

The Spider Poisons

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LATRODECTUS MACTANS.

This "Black Widow," as it is called, is a member of the genus *Latrodectus* of the family *Theridiidae*, which bears the name of being the only truly venomous family of spiders. However this may be, observations of *Latrodectus* poisonings have been recorded that show it to be a powerful venom, having a direct action on the circulatory system. In fifteen cases observed by Dr. Bogen in the Los Angeles General Hospital, the spider's bite had been witnessed by the patient, and nearly all these cases developed pain in the legs and abdomen, extreme abdominal rigidity, high blood pressure and high temperature. Had these cases been recorded by a trained homœopathic physician, how much valuable data we might have gained!

It is significant that the higher types of animal development show the greatest reaction to *Latrodectus* poisoning. Horses and camels have succumbed to the bite, while sheep and pigs can eat the spider without any ill effects, and are used to clear fields of the spiders instead of the more common custom of burning over the fields. Experiments have determined that extracts from the poison gland of the spider will kill a cat very quickly.

The *Latrodectus mactans* is the largest spider of its family. It sometimes attains a length of one-half inch. The abdomen is round and the whole body is a velvety black, except a bright red spot underneath and one or more red spots over the spinnerets and along the middle of the back. The legs of the male are much longer than those of the female, although the male varies in size of body very much, in some instances being only about one-fourth the size of the female. Each joint of the legs is marked with orange, shading to black at the edges of the joint. The male also has four pairs

of stripes along his sides, red in the middle and white at the edges.

This spider makes its nest among loose stones, on plants or in houses. Around its hiding place it spins a large funnel-shaped tent that widens into a flat or curved sheet of web, closer in texture toward the tube and more open toward the edges, spreading two or three feet over plants and stones. It is found all over the United States as far north as Massachusetts and New Hampshire, although its northward spread was by forced means, a professor whose summer home was in New Hampshire carrying some specimens north for experimental purposes, and they escaped from captivity and made themselves at home. Their habitat extends southward through Florida, the West Indies and South America, as far as Chile. It is probably the *Theridion curassavicum* of the West Indies, or a very near relative, for the *Theridion cur.* also has the velvety black body with the spots in the same relative position as the *Latrodectus mactans* (the large spot underneath and the three smaller ones above) but the color of the spots in *Theridion cur.*, is not bright red, but yellow underneath and orange-red above, and in size the *Theridion cur.* is about the size of a cherry pit.

Many of the *Latrodectus* symptoms that have been recorded resemble those of *Theridion cur.*, although *Latrodectus* has not been thoroughly proven, and *Theridion cur.* was proven by that indefatigable worker, Hering. Had there been a more careful proving of *Latrodectus* by such a master as Hering, we might have noted more similarities.

It is interesting to note that the genus *Latrodectus* will eat almost anything, including tarantulas, scorpions, woodlice and lizards, and even the Spanish fly, cantharides, all without showing any poisonous effects.

The poisonous effects of the bite of this spider on human beings have given us some peculiar and valuable symptoms, which are almost wholly associated with the action of the poison on the heart. There is disorganization of the blood,

with inability to coagulate. We have used this remedy in these critical conditions with prompt and marked effect.

In the mental sphere there are symptoms of great anxiety and fear that dissolution is impending. This is not so much a fear as a foreknowledge of the approaching dissolution, with the attendant fear; and the countenance shows this great anxiety.

The heart symptoms are marked. There are very violent præcordial pains extending to the left axilla, down the left arm to the hand and fingertips. The patient's left arm seems to become almost paralyzed with the pain, and there is extreme numbness. The pulse becomes very rapid, so that it can hardly be counted, and so weak it is almost imperceptible.

The respiration is slow and gasping. There is great shortness of breath, approaching apnoea.

The surface of the body breaks out into a cold perspiration.

There are severe abdominal pains with nausea and sinking sensations in the epigastrium. Finally there is vomiting of black blood, with dark bloody evacuations of the bowels.

LATRODECTUS KATIPO.

