



Argentum nitricum, a study

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PHARMACOGNOSY

This remedy is prepared from silver nitrate, known in medieval times to the alchemists as Lunar Caustic. It forms flat transparent rhombic crystals which turn grey or greyish black on exposure to light. The crystals are odourless but have a bitter metallic taste. Organic matter, for instance the skin, is stained black by contact with the crystals.

The molten substance, when cooled to 160° F., suddenly solidifies with such violent expansile force as to burst the test tube.

PHARMACOLOGY

The salt is highly soluble in water. In strong solution it is astringent or actually caustic, it is described as a powerful disinfectant from its action in coagulating the proteins of bacteria.

In relation to the tissues of the body, it is an irritant poison with a special affinity for mucous membranes, causing violent inflammation: for red blood corpuscles, leading to hæmolytic and ecchymosis; and for the nervous system, giving rise to cramps, convulsions, loss of peripheral sensation, and paralysis.

PHYSIOGNOMY

The physical features associated with the remedy are of much less import than the mental and emotional factors.

A typical appearance is described as one of malnutrition, with sunken facies. There is a prematurely old, withered, weak and tremulous look, seen perhaps especially in children.

Blue lips, cold, blue hands, forearms, feet and legs may be seen in women during menstruation.

Discoloration of the skin of grey-blue, violet or bronze hue may occur. The discoloured skin is tense and hard in texture.

PSYCHOLOGY

The *Argentum nitricum* subject lives in a state of perpetual agitation, always feeling driven, never having enough time for what he wants to do or feels he ought to get done, wanting to have a job finished almost as soon as it is begun, darting off with unnecessary precipitation to carry out an assignment, and generating an atmosphere of turbulence, tiring and exasperating to his "entourage" whether at home or at work.

If any kind of ordeal is coming up, this agitation is intensified into a peculiar type of fear, namely apprehension ante. It is really an apprehension of what may happen—fear lest he miss the train; fear lest the guests do not arrive on time for the dinner party; fear lest he forget his lines on the stage; fear lest memory fails at a viva voce examination; fear of what the physician may reveal,

or may conceal, if he goes to see the doctor; and like possibilities of embarrassment.

This peculiar apprehensiveness finds expression in other ways. There is a fear of crowds, lest one be crushed or trampled on; a fear of certain places such as streets or high buildings, lest "the corners of houses will bump into one" or "the high building will topple over onto one"; a fear of heights both when looking up and when looking down, lest someone fall from a high window or a girder high up in space, or lest one be impelled by a sudden urge to jump over the cliff or off the bridge.

Water draws, and a bridge with low parapets, or a wharf side is avoided sedulously. The reaction to heights is often accompanied by giddiness and even by a loss of muscle tone so that the knees give way and the subject finds himself on all fours.

Claustrophobia is also a prominent feature, with resulting feeling of panic if shut in a telephone booth or caught in a tube train which has stuck in between stations, and a general objection to be confined in close quarters.

The hurried, restless feeling often impels its victim to walk and walk and walk until becoming quite tired out. Moreover there is a liability to irrational behaviour; does strange things or comes to odd conclusions, and is harassed by a constant flow of troublesome thoughts. All this is further evidence of the deep-seated agitation and apprehension.

PHYSIOLOGY

The thermal modalities of the remedy are quite important. There is aggravation from warmth in any form, and a craving for cold air. The *Argentum nitricum* subject wants the doors and windows open, suffocates in a stuffy room, wants his head in a cool place, loves to be out in a wind, and to be lightly clad.

Further aggravating factors are the partaking of sugar or cold food, the menstrual period, both before and at the time, any unusual mental effort or emotional stress and, chronologically, at night and on waking up in the morning.

Relief is experienced from cold, in the fresh air, and also from pressure on the affected part.

As to food and drink, there is a great desire for sweets, which tend to disagree (infants at the breast develop diarrhoea if the mother eats a lot of sweets). There is also a craving for salt, and a fondness for ice-cream and cold drinks. Considerable thirst may be associated with dryness of the mouth.

Nervous insomnia is frequent, and sleep is disturbed by horrible dreams, often of violence in some form or other. He feels chilly in bed when lightly covered, yet smothered when heavily covered. On waking up the limbs are apt to feel "bruised".

There is a liability to sudden profuse nervous sweats.

