

Homeopathic Treatment of Patients with Dementia

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Abstract: One hundred years after the first description, Alzheimer's disease and other dementias belong to the most disabling and burdensome health conditions worldwide. It is estimated that 24.3 million people have dementia today, with 4.6 million new cases every year. The role of homeopathy and other complementary therapies in the therapy and prevention of dementia has not yet been systematically evaluated.

A case of a patient with dementia treated with *Hyoscyamus niger* is presented. Boger's *General Analysis Repertory* as a tool to identify the homeopathic remedy is explained. A comparative materia medica of the most important remedies for this condition is discussed.

Dementia can be treated successfully with homeopathy. The role of homeopathic treatment in geriatric diseases needs further attention and research.

Keywords: dementia, homeopathy, *Hyoscyamus niger*, General Analysis Method of Cyrus Maxwell Boger; Boger, Cyrus M.

Background

Approximately 24.3 million people worldwide are suffering from dementia. Due to demographical developments in industrialized countries the number of demented fellow citizens is increasing every year. The frequency of occurrence of dementia increases with age. Whereas in Germany only 1.2% of people between 65 and 69 years suffer from dementia, 35% of those over 90 years of age.

Existing conventional anti-dementia pharmaceuticals appear to barely effect the condition and are expensive. Considering the rate of aging in industrialized countries, we are approaching a serious medical problem.

According to the diagnostic criteria, dementia is defined as a disease which consists of at least three symptoms:

- A. Impairment in short and long-term memory
- B. At least one of the following:
 - Impairment in abstract thinking
 - Impaired judgment
 - Other disturbances of higher cortical function
 - Personality change
- C. Memory impairment and intellectual impairment causing significant social and occupational impairments

The most common dementia is Alzheimer disease (50-60% incidence), followed by vascular dementia (20%). Other causes of dementia, which might occur

concurrently with the foregoing age-related dementias, include Lewy body dementia, frontotemporal dementia, dementia as a late effect of Parkinson's disease, and infrequent causes, such as infectious diseases (HIV, syphilis, Creutzfeld-Jakob disease), normal pressure hydrocephalus, metabolic disorders (vitamin B12 deficiency), hormonal disorders (e.g., thyroid disorders), tumors, and others.

Using C.M. Boger's *General Analysis Repertory*

There are hardly any case reports or clinical studies referring to the homeopathic therapy of dementia. The treatment of patients suffering from dementia has constituted a focal point of the author's clinical practice for seven years. In this work the method of C.M. Boger, represented by the *General Analysis Repertory*, or *Synoptic Key*, proved to be a valuable tool.^{1,2,3} The method follows a generalizing strategy comparable to Boenninghausen's *Therapeutic Pocket Book* and includes only highly characteristic symptoms. Very important in working with Boger's *General Analysis* and *Synoptic Key* is the anatomic direction of action of a remedy. The focus of repertorization should be, as long as there are no other more characteristic symptoms, the rubric "Memory," indicating the anatomic focus of the disease. This rubric can be combined with various specific rubrics to individualize. This scheme

has stood the empirical test in many clinical cases, but it has not yet been tested in clinical trials.

The following repertorization scheme is illustrative (Table 1):

By applying this method, a few homeopathic medicines proved to be very successful therapeutic options for patients with dementia over the past years.

The most important drug displaying beneficial therapeutic effects turned out to be *Hyoscyamus niger*, fol-

Main Rubric (General Analysis)	Specifying Rubric (General Analysis)	Additional Rubrics (Examples)
Memory	+ Activity level + Localities + Sensations + Modalities + Concomitants + Mind + Other	+ Anatomic direction of action + Anchoring rubrics (symptoms being actually present and appearing throughout the history of the patient and/or his family)

Table 1: Strategy of individualizing the homeopathic remedy with Boger's General Analysis Repertory

Table 2 displays possible combinations of rubrics and the results (remedies which are contained in both rubrics).

