# **ORIGINAL ARTICLE**

# *Mygale lasiodora*: A multicentric observational homoeopathic clinical verification study

Raj K. Manchanda<sup>1</sup>, P. S. Chakraborty<sup>2</sup>\*, Pramodji Singh<sup>3</sup>, S. S. Nayan<sup>3</sup>, Ojit Singh<sup>4</sup>, P. K. Pradhan<sup>5</sup>, D. K. Singh<sup>6</sup>, Subhranil Saha<sup>2</sup>, Munmun Koley<sup>2</sup>, Chaturbhuja Nayak<sup>1</sup>

### ABSTRACT

**Context:** Clinical verification is an ongoing research program of the Council that verified many rare homoeopathic drugs.

**Aims:** To clinically verify the symptomatology of *Mygale lasiodora* by ascertaining the symptoms improved during verification.

**Settings and Design:** In this multicenter observational study, 166 patients were enrolled after matching with the available drug symptomatology and specified eligibility criteria. The medicine was prescribed in 6C, 30C, 200C, and 1M potencies, as per homoeopathic principles.

Statistical Analysis Used: Data were presented in terms of descriptive statistics.

**Results:** One sixty-six cases were analyzed; male/female: 105/61; mean age 29.13 years. There were "clinical successes" in 104 cases and failures in 62, judged subjectively by the physicians. A minimum of two prescriptions was considered for pick-listing each symptom as a rule of thumb. The number of symptoms verified was as follows: proving symptoms (n = 18), symptoms from other literature (n = 16), and new observations (n = 47). The data were presented as mean, standard deviations, N (%), and 95% confidence intervals (CI).

**Conclusions:** Total 34 available symptoms were verified, and 47 new symptoms were identified. Cautious interpretation is necessary. Further replication on larger sample and estimation of likelihood ratio, in general, practice settings in prospective Bayesian approach is necessary before inclusion of the symptoms in homoeopathic literature.

Access this article online Website: www.ijrh.org DOI: 10.4103/0974-7168.172869 Quick Response Code:

in Homoeopathy, New Delhi, <sup>2</sup>Dr. Anjali Chatterjee Regional Research Institute for Homoeopathy (Central Council for Research in Homoeopathy), Kolkata, West Bengal, <sup>3</sup>Central Research Institute (Central Council for Research in Homoeopathy). Noida, Uttar Pradesh, 4Regional Research Institute (Central Council for Research in Homoeopathy), Imphal, Manipur, 5Regional Research Institute (Homoeopathy) (Central Council for Research in Homoeopathy), Puri, Odisha, 6Clinical Verification Unit (Homoeopathy) (Central Council for Research in Homoeopathy), Patna, Bihar, India

\*Address for correspondence: Dr. P. S. Chakraborty, Dr. Anjali Chatterjee Regional Research Institute (Homoeopathy), Kolkata, West Bengal, India. E-mail: drpsch@yahoo.co.in

**Received:** 21-08-2015 **Accepted:** 08-12-2015

Keywords: Acne, Clinical verification, Dyspepsia, Homoeopathy, Mygale lasiodora

### **INTRODUCTION**

Curing a proving symptom in a patient refers to clinical verification. Reporting of verifications out of medical practice is one of the most important tasks of Homoeopathy. The reliability of a Materia This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

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**How to cite this article:** Manchanda RK, Chakraborty PS, Singh P, Nayan SS, Singh O, *et al. Mygale lasiodora*: A multicentric observational homoeopathic clinical verification study. Indian J Res Homoeopathy 2015;9:249-57.



Medica directly depends on it. Clinical verification refers to systematic observation and recording of improvement of proving symptom(s) and/or previously noted symptom(s). Thus, having a direct impact on the reliability of homoeopathic Materia Medica, clinical verification has been one of the most important tasks of Homoeopathy. The clinical verification of homoeopathic symptoms is an internal validation of the basic principles of Homoeopathy and the results can be used for improving the daily practice. In homoeopathic Materia Medica, there are many lesser proved and lesser known drugs. Due to less pathogenetic data, these drugs are often treated as "small" remedies in spite of having probable and considerable therapeutic potential. Hence, their pathogenesis needs to be verified clinically to identify the reliable indications for its therapeutic use, and may be added in literature after subsequent confirmation. The Central Council for Research in Homoeopathy (CCRH) is conducting clinical verification since its inception, and a large number of drugs have been verified, most of which are Indian drugs, rarely used in Homoeopathy. The study of Mygale lasiodora was started in October 2005 and continued until March 2010 in 11 research centers across India.

M. lasiodora is a large black spider, native to the Island of Cuba and commonly known as bird spider (Black Cuban Spider).<sup>[1]</sup> It was first introduced and proved by Dr. J. G. Houard, of Cuba<sup>[1,2]</sup> and for the preparation of homoeopathic medicines, the whole spider was used.<sup>[1]</sup> The spider is one of the most primitive spiders, and it belongs to the family of Antrodiaetidae.<sup>[1]</sup> Its synonyms are Antrodiaetus lasiodora,<sup>[1]</sup> Mygale avicularia, and Aranea avicularia.<sup>[3]</sup> These are ground spiders, like Tarantula, that run after prey and makes webs to attract prey. While attacking, the fangs move forward and downward into the prey. Mygale may remain totally inactive (they are very still, and almost like in coma) alternating with a sudden burst of aggression or activity. They are one of the most violent spiders.<sup>[4]</sup> An individual bitten by this species endures swelling and tenderness as well as a violet staining which changes to green and extends from the place of the bite down the lymph vessels.<sup>[3]</sup> The other symptoms of the bite may include coldness giving rise to fevers, intense thirst, dry mouth, shuddering, breathing problems, hopelessness, depression, as well as trepidation about passing away.<sup>[3]</sup>