This venomous spider is found in some parts of California and in New Zealand. The recorded symptoms are those produced by bites. The symptoms are slow in evolution, and in a fatal case which was recorded, the child, was bitten on the abdomen, did not die until six weeks after the bite.

The bite produces a small raised place like that of a flea-bite, sometimes with intense burning. This swells sometimes at once and sometimes after the lapse of a few days, as large around as a teacup, white with a red halo. There are severe pains running upward from the bite, as in *Latrodectus mactans*, accompanied with a great deal of burning pain and severe twitching. The face becomes anxious, with extreme pallor, changing to a bluish tint. There is nervous depression

and delirium. The jaws become stiff, so the patient cannot eat, nor scarcely articulate. The heart becomes slow in action and the patient is almost pulseless. The appearance of the patient is as of one going into a decline. Those bitten take a long time in recovering; after very long and gradual loss of strength the tide may turn and there will be a long, slow convalescence.

A marked peculiar symptom is the sensation as if the heel were lacerated by a dull instrument; a bruised pain, which awakens him from sleep, and which is an aggravation in sleep.

In these animal poisons we expect to find the anxious expression as a result of heart complications, and the pallor and blue tint extending from the face to the entire body, are of course due to disorganized condition of the blood, which almost always is the first action of these animal poisons.

The stiffness of the jaws is so great that the patient can not eat, nor scarcely speak. There is a loss of all desire for food; severe cramping and drawing pains in the abdomen.

Respiration is very greatly slowed, almost ceases. The pulse becomes very slow, scarcely more than twelve to fourteen beats to the minute.

There are severe burning pains running from the foot and limbs to the back, but centering about the heel. The sensation in his sleep as if his heel were being lacerated.

With these symptoms, there is nervous twitching beginning in the limbs and extending over the whole body; severe shaking; lack of energy; sudden faint spells, with pallor; great emaciation and wasting.

Theridion curassavicum.

Theridion curassavicum, or the Orange Spider, is a native of the West Indies, coming from the islands of Curacoa, where it is found on orange trees. It is about the size of a cherry stone. When young it is velvety black with anterior and posterior lines composed of white dots. Later the

markings are three orange red spots on the posterior of the body and on the belly a square yellow spot. This is an exceedingly poisonous spider, and the poison has a marked action on the nervous system, producing weakness and coldness, anxiety and fainting.

There are two very characteristic symptoms always present when *Theridion* is indicated. One is the excessive sensitiveness to the least noise. This sensitiveness extends to vibrations as well as noise, as jars or the moving of a carriage, or even the moving of a boat, the vibration against the waves. Another peculiar sensation is as if these vibrations extended to the teeth, and were felt most in the teeth. "Sounds penetrate the body, and especially the teeth, increasing the vertigo and causing nausea." Many symptoms make this remedy applicable in sunstroke.

Because of its symptomatology, this remedy is very often of value in hysterias, especially the hysterical conditions of puberty and during the climacteric. It is indicated in many nervous disorders, and it is peculiarly useful in some forms of seasickness.

Hering introduced and proved this spider poison in 1832, using the preparations made from the live spider crushed in alcohol. Hering's careful observations elicited a very interesting symptomatology.

The provers found that time passed very quickly; their inclination to mental exertions was increased, and they became very talkative, hilarious and even hysterical. Then the reverse side of the picture, great aversion to work, especially to do the common tasks of everyday life. There was great mental depression especially with the headaches, and with the peculiar toothaches there is much weeping and hysterical manifestations.

There is vertigo, nausea and vomiting, aggravated on stooping, from the least movement, and markedly aggravated on closing the eyes. In sick headaches and seasickness they will often be able to keep about until they close their

eyes the vertigo and nausea increase tremendously. The vertigo is more marked on board a vessel, and often blindness and cold sweats accompany the vertigo.