PATHOLOGY

A peculiar symptom met with under this remedy is a distressing sensation of expansion, expressed in various ways—as if "squeezed in a vice", as if "constricted by an iron band round chest or waist", or as if the part affected is "blown up", "too big", "going to burst".

A prominent feature is extreme fatigue ensuing on quite mild exertion, accompanied by a sensation of great weariness in the lower limbs.

Emotional distress or over-exertion mentally is apt to result in widespread disorder affecting digestion, circulation and other functions, and possibly

resulting in a state of chronic psychosomiasis as evidenced by palpitations, pulsations, paræsthesias, and tremor.

Pains are sharp or splinter-like, come and go slowly, and are often left-sided.

Discharges tend to be thick and muco-purulent. Ulcers tend to bleed and, indeed, hæmorrhage may occur from various sites such as nose, lungs, uterus.

Head Region. Giddiness is a very prominent symptom especially when looking up at or down from a height, or when over water. The vertigo tends to be accompanied by both trembling of the limbs and tinnitus in the ears.

Headache may be hemilateral, of throbbing type and aggravated by warmth. Concomitants may be a feeling as if the head is "expanded", or seems "too large". Contact with cool air and tight bandaging afford relief.

Facial neuralgia occurs, affecting especially the areas supplied by the intra-orbital and mandibular nerves, and often accompanied by a sour taste in the mouth.

Eyes. Eye symptoms are various and tend to be severe—photophobia, purulent conjunctivitis, chemosis, adherent lids on waking in the morning, corneal ulceration, ophthalmia neonatorum. The eye symptoms are worse in a warm room or from the heat of a fire, but alleviated by cold bathing or in cool air.

Respiratory System. Rhinitis is associated with severe itching in the nose and an irresistible desire to rub the nose till the nostrils become raw and sore. It may proceed to ulceration with purulent, blood-streaked discharge.

The throat is specially vulnerable, becoming sore and raw, even ulcerated. The fauces and uvula are injected and dark red. There is complaint of a sticking sensation in the throat, or of "the presence of a splinter or a hair lodged there": the larynx feels "clogged". Cold fluids are desired, a point of distinction from *Hepar sulph.* with which remedy there is a preference for warm fluids.

Burning and heaviness may be complained of in the chest, or painful cramp-like pains in the thoracic muscles.

Nervous asthma may be brought on by being in a stuffy room or in a crowd.

Alimentary System. The tip of the tongue may be markedly red and sore also. Gums become tender and bleed easily but are not swollen.

Nausea is relieved by taking a good meal. Belching is violent but ineffective. Food is vomited in mouthfuls. Hæmatemesis may occur, with "coffee-grounds" vomit.

Pain or distress felt in the epigastrium is apt to come on soon after meals and be accompanied by flatulence with excessive distension, not relieved either by belching or by passing flatus per rectum. Both procedures are violent and noisy. The remedy has proved useful in alcoholic gastritis.

Diarrhœa occurs with noisy, spluttery stools, characteristically green in colour and very offensive. The stools may be dysenteric and contain membranous casts or shreds. The condition is likely to be precipitated by eating sweets or drinking even small amounts of water. Nervous diarrhœa may occur before an ordeal of some sort or from emotional stress.

Cardio-vascular System. Anginal pain may be felt around the heart, accompanied by intense dyspnœa. Violent palpitation may be brought on by quite

slight mental exertion or by sudden muscular effort. This tends to be worse in the afternoon and better when walking out of doors. This is just the reverse of the anginal pain of *Arsenicum* which is brought on by walking even on the level.

There is inability to lie on the right side in bed as this position induces fresh palpitation and pulsations, which drive the sufferer from bed.

Urinary System. Dysuria is quite severe with pain and scalding both during and after urination. Urine tends to be scanty in association with gastro-intestinal affections and profuse in nervous disorders, with frequent passage of pale urine or even incontinence.

The remedy may be called for in relation to urethral discharge or in the presence of hæmaturia.

Genital System. An indication here is very severe dysmenorrhœa associated with copious yellow corroding vaginal discharge and bleeding from the cervix.

Ovarian pain associated with feeling of being blown up on the affected side. Painful inflammatory conditions of external genitalia are accompanied by the sensation of "sticks" or "slivers" in the parts affected.

Locomotor System. Rending, shooting pains are described in the limbs and a tendency to stagger in the dark or when the eyes are closed. Hands tremble and legs are weak, with a bruised feeling in the calves.