lowed by *Opium* and *Acidum phosphoricum*. A multitude of patients experienced significant emotional, as well as partial cognitive, improvements from these

Main Rubric	+ Specifying Category <i>Medicine is listed which covers the main category as well as the specifying one, only results are listed.</i>
Memory ANAC, Arn, Aur, Bar-c, Bell, Calc, Cann-s, Con, Hell, HYOS, Lach, LYC, Merc, NAT-M, NUX-M, OP, Ph-ac, Staph, Sulf	+ Activity level <ul style="list-style-type: none"> Restlessness: Bell, Sulf, Hyos, Merc, Inactive, apathetic, lies down, lethargic: Arn, Ph-ac, Calc, Hell, Op, Sulf
	+ Locality <ul style="list-style-type: none"> Old age, senility: Aur, Bar-c, Con, Lach, Op, Lyc Trembling: Con, Merc, Calc, Staph Paralysis, paralytic pain etc.: Con, Hyos, Staph, Lach, Bell, Op, Lyc, Sulf Coordination disturbed: Merc, Hyos, Con, Bar-c, Lach, Bell, Sulf Heart, circulation and pulse: Bell, Sulf, Aur, Nat-m, Calc, Lach Injuries, wounds, bruises, shock, etc.: Lach, Con, Staph, Arn
	+ Concomitants <ul style="list-style-type: none"> Thirst, absent, especially during fever, aversion to water, etc.: Hyos, Hell, Bell, Nux-m Incontinence, stool, urine, sexual, etc.: Con, Nat-m, Hyos, Ph-ac, Staph, Arn, Bell, Sulf Emaciation: Nat-m, Bar-c, Calc, Op, Lyc, Sulf Sleeplessness: Hyos, Merc, Calc, Lach, Bell, Op, Sulf Vertigo: Sulf, Bell, Con, Nat-m, Calc Swallowing agg., painful, etc.: Hyos, Bar-c, Merc, Lach, Bell, Sulf
	+ Mind <ul style="list-style-type: none"> Emotions, excitement, etc.: Hyos, Nat-m, Staph, Bell, Lach, Lyc, Op, Ph-ac, Sulf, Aur Mind: Hyos, Nat-m, Calc, Lach, Op, Bell, Lyc, Ph-ac, Sulf, Aur Fearsome, anxious, etc.: Nat-m, Arn, Calc, Lyc, Op, Sulf, Aur Sadness, low spirits, etc.: Nat-m, Aur, Lach, Lyc, Sulf Anger, irritability, fretfulness, bad temper, etc.: Aur, Nat-m, Staph, Calc, Lyc, Sulf Loquacity: Hyos, Cann-s, Lach, Op Perception changed (mental or visual): Ph-ac, Hyos, Merc, Cann-s, Bar-c, Calc, Lach, Bell, Op, Sulf Carphology, nervous picking, etc.: Bell, Hyos, Lyc, Op
	+ Modalities (individual examples) <ul style="list-style-type: none"> Company amel.: Hyos, Lyc Company agg.: Aur, Bar-c, Nat-m, Bell, Lyc Times Moon phases

Table 2: Possible combinations of rubrics

medicines.

In the following I would like to introduce *Hyoscyamus niger* from a toxicological and homeopathic perspective and discuss the therapeutic application by means of casuistics.

