# 63rd Congress of the Liga Medicorum Homeopathica Internationalis (LMHI) May 20 – 25 Oostende - Belgium

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# **HYDROGENIUM PEROXIDATUM - H<sub>2</sub>O<sub>2</sub>**

Proving results and clinical use of Hydrogen peroxide in humans and animals.

### **ABSTRACT**

The homeopathic proving of  $Hydrogenium\ peroxidatum\ (H_2O_2)$  was carried out between February and June 2004 using a double-blind, randomized, placebo controlled trial [1,2]. The elaboration of the data turned out to be demanding, due to the slow development of symptomatology in the provers.  $Hydrogenium\ peroxidatum$  was administered in a 30 CH potency. Two provers continued the trial receiving a 200 K potency. The present paper shows proving results and clinical use of  $Hydrogenium\ peroxidatum\ (H_2O_2)$  in humans and animals. Clinical results underline the ability of this homeopathic remedy to improve and even to recover functional and structural intellectual deficit. The first encouraging results show that the remedy could be very important in the therapy of degenerative diseases of CNS, which are currently strongly increasing. In this case, the homeopathic therapy might be useful where traditional medicine have no chances.

### **KEYWORDS**

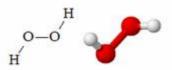
Hydrogen peroxide – Double-blind proving – Placebo – Clinical use – Degenerative CNS diseases

### INTRODUCTION

# Hydrogen peroxide - H<sub>2</sub>O<sub>2</sub>

The substance

Hydrogen peroxide  $(H_2O_2)$  is the simplest stable peroxide  $^{1,2}$ .



From a chemical point of view, it is a powerful oxidizing agent.

At a room temperature, it is a fluid, colourless, viscous and unstable substance, spontaneously exploding. Because of its explosive temper it is not available in its raw state.

The danger of explosion is due to its tendency to dissociate, turning in water and oxygen through an exothermic reaction.

It is normally produced within the cells with a critical concentration. If present at non physiological concentrations, it causes oxidative damages to biological molecules.

It is also considered a significant signal molecule inside nervous cells.

Low concentrations of it can be normally present in the air.

Low dose toxic effects include eye, throat, respiratory tract and skin irritation. Its ingestion can cause vomit, gastrointestinal damages and embolism.

### Free radicals

Free radicals are molecules or pieces of molecules showing a unmatched electron. They can build up within the cells as products of enzymatic reactions. They are highly reactive, so that they tend to catch an atom of hydrogen from different molecules, inducing a chain reaction.

Their action on fats of the cellular membrane and on nuclear proteins can cause severe damage on cells, breaking up their membranes and nucleus. Free radicals are one of the basic causes of cancer, arteriosclerosis, hypertension, Alzheimer, Parkinson disease and autoimmune diseases. They are the main cause of the cell ageing process.

### Free radicals and reactive oxygen species (ROS)

### O.-2 – superoxyde anion

It can be quickly transformed into H<sub>2</sub>O<sub>2</sub> by the action of the superoxide dismutase enzyme (SOD).

### H<sub>2</sub>O<sub>2</sub> – hydrogen peroxyde

It is not a free radical, but it can cause their production, for instance in the presence of metals.

### OH. - hydroxyl

It is the most dangerous and reactive free radical.

### MATERIALS AND METHODS

# **Hydrogen peroxide - H<sub>2</sub>O<sub>2</sub>**Proving

- PROVING DIRECTOR
- COORDINATOR
- SUPERVISORS
- PROVERS
- SUBSTANCE
- POTENCY
- ADMINISTRATION
- PLACEBO
- METHODOLOGY
- PROVING TIME-LINE
- CLINICAL USE

PROVING. The proving of H<sub>2</sub>O<sub>2</sub> was carried out between February and June 2004, according to a previous successful protocol <sup>3,4,5,6,7</sup>. The proving team included: a PROVING DIRECTOR; a COORDINATOR, whose task was collecting, assessing and checking the symptomatology sent by every supervisor; 4 SUPERVISORS, each one supervising 2-5 provers; and 16 PROVERS. SUBSTANCE. It was selected by the DIRECTOR, drawing it among a set of substances prepared in various potencies by a qualified Laboratory. The Director attended to vials (remedy and placebo) coding, kept their codes and random assignations to single provers until the end of the proving. Therefore, the proving could be considered a multicentric double-blinded study.