Pain in the lumbar region is worse when sitting and especially in the act of rising from the sitting position, but is relieved by standing or walking. Pains may be felt in and around the joints, particularly the smaller joints.

Skin. There is hypersensitivity of the skin, but at the same time a loss of acute discrimination of sensations which produces a feeling of numbness.

Dermatitis is specially liable to occur on the neck and at the hair margins, as is the case with *Natrum muriaticum*. There is erythema with burning, itching and a tendency to pustule formation.

POSOLOGY

The remedy is of special value to those who do a lot of active brainwork, to artistes, and nervous people of the type described above.

It is to be considered in connection with the luetic diathesis ("constitution fluorique" of Vannier). *Thuja* is a complementary remedy in affections of the genito-urinary tract and nervous system, and *Lycopodium* in digestive troubles.

All effects of the use of Silver nitrate can be antidoted by *Natrum muriaticum*.

It is said to be of value in epilepsy when the attack is preceded for hours or days by dilatation of the pupils, and when the attack is followed by great restlessness and tremors of the hands; also if the attack is induced by a fright or associated with the onset of the menstrual period.

Gelsemium, a study

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PHARMACOGNOSY

Gelsemium sempervirens, *Gelsemium nitidum*, yellow jasmine, false jasmine, Carolina jasmine, is one of the most beautiful native plants of North America. It is found growing in rich moist soils, by the side of streams, along the seacoast from Virginia to the south of Florida, and extending into Mexico.

Despite its local names the plant is not in any way related to the true jasmines, but belongs to the Loganiaceæ, a family which also includes *Curare*, *Ignatia*, *Nux vomica* and *Spigelia*.

The plant is a woody climber, manifesting a need for support—something to hold onto or be held up by. Its twining purplish stem often attains great heights as it ascends lofty trees and festoons from one tree to another.

The plant contains a milky juice, and bears opposite, shiny, evergreen lance-shaped leaves. The flowers form axillary clusters of from one to five large, funnel-shaped, very fragrant yellow blossoms. The fruit is composed of two separable jointed pods enclosing numerous flat-winged seeds. The stem often runs underground for a considerable distance, and it is from the bark of this rhizome together with fresh roots the size of a goose-quill that the mother tincture is prepared.

The plant has a bitter taste and is highly poisonous. The taste derives from alkaloids present mostly in the bark. There are two main alkaloids. Gelsemine is amorphous, yellow in colour, bitter and poisonous, readily soluble in ether and in alcohol. Gelsemine is colourless, odourless, intensely bitter and forms crystalline salts. It is sparingly soluble in water, but readily forms a hydrochloride which is completely soluble. A further alkaloid, gelsemicine, has a depressant effect on motor neurons and is highly toxic.

PHARMACOLOGY

Lethal doses of the drug kill by its action on the respiratory centre in the medulla. Shortly after administration respiration is slowed and finally arrested altogether.

Toxic doses produce a sensation of languor, relaxation and muscular weakness, which may progress to a degree of actual paralysis. The expression becomes anxious, the temperature subnormal, the skin cold and clammy, and the pulse rapid and feeble.

Ptosis of the upper eyelids, dropping of the lower jaw, medial squint, double vision and dilatation of the pupil all ensue as the result of loss of muscle tone. Respiration becomes slow and feeble, shallow and irregular, and death may follow in periods differing from one to seven and a half hours. Arrest of the heart occurs almost simultaneously with failure of the respiration.

Interesting accidental provings of the plant have resulted from its use to give a kick to watered-down bootleg alcohol. The drinker experiences a pleasant

but short-lived initial effect, being possessed by a total freedom from desire, an euphoric happiness. But catastrophic symptoms soon follow ending in collapse. The victim is overcome by a sudden, terrible weakness; he begins to tremble, his movements become jerky, his heart fails, and he is seized with a deadly anxiety that sobers him up completely. Actual convulsions have been met with, the victim manifesting spasms and opisthotonus, similar to those seen with poisoning by *Nux vomica* or strychnine.

The tissue affinities of the drug are thus mainly with the nervous system—with the central nervous system, producing depression of the motor areas of the cord and consequent muscular weakness, paralysis and relaxation of sphincters; with the respiratory centre, leading to failure of respiration; with sympathetic ganglia, causing depression and passive hyperæmia, both venous and arterial; with mucous membranes, also, tending to catarrhal inflammatory states.

