

## A STUDY OF HYOSCYAMUS NIGER AND STRAMONIUM

WILLIAM GUTMAN, M.D.

### HYOSCYAMUS NIGER

*Character of the drug:* It is expressed by its toxicological effect *delirium*.

The complete dissolution of the personality in the delirious stage is characterized by incoherency and involuntariness of thoughts and actions through disturbances and final paralysis of the governing cerebral centres. Incoherency and involuntariness in the mental sphere is expressed by delusions and hallucinations, which have no interrelationship nor any connection with reality, and come and go involuntarily. Incoherency and involuntariness in the motoric sphere is expressed by twitching of single muscles and muscle groups, and incoordinated involuntary movements of single extremities as well as of the whole body. A general restlessness and nervous excitability reaching a point of mania and convulsions, and a great general weakness progressing to complete stupor runs through the whole picture. The restlessness is characterized mentally by great loquacity, jumping from one object to another, flight of ideas and delusions; physically, by continual involuntary movements of single muscles such as twitching, subsultus tendinum, purposeless movements of arms and legs, general motor unrest, clonic convulsions. The nervous excitability manifests itself particularly in the sexual sphere ranging from hysteria to nymphomania. The hallucinations assume a true paranoid character, with various ideas of persecutions. Beginning with the slightest manifestations of mental and physical restlessness up to a state of hallucinations, muttering, and unconsciousness, always associated with great weakness and final stupor, the delirious state runs through the whole picture and accompanies most of its symptoms.

*Personality of the drug:* Persons easily affected by this drug have certain predispositions which make them more susceptible to the drug as well as to factors which cause pathological conditions similar to those produced by the drug. These are persons of a nervous, restless, irritable, fearful type, or of a highly emotional type up to a hysterical degree. The key-word of their mental disposition is suspiciousness. In the pathological exaggerated state, this suspiciousness reaches a true paranoid form of delirium or mania. Another form of this persecution mania is jealousy mania. This indicates the hysterical character and the sexual hyper-excitability which is another trait of the drug personality.

*The keynote of the remedy:* Non-inflammatory cerebral irritation, producing a picture of delirium and mania of a paranoid character, often with sexual excitability, also convulsions, always with great weakness, tending to stupor.

*Modalities:* Aggravation in the evening and during the night, when the delirium usually becomes worse; after mental excitement; before and during menstruation, when particularly a hysterical disposition is inclined to flare up; from lying down (cough, some head and bladder symptoms). Some head and larynx symptoms are better from sitting up or stooping, due to changes in the circulation.

*Etiology:* Infectious diseases (such as pneumonia, typhoid, scarlet, acute polyarthritis, chorea, encephalitis, etc.) affecting the brain; arteriosclerosis of the brain vessels; alcohol intoxication; parturition; emotions, particularly of a jealous character; as from unhappy love affairs; fright; taking cold (cough).

*Organ relationship:* The symptoms of Hyoscyamus are produced by affection of the brain and to a lesser degree of the parasympathetic nerve.

*Pathological relationship:* The symptoms correspond primarily to a non-inflammatory irritation and final paralysis of the cerebral cortex as it can be brought about by bacterial toxins or endo-toxins, but also by emotions in disposed individuals.

*Physiological and physiopathological action:* The pharmacological action of the chief alkaloid of Hyoscyamus niger, Hyoscine or Scopalamine, an alkaloid closely related to Hyoscyamine and Atropine, differs somewhat from the effect of Atropine and Belladonna. The principal alkaloids of Belladonna are Atropine and Hyoscyamine and to a considerably smaller degree Hyoscine. Hyoscine, or as it is also called Scopalamine, produces even in small doses weakness and weariness, finally sleep, often confusion, motor unrest, hallucinations, delirium, unconsciousness; greater doses provoke convulsions, and paralysis. The effect upon the peripheral organs is, although principally the same, of much shorter duration than in Atropine. There is also vago-paralysis with the characteristic symptoms as described under Atropine, but there is less acceleration of the heart, the cerebral circulation in animals is not changed, there is no stimulation of the spinal centres, and the paralysis of the central nervous system supervenes the irritation, whereas in Atropine the opposite is the case. -All this accounts for the difference in the homoeopathic proving picture. There is not the storm in the arterial circulation, which makes Belladonna a remedy so important in inflammatory diseases and there is less stimulation of the nervous system, but much more depression and paralysis. Besides, the homoeopathic proving picture shows a particular excitation of the sexual centres, very characteristic of Hyoscyamus as well as of the related Datura stramonium.