We selected the 30 CH POTENCY as more suitable to the trial, though in some cases we used a higher potency later on. Provers were being given the experimental substance in hydroalcoholic form.

ADMINISTRATION. From the first day, on waking up, every prover assumed 10 drops of the remedy. Administrations were repeated, up to six times, during 48 hours. Each administration was preceded by proper succussion (vigorous shaking). The supervisor was empowered to suspend the assumption cycle in case of absence of new symptoms. Then, after consulting with the director, he could administer again the substance.

PLACEBO. The Director settled number and supply of placebo in every group. Vials of the same shape and color of the verum were randomised, numbered by the Director, and delivered to provers. The provers maintained the same numbers of assignation all the proving long.

METHODOLOGY. Provers were carefully tested by their own supervisors, who decided their eligibility according to their health and reliability. Some of the provers already have been participating to previous provings., Each prover practiced self-observation during four weeks before the proving under her/his Supervisor direction. Beginners were trained on symptoms harvesting and journal keeping.

PROVING TIME-LINE. On the basis of former experiences, we planned a two months trial. Two provers assumed a 200K potency and went on with the experiment four months more.

CLINICAL USE. When symptoms similar to those produced in the proving were detected in a patient – human or animal - we administered centesimal potencies (CH and K, starting from the 30CH and ending to the XM) of *Hydrogenium peroxidatum*.

### **RESULTS**

# H<sub>2</sub>O<sub>2</sub> - *Hydrogenium peroxidatum* Pathogenesis

*Hydrogenium peroxidatum* produces slow, long lasting and basically persistent symptoms. Mental symptoms affect the deepest area of the individual, especially her/his vitality, creativeness and attention, producing:

- Sluggishness
- Loss of interest in everything
- Asthenia
- Sleepiness
- Numbness
- Blunting
- Loss of memory
- Confusion
- Lethargy
- Degeneration

GGL, very experienced prover, being at his third proving, after 20 days looked dull, his face was tense, he didn't smiled as usual. He was out of sorts, miserable, he looked older than he was; he didn't stand straight as usual, but he looked stooping. He said:

This proving has typical features: tiredness, INDOLENCE, GRAYNESS. That's just its colour: the gray. My creativeness is reduced. I used to write, create everyday...now my head is heavy, I feel as a pan covered by a lid. I don't see everything black, I don't feel depressed, but I'm less open, less imaginative.

### RDG:

I feel so bad! I have got asthenia and sleepiness as I never had in 45 years of my life, as I was tetraplegic. Yesterday I went to sleep at 7 pm.

At a physical level many provers showed itchy eruptions, on their face, forearm, buttocks, sometimes exudative, lasting several weeks after the end of proving; in one case they disappeared just after the administration of the 200K. Cramps and stomacache; stiffness and troubles of the neck and throat; urinary burning. All the physical symptoms were always associated to sleepiness, tiredness, indolence, abulia.

#### GGL:

I feel sleepy even during the day. My legs and right forearm are still full of very itchy blisters, while my left forearm is better. I feel worried and down in the mouth without a specific reason. I have lots of things to do and I feel tired.

In a case, a violent symptomathology developed, very similar to a severe meningoencephalitis, with spasms. The prover wrote:

My temperature is 39,4°C.

*I threw up four times, without food.* 

I feel terribly sleepy, I fall asleep as soon as I start watching TV, even if I don't do anything.

My neck is hurting, I can't keep my head straight.

As soon as I fall asleep, my legs start moving by themselves.

This proving had to be interrupted and the substance was antidotated.

The whole symptomathology of *Hydrogenium peroxidatum* reminded us: neurological pathologies slowly developing, with acute, violent episodes; degenerative diseases of CNS; mental functional or structural decline; all pathologies considerably and severely reducing all vital functions of individuals.

# $H_2O_2$ - Hydrogenium peroxidatum

Clinical use in man

At the moment, 12 patients benefited from *Hydrogenium peroxidatum*<sup>8</sup>. We still did not have the opportunity to prescribe this remedy to evident neurological cases, as its pathogenesis would call for. Every patient derived some benefits from it, to a different level. All experienced clearness of mind, intellectual vividness, proactivity.