PHYSIOGNOMY

The *Gelsemium* visage acquires a suffused red or purplish hue, owing to venous stasis, and the patient looks drowsy, even besotted. The upper lids droop over dilated pupils, and there is a glassy look in the eye.

Quivering may be seen in the lid muscles as also in the tongue, and speech may be difficult and thick. The lower jaw may be dropped and tend to wobble sideways.

Muscular weakness is evidenced by loss of power in the limbs or ocular muscles, and limbs feel so heavy they can scarcely be moved at all. If out of bed, the gait is staggering. The neck muscles may show rigidity.

Another prominent feature is the tendency to tremors and twitching. Tremulousness of the hands is especially noticeable when attempting to lift a cup to the mouth. There may be violent and generalized trembling, so much so that the patient desires to be sat on or held firmly to control the shaking.

The lips tend to be very dry, even cracked, The saliva acquires a yellow hue. The tongue is coated yellowish white and the breath is fœtid.

The pulse becomes weak, soft, frequent and difficult to detect.

PSYCHOLOGY

The mind seems paralysed. The sufferer becomes listless, indolent, wants to be let alone, may even be apathetic. There is aversion from noise or bright light, but a tendency to become scared in the dark and demand a light.

Depression is prominent, even with fear of death (respiratory weakness may account for this, the function of respiration being essential to life).

There is a great disinclination for any sort of effort, probably secondary to hypoxia of tissues. Associated is an overwhelming desire to lie down.

Actual fear may be present, fear of the dark, and also fear of falling—the child will clutch the nurse or the sides of the cot, lest it fall or stumble.

Another characteristic of the drug is a nervous restlessness and apprehension, especially before any kind of ordeal, or the undertaking of some new responsibility. This reminds one of a similar feature of *Argentum nitricum*, but *Gelsemium* probably lacks the tense agitation of the first named remedy. Rather is the nervous reaction manifested by trembling and weakness about the knees, and a tendency to go cold and experience a hollow empty feeling, which is relieved by moving about.

Suicidal tendencies are mentioned, with the urge to jump from a height.

Such causal factors as undue excitement, sudden fright, bad news, apprehensive anticipation, and chagrin may precipitate or induce a *Gelsemium* type of psychosomatic disorder.

PHYSIOLOGY

The thermal reactions are somewhat contradictory. In a hot room there is discomfort, the subject feeling hot and sticky and distressed, from lack of oxygen to assist respiration, but at the same time there is a complaint of shivers of cold up and down the spine—not actual shuddering but a sensation as if somebody was running a cold hand or spilling a trickle of cold water down the back. Again, face and head may be hot while the extremities are cold.

With regard to appetite there is often a gnawing type of hunger—a horrible empty sensation without any real desire for food.

Lack of thirst is an important characteristic, and there may be even a dread of fluids.

Although drowsy by day, sleep at night tends to be disturbed, with a liability to wake with a jerk and a feeling of having fallen out of bed.

Sweats may be profuse and exhausting, but do tend to give relief to pains and aches.

Aggravation of symptoms results from being in a hot room or from direct sunlight. They are worse also in wet weather and fog, and before a thunderstorm and, if feverish, are aggravated by a cold draught. Furthermore symptoms are always aggravated by dwelling on them. The worst time of the day is 10 a.m.

Some relief is obtained, however, in the open air, from continued movement (if the effort can be made), from stimulants, as the result of sweating, and after passing a large quantity of pale urine.

PATHOLOGY

General. The picture presented is one of loss of muscle tone associated with great lassitude and listlessness, and a not surprising aversion from making any kind of effort.

In fever the symptoms are of the influenza type—slow onset, vague aches and pains, chills up and down the spine, great weariness in body and limbs, head heavy and dull, muscles sore and feel bruised. The regions specially involved are the shoulders and the lower extremities. Fever tends to be remittent or intermittent.

Head. Vertigo with this remedy seems to start from the occiput, causes a feeling of intoxication and unsteadiness, as if would fall.

Gelsemium is an important headache remedy and several varieties of headache are described. A headache of sudden onset associated with dizziness, blurred vision and staggering gait is worse in the morning, and is aggravated from any sudden movement and when walking. Relief is obtained by lying down with the head raised on pillows.