Ideas of persecution have been observed after habitual injections of scopolamine and the characteristic of the delirious and maniac stage of Hyoscyamus is a paranoid reaction. Infectious delirium as occurring particularly in typhoid conditions have been divided into a paranoid group with hallucinations, and into a group with excitation and extreme motor unrest; there is often a transition of one form into the other. This delirium is clearly pictured by the symptoms produced by Hyoscyamus. There is a general sus-

piciousness, fear of being sold, poisoned, persecuted, complaints of imaginary wrongs; the medicine or food and drink or whatever is offered is refused for fear of being poisoned. There are hallucinations of demons, devils, ghosts and attempts to escape, to jump out of the bed. Unrest and weakness, finally stupor are very characteristic in the mental as well as in the physical sphere. Great loquacity, flight of ideas announce the imminent dissolution of all mental coordination. Laughing and crying without reason, moaning and whining accompany the symptoms. The same unrest prevails in the physical condition. There is a steady desire to move, and to uncover the body; arms, legs, head are in constant motion, single muscles twitch, subsultus tendinum precedes and follows through the unconscious stage, from which the patient still can be aroused only to fall back immediately into a muttering delirium, picking bedclothes, grasping feathers, sometimes interrupted by sudden epileptiform convulsions or maniacal outbursts, which are only of short duration as the great weakness does not permit a prolonged excitation. The reflexes disappear, urine and stool are passed involuntarily, the jaws hang down, the teeth become covered with sordes, the tongue is dry and unwieldy, the pupils dilated to the maximum, the eyes stare without noticing the surroundings, the expression is dull. This is a complete picture of hyoseyamus poisoning as well as of severe infectious delirium in which hyoseyamus often has proved curative. In the still more dangerous state of the so-called collapse-delirium which particularly occurs after the ominous drop of temperature, deeper acting remedies like Arsenic, Lachesis, Acidum mur. etc. should replace it.

Another form of paranoia is jealousy mania. We find it also in the Hyoscyamus picture as a typical reaction, showing at the same time the particular relation of the drug to the sexual realm. Jealousy mania is to be found quite regularly in chronic intoxication; the alcohol delirium demonstrates also all the other symptoms produced by Hyoscyamus. Old arteriosclerotic people often show jealousy mania and also other symptoms of excitation in connection with arteriosclerosis of the brain vessels. Similar symptoms are produced by Hyoscyamus. The reaction of jealousy is quite typical in hysterical subjects as is also the twitching, irritation, restlessness, sexual irritability up to nymphomania, exhibitionism and hysterical convulsions; these symptoms are aggravated before and during the menstrual period. Hyoscyamus as well as Stramonium produce stimulation of the sexual centres, a fact which accounts for the ancient use of these drugs in witch ointments. Abnormal jealousy occurs also as a mental reaction in Graves' disease and the experience of Stiegele that Hyoscyamus in 3x potency produces severe maniac conditions in cases of Graves' disease points to its use in higher potencies in thyrotoxicosis, if other symptoms correspond.

The irritation of the cerebral motor centres through Hyoscyamus poisoning produces clonic convulsions and epileptic attacks followed by deep snoring sleep, characteristic of the tendency to stupor and paralysis inherent

in the drug picture. The involuntary and incoordinated angular movements remind one of symptoms of chorea, encephalitis and paralysis agitans. Disturbances of sleep, particularly in children, awakening in fright with trembling and confusion, complete the picture of the drug action on the nervous system.