Hyoscyamus niger

The Black Henbane (*Hyoscyamus niger*) belongs to the plant family Solanaceae. This plant grows on eutrophic and nitrogen-rich sandy and loamy soil. The plant is usually 30-60 cm high, has fusiform or napiform roots, sticky stipules and elongated ovate and roughly indented dentated leaves. The plant blooms from June to October; the flower is yellowish-white and veined violet and has the shape of a funnel. It develops a 1.5 cm long capsule which contains a brownish seed. It can be found in Europe and Asia and grows wildly from the Iberian Peninsula to Scandinavia. One can come across this plant in North Africa as well as in the Himalayas up to an altitude of 3,600 meters. A series of alkaloids in the plant are classified as the most important toxicologically active substances, especially scopolamine (up to 60% of the total amount of alkaloids), hyoscyamine and atropine. From a historical and cultural perspective *Hyoscyamus niger* is a significant hallucinogenic and narcotic plant. Dioscurides describes this plant and reports that insanity as well as lethargy can be caused by it. The smoke of henbane was used as a narcotic during surgeries in medieval times. In the 18th century Störck recommended this plant to treat spasms, tremor and epilepsy. Prior to this, Germanic tribes added henbane to their mead and later to their beer. Due to the Bavarian purity law installed in 1516, the use of henbane for brewery was outlawed. Extracts of henbane were also used for the fabrication of laudanum (which was probably introduced by Paracelsus); made of wine, opium and henbane, it was widespread in Europe from 1500 on.⁴

In homeopathy, *Hyoscyamus niger* was introduced by Samuel Hahnemann; he recommended it for 'disruptions of spirit and mind organs,' according to the proving symptoms in his *Reine Arzneimittellehre*. [5] The toxicological and proving symptoms present an impressive image which is characterized by dwindling mental activity ('numbness, mindlessness, hebetude, idiocy and senselessness') alternating with increased activity ('babbling, carphology, mumbling, agitation, vivacity, imagination, outrage, angriness'). 'Anxiety, delusion and desperation' are mentioned as well.

In *Reine Arzneimittellehre* Hahnemann lists several cognitive symptoms, which are relevant to dementia⁵, such as (translated by author):

He lies there nonsensically and indolently. (*Greding*, in *Ludwigii Advers. med. pr. I. p. 78.*) [RAL (391)]

He does not recognize relatives. (*U. Faber*, at *Schenk lib. VII. obs. 152.* – *G.W. Wedel*, in *Misc. Nat. Cur. Dec. I.*

ann. 3 obs. 21. – *J. Stedman*, in *Philos. transact. Vol. XL. VII. p.194.*) [RAL (393)]

Entirely mindless. (*J.B. van Helmont*, *Jus. duumv. p.22.*) [RAL (395)]

Senselessness (amentia). (*Wepfer*, *hist. Cicutae aquat. Bas. 1716. p.230.* – *Stedman*, l.c. – *A v. Haller*, in *Vicar Mat. med. I. p.184.* – *Targ. Tozzetti*, *relaz. di alcuni viaggi Vol. VI. p.279.*) [RAL (400)]

Having lost sanity, he did not know what he was doing. (*Greding*, l.c. p.90.) [RAL (425)]

Weak memory. [RAL 2]

Absence of memory. [RAL 3]

Caught in a thoughtless goggling on items, affinity to forget oneself (after ½ h). (*Franz*, l.c.) [RAL (11)]

Lack of memory. (*J. Jaskiewicz*, *Diss. Pharmaca regni veget. Vindob. 1775. p.53.*) [RAL (13)]

Failure to contemplate: he only remembers actions and thoughts of the past few days, as if they happened in dreams (after 24 h). (*W.E. Wislicemus*, in one essay.) [RAL (15)]

Oblivion of everything previously heard. (*Wendt*, l.c.) [RAL (16)]

Oblivion: he does not know for sure, if he actually said what he was trying to say (after ¼ h). (*Franz*, l.c.) [RAL (17)]

He involuntarily remembers people and incidents he did not want to think of (after ½ h). (*Franz*, l.c.) [RAL (12)]

Reminiscence of long ago elapsed things. [RAL 4]

Things he does not want easily cross his mind, and has a hard time remembering things he would like to think of (after 3 h). (*Franz*, l.c.) [RAL (14)]

These toxicological and proving symptoms clearly indicate that *Hyoscyamus niger* does impact cognitive processes.