A violent throbbing occipital headache is worse when standing up and better by lying quite still. It is also relieved by the passage of copious amounts of pale urine.

There is a tendency for the headache to spread from the nape to the forehead, above the eyes, and to be accompanied by great heaviness of head and eyes, soreness of scalp, and stiffness of neck muscles. There may be a feeling as if the head was "bound by a tight band".

A neuralgic type of headache in the frontal region is associated with nausea and aggravated by vomiting. By contrast a bilious headache accompanying menstruation is relieved by vomiting.

A menopausal headache occurs in association with drowsiness, giddiness, and blurring of vision.

The headaches are usually aggravated by warmth or by hot local applications.

The remedy may be called for in meningitis when there is extreme tenderness to the least touch in the occipital region and definite rigidity of the neck.

Eyes. Eye symptoms accompany other manifestations of illness, as mentioned in connection with headache. Not only dimness of vision, but other disturbances such as double vision, nystagmus, ptosis, and soreness of eyeballs, aggravated by moving the eyes, may occur.

Respiratory System. Coryza appearing some days after exposure is associated with severe sneezing in the early morning accompanied by profuse flow of scalding watery discharge in nose and throat with concomitant soreness of nostrils and *alæ nasi*. There is often also a feeling of extreme blockage at the root of the nose, and epistaxis is not uncommon.

With sore throat the parts look red, puffy and congested; swallowing is acutely painful and pain shoots from the tonsil to the ear; swallowing may even become quite difficult, with a feeling of constriction or of a "lump stuck in the throat". There may be actual paresis of the muscles of deglutition with resulting regurgitation of fluids through the nose.

Aphonia occurs, either nervous or catarrhal in origin.

A violent spasmodic frequent cough is accompanied by soreness in the chest, and a tendency to spasm of the glottis. A cough often occurs in the spring at the onset of warm weather.

Sudden alarming dyspnoea is described, accompanied by a sensation of suffocation and extremely shallow respirations with ensuing extreme restlessness due to oxygen lack, and incessant demands for more air.

Alimentary System. Perhaps the main feature in this sphere is the tendency to nervous diarrhoea from emotional stress or apprehensive anxiety. The stools are painless, even involuntary. Similar symptoms are found under *Argentum nitricum*, but in this case associated with great excitement and agitation. The *Gelsemium* patient is "all of a dither"; the *Argentum nitricum* patient is "all keyed up".

There may be anal troubles, spasticity of the sphincter muscles so that even a soft stool is passed with difficulty, or on the other hand actual paresis with patulous anus and incontinence of *feces*. The stools tend to be yellow in colour.

Cardio-vascular System. The general asthenia may involve the heart muscle, and produces a curious feeling associated with palpitation, namely that the sufferer "has got to move about or the heart will stop altogether". With *Digitalis* the reverse is the case. Here the sufferer must keep still and dare not move lest the heart stop beating.

Urinary System. Nervous polyuria occurs, presumably due to increased renal bloodflow. Paresis of the bladder may occur leading to distension and overflow.

Genital System. The remedy may be called for when dysmenorrhœa is associated with pains which shoot up the back and down into the thighs, often accompanied by giddiness and faint feelings.

It may be needed in relation to threatened abortion resulting from fright or from apprehension. Its use is mentioned both in connection with rigid os in protracted labour and in the condition of complete uterine atony.

Sensations of heaviness of the uterus, or as if the organ was being squeezed by a band, are also mentioned.

Nervous System. The remedy may be indicated in various paralytic conditions, e.g. diplopia, post-diphtheritic paralysis of palate. It is of undoubted value in relation to peripheral neuritis with loss of muscular power, either single muscles or muscle groups being affected.

Numbness and tingling may occur, made worse on attempting to grasp something.

Locomotor System. Apart from heaviness, neuralgic and rheumatic pains in the limbs, the remedy has a sphere of usefulness in relation to occupational neuro-muscular affections due to overuse of some particular muscle group. e.g. writer's or violinist's cramp.

POSODOGY

The remedy has proved of signal value in many cases of influenza, in paralytic nervous disorders of sudden onset, in virus toxæmias, in measles. The 200c is a useful potency in relation to apprehension before ordeal.

The remedy can be used prophylactically in influenza epidemics of characteristic type—three doses of 30c in 24 hours and one dose a week later.



