.



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