The Cholinergic System as an Anatomic Direction of Action

Modern brain research has experimentally verified that the alkaloid scopolamine (main alkaloid of henbane) can elicit a memory disorder.⁶ Scopolamine is an active antagonist of muscarinic acetylcholine receptors in the central nervous system. The cholinergic system plays a major role concerning memory processes. Postmortem studies indicate that patients with Alzheimer's disease and other dementias suffer from dying muscarinic and nicotinic receptors in the frontal cortex and hippocampus. In 1974 Drachman and Leavitt proved experimentally that muscarinic antagonists could trigger amnesic deficits.⁷ Miles had already reported in 1927 in the *American Journal of Physiology* about memory disruptions after the application of *Hyoscyamus*. The application of scopolamine can lead to attention and memory deficits. Thereby an interaction between nicotinic and muscarinic receptors seems

to exist. Of interest concerning this interaction is that the present-day pharmaceutical anti-dementia drugs such as Donepezil or Rivastigmin also affect the cholinergic system as the anatomic site of action, although as an acetylcholinesterase inhibitor in an allopathic sense. These drugs improve the cognitive processes by increasing acetylcholine concentration.

Clinical Case

Having retrospectively analyzed case histories of patients with dementia treated with homeopathy, it became clear that patients treated with *Hyoscyamus niger* showed good clinical results. Apart from experiencing improvement in emotional disruptions like agitation, aggression, and rage, many patients showed an improvement in memory, orientation and sleep. Furthermore, the author was quite surprised when a literature search in 2009 yielded that experimental brain research had identified scopolamine as a potent elicitor of memory defects! Following is a presentation of a typical case:

An 85 Year-Old Man with Refusal to Drink and Eat

The patient, living in a nursing home, was diagnosed with a progressive dementia and Korsakov's syndrome caused by chronic alcoholism. After the death of his wife eight years ago the patient became addicted to alcohol and developed as a consequence Korsakov's syndrome. Further indispositions were chronic pulmonary emphysema, cachexia and incontinence with encopresis. It was quite difficult to look after the patient in the nursing home. He regularly undressed himself and urinated in the corners, smeared excrement about and tugged on duvets and diapers. Additionally he was aggressive and constantly screamed. Examination showed him to have a reddened face and be completely disoriented. His medication consisted of Clomethiazol, if necessary, Risperidone 0.5 mg, Salbutamol and Ipratropiumbromide aerosol, 2 puffs 3 times daily.

Case Analysis and Repertorization (General Analysis, C.M. Boger)

The following rubrics were chosen

Memory: ANAC, Arn, Aur, Bar-c.; Bell, Calc, Cann-s, Con, Hell, HYOS, Lach, LYC, Merc, NAT-M, NUX-M, OP, Ph-ac, Staph, Sulf

Carphology, nervous picking, etc: Ars, Arum-t, Bell, HYOS, Lyc, Op, Phos, Rhus-t, Stram, Zinc

Combining both rubrics one obtains: *Belladonna, Hyoscyamus, Lycopodium, Opium.*

Due to the agitation the decision primarily fell on *Hyoscyamus niger*.

Treatment: The patient was given *Hyoscyamus niger*

(Weleda) D15, every day an ampule subcutaneously. Also, he was continued on Risperidone 0.5 mg., folic acid 5 mg. In addition, a PEG tube was endoscopically implanted and enteral feeding started.

Follow Up: After ten days the patient was oriented to location and person; a conversation about simple ordinary things was possible. With support he was able to have breakfast, drink tea and walk about 50 meters. After 15 days the patient was released into the nursing home. The following day the patient suddenly experienced whole body myoclonus ("twitching"), hyperkinesias, rigor and tremor, and he had to be sent back to the hospital. So, was that a side effect of the (now reduced) antipsychotics? The patient did not develop any neurologic symptoms under a higher dosage of antipsychotics previously; however, it was also vague whether the antipsychotics were applied regularly in the nursing home. Did the organism now show a stronger reaction to the medication? Should the symptoms be evaluated as a healing reaction? In any case the antipsychotics were discontinued now and the case newly analyzed.