The peripheral action of the drug is much less pronounced than in Belladonna. We find here also a flushed face, erythema of the body and a tendency toward formation of furuncles; but more frequently the face is pale, corresponding to the greater general weakness, and this differentiates the Hyoscyamus face from the congested appearance of the Belladonna face. There is also great dryness of the mucous membranes producing an obstinate tickling cough, aggravated when lying down, particularly at night. Dilatations of the pupils by loss of accommodation, irritation and paralysis of the oculomotorius, count for disturbances of vision, such as photophobia, nystagmus, diplopia, strabismus. Heaviness and tightness of the chest points to asthmatic conditions. Vomiting with a tendency to convulsions is similar to cases of gastric intoxications. Singultus is quite often produced as a 'muscle twitching' of the diaphragm.

There is meteorism and colic through irritation of the abdominal vagus leading to diarrhoea or constipation. A number of painful sensations of the extremities, such as drawing, tearing, stabbing, as found in the provings, show the relation of the drug to neuralgic conditions, possibly also affections of the joints.

*Landmarks for prescribing:* Delirium, mania, clonic convulsions with weakness, restlessness, and stupor.

Twitching of single muscles everywhere, and continual movements of head, arms, legs during stupor.

Paranoic character of hallucinations (fear of being persecuted, sold, poisoned, or jealousy mania).

Aggravation after emotions, fright, before and during the menstrual period; from lying down (cough).

Time aggravation: evening and night.

#### STRAMONIUM

Stramonium holds a position between Belladonna and Hyoscyamus and with regard to its physiological and pathological action we refer to what has been said concerning these two drugs. It has more cerebral excitation and mania than Belladonna, but no inflammation; it has more congestion than Hyoscyamus but instead of the weakness of Hyoscyamus a furibund delirium. The maniac condition is greater than in any other drug. There is more consciousness than in Belladonna and Hyoscyamus-delirium, a desire for light instead of the photophobia of Hyoscyamus and a desire for company, fear to be alone and in the dark. On the other hand light and bright shiny objects bring about convulsions, pointing to a particular hypersensitivity towards visual impressions. The incoordination of muscle actions is parti-

cularly present in the muscles of speech, producing stammering. The mania is often of a more religious nature with much praying, beseeching, swearing. The sexual excitement is still more outspoken than in *Hyoscyamus*; there is violent sexual desire and nympho-mania of highest degree. The menstrual period is strong, the blood dark and clotted, the body has a strong odour at this time. Hahnemann considered the painlessness in all conditions as very characteristic. Otherwise the picture differs only in degree from that of *Belladonna* and *Hyoscyamus*.

#### CONCLUDING REMARKS

If we compare allopathic and homoeopathic knowledge of pharmacotherapy, for instance in the case of the drugs of the *Belladonna* group, we become aware of the great limitations of allopathic drug therapy. First of all the use of single alkaloids in old school therapy neglects completely the individual entity presented by each drug-plant; the result is a bare outline in contrast to the full individual picture given by Homoeopathy. Although we find in *Belladonna*, *Hyoscyamus* and *Datura stramonium* basically the same alkaloids, they are, after all, plants, very different in their appearance so that we have to expect also a certain difference in their biochemistry and consequently also in their toxicological and therapeutic effects.

On the other hand, the one-sided analytical approach of old school pharmacology overlooks the complexity of drug action confining thereby the scope of drug therapy to a purely symptomatic paralysis or stimulation of single functions. Besides, old school-pharmacology stresses repeatedly the fact that the use of the various *Belladonna* alkaloids is limited in time, as the toxicity of the alkaloids does not permit prolonged use, producing too many undesirable co- and after-effects. This holds good for most of the other drugs, and I refer to another typical example, *Aconite*. Therefore the use of most drugs in school-medicine becomes very limited in every respect. It appears quite symbolical that the only therapeutic use of the *Belladonna* alkaloids in recent times for the treatment of a pathological entity instead of single functions, the so-called bulgarian cure of paralysis agitans was initiated not by a man of the school, but by a peasant; characteristically again, not the single alkaloids; but the whole drug had the most satisfying therapeutic effect.

This whole situation changes completely if the simile principle is generally accepted. The entire wealth of toxicological and pharmacological knowledge, which is now to a great extent a purely theoretical one, comes to life and enriches pharmacotherapy immensely. This is not a small question. Pharmacotherapy, together with general and individual hygiene, is the real centre of medicine as a science of healing. As long as the simile principle is not incorporated medicine will be only a torso.

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