Theridion has much headache. These headaches are frequently throbbing, this throbbing extending back into the occiput. It is especially violet behind the ears, with heavy pressure. With the headache there is confusion of mind ; it is hard for her to describe the feeling, her head is so confused. She feels as if her head were disjointed, as if it did not belong to her or to the rest of the body ; as if she could lift it off ; as if it were strange to her and belonged to another. This is one of the remedies having the marked sensation as of a band pressing about the head. There is a sense of pressure in individual parts of the head as well as about the head. There is a headache with nausea and vomiting like seasickness, at the climacteric period. With the headaches there is an aggravation from lying down, which causes pain deep in the brain.

There are marked eye symptoms. There is flickering before the eyes, even when closing them ; a sensation as of a veil before the eyes. They are sensitive to light, and light causes sparkles before the eyes. There is double vision.

All the ear symptoms are made worse by the least noise. Every noise reverberates and penetrates the whole body, especially the teeth, causing vertigo and nausea. There is roaring in the ears. The scalp itches behind the ears.

The jaw is immovable in the morning on waking, making us think of *Latrodectus katipo* ; later in the day the jaw opens involuntarily. There is tetanus with frothing from the mouth, with shaking chills. Cold water feels too cold to the teeth. There is pain in the teeth, particularly in the eye teeth.

There is a peculiar sensation in the œsophagus as if there were something slipping toward the epigastrium, temporarily taking away the breath.

These patients have a craving for acid food ; a desire to

eat and drink first one thing and then another, with particular desire for wines and brandies, and for smoking tobacco.

There is a burning pain in the hepatic region, aggravated on touch. *Theridion* has produced abscesses of the liver. It is one of the many remedies that is known to cure cases of anthrax in sheep, with great tumefaction of the hypogastrium and great thirst.

In the lower abdomen, there is great pain in the groins after coition. One of the peculiar symptoms of *Theridion* is the sensation as if someone tapped her in the groin when she flexes her knees.

The stool is a painless diarrhoea, with a sensation as if a lump were lying in the rectum. The urinary symptoms are peculiar, in that they have to get up several times in the night, and they void practically none in the day.

In the male organs, sexual desire is lessened. There are weak erections during coition, with pains in the groin after coition; and there are forcible seminal emissions during siesta.

Theridion has been used successfully in the respiratory organs, several cases of phthisis florida having been cured by it, with the symptoms of cough at night, constant inclination to take a deep breath and much sighing. There are sharp stitches through the chest, especially sharp pains about the heart, radiating to the left shoulder.

There is a peculiar sensitiveness to the spine, and they will sit down sidewise to avoid pressing against the spine. The jar of the foot in walking so aggravates this sensitiveness that it makes her cry out.

Theridion has many peculiar sensations; as if the head were another's as if the vertex did not belong to her; the band about the head; the veil before the eyes; as if too much air passed into the nose and mouth; as if the mouth were furred, benumbed; as if a lump lay in the perineal region; as if someone tapped her in the groin when

she flexed her leg ; as of a child bounding in the abdomen ; as if the bones were broken and would fall asunder.

The aggravations occur every night ; from cold ; after stool ; by coition ; on motion or exertion, especially on stopping or rising ; walking or going up and down stairs ; after washing clothes there is nausea and fainting.

These patients are ameliorated by warmth, and the nausea and vomiting are relieved by warm water.

This is very largely a left-sided remedy.

TROMBIDIUM

Trombidium is a parasite that inhabits the bodies of houseflies, resembling very closely the itch-mite and closely related to the spiders. The remedy is prepared from the tincture of these parasites, and it has been proved in the 3rd, 6th, 9th, 18th and 30th potencies, under the direction of that indefatigable worker and observer, Constantine Hering. The provings have brought out a number of peculiar symptoms which are noteworthy.

The symptoms brought out by the provings show the action of *Trombidium* to be very largely on the left side. Its great characteristic is the marked aggravation of all conditions by eating or drinking, either while eating or after eating. It vies with *Croton tig.* in aggravation of stool from eating or drinking. All conditions are aggravated by touch ; aggravated by pressure ; aggravated lying down, especially toothache. Rising up causes faintness. Warm drinks relieve ; open air relieves.