- L. P., man, 51. He is using *H. p.* for one year and half. He's a writer, who came to me because of depression, total lack in initiative, together with severe spondylitis and herpes genitalis. He's now working at full rate, and his improvement and clear-headedness are striking.
- S. T., woman, 86. She basically forgets everything, even what she just said and she feels a hollow feeling in her head. She took twice *H. p.* 200K. When I saw her again I found her memory considerably improved. Unfortunately she suffered from a tormenting eruption of her lower limbs, a complaint that she never had before. The patient benefited at a mental level, but experimented the strong pathogenetic power of the substance, especially in inducing limb eruptions.

M. E., woman, 77. She is assuming the remedy since 15 months and the results suggest it could be her *Simillimum*. She is overweight, prone to misanthropy, depressed, sad, suffering from hypertension. *Carbo animalis* improved her once. When we last meet she said:

The old age came crush about me!

I don't feel like doing anything, I don't go out for days. I don't feel like anyting, I don't even feel like reading.

Recently, she got a very itchy eruption in her legs.

She took *Hydrogenium peroxidatum* 200K, one dose every month and a MK three month ago. I know her since 15 years and I never saw her so in shape. Eruptions are gone, hypertension is under control without medicines.

D.D., man, 75. He soon run into a very quick ageing process, forgetting what he was going to say, expressing himself in an unintelligible way, retiring into himself and unburdening his frustration with members of his family. *H.p.*, progressively diluted and administered during eight weeks, made him regain his clearness of mind.

# H<sub>2</sub>O<sub>2</sub> - *Hydrogenium peroxidatum*Clinical use in animals

*Hydrogenium peroxidatum* was used in some cases of serious animal pathologies. The remedy confirmed to be useful in cases where pathogenetic symptoms were present, in addition to improving the following situations:

- Cerebral disconnection
- Loss of sense of direction
- Inability to react, with impossibility to act upon previously made decisions
- Loss of hearing
- Rinithis

## LULU', 13-years old cross-breed female dog.

She's suffering from a mammary neoplasia, she's excessively sleepy, indolent, polydipsiac. I prescribed *H.p.* 200 K. A week later the dog was more joyful and lively, she retrieved her ball, but was still easily tired. She urinated much more, even if she reduced liquid intake. Two weeks later she played ever more with the ball. I prescribed again the remedy. A month later I noticed a rise in her energetic level: she was lively, running and playing more and more. An old dermatitis reappeared. I prescribed again *H.p.* 200K and two months later she was still lively and eager to play and jump. Her cataract cleared up.

### BILLY, 13-year old Miniature Poodle male dog.

When he came on my couch, he looked dazed, then he didn't know which way to get down. He's hard of hearing and he doesn't answer when somebody calls him. I prescribed *H.p.* 5CH drops, once a day per 14 days. Two weeks later he was quicker and sprightly. He continued the remedy two weeks more, then *H.p.* 30 CH drops once a week. Two months later he was even more lively, less sleepy, eager to play again. He did not suffer anymore from cervical pains. Hearing was better. Eight months later the dog looked really younger: he was wearing well 13 years. He regained his joie de vivre. His hearing is good.

AQUILA, 6-years old Border Collie male dog.

Very active subject: he often exercises and takes part in agility competitions. After a food poisoning he showed lack of reactivity. He stayed in a corner and slept all the day long. When somebody called him, he refused to go out. Though he always was a bold subject, he looked fearful, stayed close to his owner, marking with urine his sit. Since four weeks he got tired at the least effort, and three throws of the ball were enough to make him breathing rapidly and exhausting him. *H.p.* 30 CH drops, a dose every other day for one week. Seven days later he went back to his habits.

### LUCHY, 13-years old cross-breed male dog.

The dog is suffering from hepatoid adenoma in the anal area. The owner brought him because of influenza syndrome, with sneezes. He is out of sorts, not so bright, more tired, and he doesn't answer when called. *H.p.* 30 CH drops, one daily dose per three days. The dog recovered within two days and 4 months later he was still very well, very bright considering his age.

## NITRO, 13-years old cross-breed male dog.

The dog is suffering from severe atlas-axis arthritis, advanced mental ageing and reduced hearing capacity. Not very bright: when he sees a cookie or the leash in his owner hands, he bites them. *H.p.* 5 CH drops, once daily for 21 days. At the follow-up his state was inaltered. *H.p.* 30 CH once a day for 3 days, then one dose every other day for 3 weeks. Three weeks later he was positively brighter, took the initiative and run without getting tired.