Case Analysis and Repertorization (General Analysis, C.M. Boger)

Trembling: Agar, Arg-n, Ars, Calc, Cimic, Con, Crot-h, Gels, Graph, Iod, Lil-t, Merc, NUX-V, Rhus-t, Staph, Stram. Stront-c, Sul-ac, Zinc

Spasmodic or convulsive effects, twitching, etc.: Agar, Ars, BELL, Calc, Caust, Cham, Cic, Cimic, Cina, CUPR, HYOS, Ign, Ip, KAL-C, LACH, Mez, Nux-v, Op, Plat, Plb, Rhus-t, Sep, STANN, STRAM, Sulf, Thuj, Verat-v, ZINC

Coordination disturbed: Agar, Alum, Arg-n, Bar-c, Bell, Caust, Cocc, Coff, Con, Gels, Hyos, Lach, Lach, Merc, Nux-v, Onos, Phos, Rhus-t, Sulf

Combining the rubrics *Agaricus, Nux vomica, Rhus toxicodendron* remain.

Treatment: Due to its possessing the greatest similarity of symptoms to the case, the patient was given 1 ampule *Agaricus muscarius* D6 subcutaneously daily over fourteen days.

Follow Up: The extrapyramidal symptomatology completely disappeared. The emotional condition improved steadily; nightly restlessness and agitation did not recur. At the end of his stay (5 weeks) the patient eventually was able to read out loud from a newspaper. He was discharged without any medication.

Evaluation: The patient showed remarkable improvement as a result of homeopathic treatment, dietetic

treatment, geriatric and physical therapy, and reduction of medication.

Discussion: Modern brain research and historical toxicological reports show that henbane and its main alkaloid might cause cognitive disorders with symptoms similar to those of a dementia disease. The proving symptoms of *Hyoscyamus* - memory defects, confusion, restlessness, anxiety, etc. - fit the clinical picture of dementia. Empiric evidence gleaned from clinical experience in isolated cases supports the validity of the Law of Similars. Toxicological dosages cause cognitive disorders, homeopathic dosages can improve cognitive disorders. The author's initial experience with *Hyoscyamus* was mostly limited to the treatment of agitated patients. Subsequently, *Hyoscyamus* was increasingly employed as an 'organotrophic' prescription with impressive clinical results - many more patients enjoyed the 'calming' effects of the remedy. The case presented above, in which *Hyoscyamus* and *Agaricus muscarius* were applied, is highly interesting in this context. Interestingly, both remedies contain important substances affecting the cholinergic system. Scopolamine (*Hyoscyamus*) is a cholinergic receptor antagonist, while muscarine (*Agaricus*) is an important agonist. The application of *Hyoscyamus* was followed by a regulative response in the cholinergic system, possibly with a concomitant heightened response to antipsychotics. Counterregulation caused muscarinic symptoms, which in turn were successfully homeopathically treated with *Agaricus*, allowing for the discontinuation of antipsychotics. Interestingly, atropine, an anticholinergic drug, is referred to as the antidote for intoxications with *Agaricus muscarius* in conventional pharmacy.

Usually one can expect from *Hyoscyamus*, when prescribed in this clinical setting, an emotional calming, improvement of everyday life skills and orientation, and possibly an improvement of memory. When considering dementia, *Hyoscyamus* should be compared to *Opium* and *Acidum phosphoricum*. Based on past experience, *Opium* works especially well in cases of vascular dementia and after an ischemic insult, whereas *Acidum phosphoricum* helps patients with normal pressure hydrocephalus. From the author's point of view, *Hyoscyamus niger* is the most important homeopathic remedy for the treatment of dementia. It has to be clinically evaluated to what extent other solanaceous herbs might play a role (*Mandroga*, *Stramonium*, *Belladonna*).

Conclusion

On the basis of clinical homeopathic findings, *Hyoscyamus niger* is an important medication for the homeopathic treatment of patients suffering from dementia. Prospective clinical studies are needed to further test this hypothesis.

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Conflict of interest

There are no existing conflicts of interest.

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