Some of the peculiar sensations are : As if there were no weight in the head (light-headed) ; as if there were incarcerated flatus in the abdomen ; as if anus were excoriated after tenesmus ; as if everything were coming out of the anus ; as if hot air were blowing over the lower abdomen and thighs ; as if the abdomen needed support ; sinking sensation, as if breath would leave her ; as if three toes on the left foot would be twisted off.

The mental symptoms of *Trombidium* show much talkativeness and loquacity; a determined inclination to do things by contraries; an inability to collect ideas and coordinate them. There is loss of memory and a constant disposition to yawn.

In the inner head there is oppressive headache; the head is congested, with red face and ears. Light-headedness and dizziness is marked in *Trombidium*, especially aggravated upon rising from bed, when they are very apt to faint. There is sharp pain in the head and temples, and the headache is aggravated by shaking the head or by jars, as in walking. There is an intolerable itching of the scalp on the vertex and occiput.

The eye symptoms show a great deal of lachrymation in the open air, and the inner canthus itches intolerably. The conjunctiva is red and injected.

There are shooting pains through the ears, which are aggravated on swallowing or blowing the nose. The outer ear itches, especially mornings, and there are burning pains in the outer ear.

The nose is obstructed; there is dryness and scabs, and nosebleeds mornings.

One of the choicest and most frequently verified symptoms is a peculiar fluent coryza which manifests itself in the open air and especially when eating. Some people cannot eat without constant attention to the nose, due to this fluent coryza, which is very marked in the proving of the remedy.

There is much aching in decayed teeth, the pain starting up when eating breakfast and lasting until noon, returning when beginning to eat. The toothache is aggravated lying down, eating, talking, or from cold air; ameliorated from warmth and hot drinks.

The tongue is coated white.

After meals there is eructation, tasting of ingesta. There is vomiting in the morning after breakfast, or after

having coffee. There is much griping in the pit of the stomach after eating.

The abdominal symptoms are manifested in griping pains on rising, which soon give way to the desire for stool. The pain and tenesmus is so intense as to cause the patient to break out all over in a sweat. There is pain at 3 a. m. from incarcerated flatus. The abdomen is quite sore, and the patient is wakened at 5 a. m. with urging to stool (*Sulphur*). There is also pain in the abdomen during the forenoon, aggravated from drinking cold water, from eating and from pressure.

There is pain in the right hypochondriac region, with soreness over the liver on pressure, with darting pains, especially evenings.

There is constipation following soft stools. There may be diarrhoea and straining, with expulsion of much flatus. The diarrhoea at 5 a. m. is followed by several small stools during the day, which are preceded by some pain in the intestines. During the stool there is continuous pain in the abdomen, with urging and chills and shivering along the back, with tenesmus. The stools are light brown, consisting largely of mucus, and are preceded and followed by pain in the abdomen. With these conditions there is great debility.

The patient complains of many sharp stabbing pains here and there through the chest, sometimes in the region in the heart, often brought on by a long deep breath.

There are rheumatic pains in the limbs, mostly shooting and stabbing here and there, as well as in the fingers and phalanges. With these rheumatic pains there is restlessness and inability to keep quiet. There is relief in the open air and relief evenings.

The skin symptoms manifest themselves in pimples, especially on the nape of the neck and in the beard.

The sleep is restless and with lewd dreams. There is constant waking from 4 a. m. on.

In the feverish condition calling for *Trombidium* there is

a great deal of chilliness in the evenings, in the mornings and on waking.

Trombidium is a remedy that bears study, keeping in mind these peculiar symptoms that have been mentioned, and these will lead us to the more frequent use of this remedy. Where it is indicated, it does exceedingly prompt and efficient work.

DISCUSSION

DR. C. L. OLDS : I think this is an exceedingly valuable paper. I am particularly interested in these remedies. Regarding spider poisons, it is rather remarkable that many of the spiders are only poisonous during the period of bringing forth their young, that is, during July and August in this climate. It is during those months, almost entirely, that we get the poisonous spider bites with their poisonous symptoms.