### VINCENT, 16-years old Yorkshire Terrier male dog.

Suffering from a widespread vertebral spondylosis, hepatic encephalopathy, blindness, extensive signs of ageing. Since 14 months he is taking *Conium maculatum*, his first homeopathic remedy, successful in improving his ambulation. Since five months, though, he is lost, apathetic, his reaction to stimuli are reduced. Furthermore he shows a ritualistic behaviour. He lost his sense of direction: he sleeps in a corner and he is not able anymore to get out by himself. *H.p.* 200K drops, one dose every five days. 12 days later he was more reactive, he turned round if somebody called him, but still didn't recognise the source of that sound. His mobility was improved in spite of the severe vertebral sponylosis; he felt less the cold; he didn't show tiredness after light exercise. Some problems were still persisting: loss of the sense of direction (at home he spun without reaching his room), staring a spot of the wall (the main symptom of hepatic encephalopathy). I though advisable to use a lower potency, so I prescribed *H.p.* 5CH drops, one daily dose for 14 days, then 30 CH one dose every 7 days. Two months later: He didn't spin around himself anymore, directed his activity, he still stared at a spot, but just when he stayed still. He got more confidence in carrying out movements. Hearing's recovery is confirmed.

Six months later hearing's recovery was maintained, as well as observed improvements.

### **CONCLUSION**

Our research about properties of  $H_2O_2$ , and particularly its capacity to produce free radicals, therefore actively participating to cell ageing process, suggested that the homeopathically prepared substance  $Hydrogenium\ peroxidatum\ could\ show\ symptoms\ related\ to\ this\ sphere\ and\ consequently\ have an effect on similar pathologies. The data obtained so far are confirming such hypothesis and opening up wide horizons.$ 

Hydrogenium peroxidatum proved to be an excellent remedy in approaching problems of ageing. Our patients referred a return of mental brightness and joie de vivre, interest and active participation in life; signs of mental and physical decline were also removed. We should also underline the recovery of damaged hearing capacity in two old patients, as well as in two dogs. The use of Hydrogenium peroxidatum in animals, where objectivity of symptoms and recovery are

incontestable, enriches our case record, allowing us to use it in some serious cases. We could especially confirm the recovery of decision-making faculty of ill subjects, and the restoration of significant neurological symptoms.

Eruptions on limbs, bothersome and persistent, extreme weakness, coryza associated with sensory dullness must also be emphasized.

To obtain a whole pathogenetic and clinical picture, to a greater extent, and therefore more detailed indications, we should complete the data so far collected. We would be expecting that our colleagues, human and veterinary homoeopaths, begin to use *Hydrogenium peroxidatum* and let us know about their results. That will be a further chance of treating severe pathologies whose traditional treatment is currently inadequate.

### REFERENCES

- 1. Watt BE, Proudfoot AT, Vale JA. *Hydrogen peroxide poisoning*. Toxicol. Rev. 2004; 23(1): 51–57.
- 2. Kamsler A, Segal M. *Hydrogen peroxide as a diffusible signal molecule in synaptic plasticity*. Mol Neurobiol 2004; 29(2):
- 3. Dominici, G; Bellavite, P; di Stanislao, C; Gulia, P; Pitari, G: *Double-blind, placebo-controlled homeopathic pathogenetic trials: Symptom collection and analysis.* Hoemopathy, 2006, 95, 123-130
- 4. P. Gulia, G. Pitari, G. Dominici ETNA LAVA. Sperimentazione omeopatica della lava del *vulcano Etna* IV Congresso FIAMO. Roma, 18-20 Ottobre 2002.
- 5. G. Dominici *Etna lava: recenti acquisizioni cliniche* V Congresso FIAMO. Roma, 10-12 Ottobre 2003.
- 6. P. Gulia, G. Pitari, G. Dominici *ETNA LAVA. Proving symptomtology and clinical results* 58° Congresso LMHI. Graz, 22-26-Aprile 2003.
- 7. P. Gulia, G. Loggi, G. Dominici, G. Pitari *Placebo e Verum nella sperimentazione omeopatica* VI Congresso FIAMO. Roma, 19-21 Novembre 2004
- 8. G. Dominici *La perduta vitalità di HYDROGENIUM PEROXIDATUM Risultati parziali della sperimentazione (proving) di acqua ossigenata (H<sub>2</sub>O<sub>2</sub>) VII Congresso Nazionale FIAMO, Roma, 10/12 Novembre 2006*

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