I recall the case, some years back, of a child that had been bitten by a spider, being brought to me. She was brought to my office about thirty minutes after she was bitten. She was then swollen from the feet to the top of the head in an almost unrecognizable way. I don't remember the other symptoms. I think there was not very much pain. I gave her, as an antidote, *Apis*, and in a short time she returned to her usual health.

In regard to this first remedy, *Latrodectus*, I have used it very little except in cases of angina pectoris, and there I have had very good results with it.

In regard to *Theridion*, I am particularly interested in this remedy as I recently had a case in which it acted most beautifully. It was a case in which there was swelling of the glands of the groins and neck. There was emaciation and long sickness. There were intense bone pains, which were left sided. In fact, most of the symptoms were left-sided. There was this great sensitiveness that the doctor spoke of, sensitiveness to jar, sensitiveness to all impressions, mental and physical. The mental state was also one of more or less agony. The woman felt as if she would fly all to

pieces ; she felt she could not exist any longer. The condition had been going on for some months and nothing had been found to more than temporarily relieve these pains—intense pains from the left hip down. One dose of *Theridion* 200th caused a terrible aggravation the first night. After that there was absolutely no pain. It has been about two months now. It is quite a remarkable case.

In regard to *Trombidium*, I have had little experience with it except in the case of certain diarrhoeas that come in the daytime and usually only after eating. Several such cases I have cleared up with this remedy.

DR. E. B. LYLE : About a year ago, a paper was published in the *Recorder*, January 1930, p. 20, on spider bites and the way the doctor treated them. We are not quite sure what the spider was, because unfortunately in sending it to the university for identification it was lost, but it would be well to compare this paper with that one.

DR. G. STEVENS : I would like to ask Dr. Roberts if he knows any antidote for *Latrodectus*. For instance, would *Lachesis* serve ?

DR. C. M. BOGER : The signature for *Latrodectus* turned up quite unexpectedly in my work. I was reading over one of my cases one day, and I noticed that one of the main symptoms was that the patient was persistently annoyed by dreams of flying. Of course, that is not such an unusual dream, but in a few days the patient came in and her symptoms were not very clear. They did not point very clearly to any particular remedy. I didn't have the particular spider, but I had the next one, which was *Latrodectus*. I gave that and all the symptoms disappeared.

I frequently do that sort of prescribing. The spider doesn't fly with wings, but he flies with jumps. I think that one of the great signatures for spider poisoning is a dream of flying. It seems to indicate that this symptom is more or less in common with many of our remedies, remedies from the same natural order, remedies of the same chemical composition. It is well worth remembering.

DR. D. T. PULFORD : I think the article by Dr. Schwartz, in regard to spider bite might help some of us in regard to the question of an antidote. He used *Arsenicum*, I think, in most of his cases.

DR. H. A. ROBERTS : There is very little I need to say that is not in the paper itself. From the clinical observation, however, I have had quite a bit of experience. It is a very, very valuable remedy. I will not go out without *Latrodectus* in my case, for the reason that when you want it you want it very badly. It will relieve the terrible torture of angina very promptly, and it will hold it for some time. I have used it repeatedly in those cases. Not only does it hold it, but it holds it for a very long while. You very seldom get a repetition of it afterwards, unless it is a natural pathological condition that has destroyed altogether the coronary artery.

There is another peculiar thing that is very annoying, which you will often be able to relieve. There are many people whose noses will begin to drip the minute they begin to eat, a fluent discharge from the nose. It is exceedingly annoying to the patient. I have, on several occasions, been able to relieve that entirely by *Trombidium*. It is a light symptom, but it is terribly annoying.

DR. C. C. WALTENBAUGH : Would you give them a high potency or a lower potency ?

DR. H. A. ROBERTS : I ordinarily in those cases use 200th.

DR. C. C. WALTENBAUGH : Do you think a higher potency would aggravate them too much ?

DR. H. A. ROBERTS : I should be afraid of it. It is too powerful.

CHAIRMAN A. H. GRIMMER : The doctor brought out one point that might be of value in the case of people who are trying to rid themselves of the desire for tobacco or alcohol. It might be one of the remedies in such a condition. That is just a suggestion, because of the craving that it has. That is the way we develop these things.

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