In homoeopathic literature, it is described as one of our best remedies for uncomplicated cases of chorea. The patient is apt to be low-spirited and depressed. There is a dull pain in forehead and constant twitching of the muscles of the face. The head is often jerked to one side, usually to the right. There are also twitching and jerking of the muscles of one arm and leg, usually the right. Control over the muscles is lost. The patient attempts to put the hand up to the head when the hand is violently jerked backward. While making an effort to talk it is found that words are jerked out.<sup>[2]</sup>

Assuming the clinical importance of the drug and keeping in mind the nonavailability of probable pathogenesis, a systematic proving on *M. lasiodora*, on randomized, double-blind, placebo-controlled technique was conducted by CCRH followed by its clinical verification to ascertain its therapeutic usefulness. The primary objective was to clinically verify the symptomatology of the drug as observed during proving or as mentioned in other literature. The secondary objective was to ascertain the clinical symptoms that did not appear during the proving but were improved in the patients after its administration, either completely or partially.

# **SUBJECTS AND METHODS**

#### **Study Sites**

Patients for the study were enrolled from the outpatients of 11 Institutes/Units of the Council, viz. Central Research Institute, Noida (UP), Homoeopathic Drug Research Institute, Lucknow (UP), Regional Research Institute, Puri (Odisha), Regional Research Institute, Shimla (HP), Regional Research Institute, Gudivada (AP), Regional Research Institute. Imphal (Manipur), Dr. Anjali Chatterjee Regional Research Institute, Kolkata (WB), Clinical Research Unit, Port Blair (Andaman and Nicobar Islands), Clinical Verification Unit, Ghaziabad (UP), Clinical Verification Unit, Patna (Bihar), and Clinical Verification Unit, Vrindaban (UP).

Inclusion criteria were subjects having symptomatological similarity with that of *M. lasiodora* and from all age groups irrespective of sexes. Exclusion criteria were clinical presentations not corresponding with the medicine, and the patients with uncontrolled systemic diseases (e.g. diabetes, hypertension, etc.). Patients who were on any medication for any "acute" purposes 1 week prior to being enrolled in the study were put on a wash-out period of 7 days. Informed written consent was obtained from the eligible subjects or from the guardians in case of minors before initiating the study. Following enrollment, patients were prescribed *M. lasiodora* according to the similarity of symptoms. The medicine was procured from the licensed pharmacy in various potencies, viz. 6C, 30C, 200C, and 1M.

The presenting symptoms and signs of the patients were recorded in a predefined case recording proforma. After doing the anamnesis of each enrolled case, special attention was given to the peculiarity of complaints, their characteristic sensations, modalities, and any associated or concomitant symptoms with the main complaint(s) and general characteristics.

Having noted all these information, the symptoms were repertorized using a repertory prepared for this purpose by the Council to aid the investigator in the selection of an appropriate medicine and subsequently confirmed from the Materia Medica, prepared specially for the study comprising of the proving symptoms of the drug, to find out the similarity of *M. lasiodora* with the symptoms collected from the patient. Thus, if M. lasiodora was found indicated for the patient as per the drug picture recorded,<sup>[5]</sup> it was prescribed in 6C potency thrice a day. If it was not indicated, the patient was excluded from the study and treated in the general outpatients of the respective research Institutes/Units. The changes in presenting symptoms and signs were recorded during the follow-up visits. If there was any kind of improvement, medicine was stopped and was followed by placebo. If there was no change in symptoms and signs even up to 7 days, the next higher potencies like 30C, 200C, and 1M were prescribed in an individualized dosage as per the need of the case and in accordance with homoeopathic principles. If no change was observed even after the change of potencies, the case was closed and considered as a clinical failure. If the patient presented with new symptoms of mild intensity, placebo was prescribed; while the appearance of severe symptoms, sufficient to cause considerable discomfort to the patient, called for a change of medicine or therapy.

The data of all the cases were collected and compiled in specially designed Excel spreadsheet

and thereafter analyzed. Data were presented using descriptive statistics – mean, standard deviations (SD), absolute values, percentages, and 95% confidence intervals (Cl). As a rule of thumb, a minimum of two prescriptions for each symptom have been considered for enlisting.

# **RESULTS**

A total of 25,368 patients were screened overall from outpatients for verifying assigned 34 drugs under the clinical verification program of the Council from October 2005 to March 2010. About 168 patients were enrolled having similar symptomatology with *M. lasiodora* and meeting the prespecified eligibility criteria. Of these, 2 dropped out and 166 results were analyzed in the end [Figure 1].

There were clinical successes in 104 cases (62.65%) and failures in 62 (37.35%), judged subjectively by the physicians. The clinically verified symptoms were enlisted along with the outcomes on the basis of proving records (drug proving profile generated by CCRH) and the symptoms available in other literature, and also the new observations (clinical symptoms), those are not mentioned elsewhere, but found to have changed after administration of *M. lasiodora* [Table 1].

Among the enrolled patients, 105 (63.25%) were male, rest 61 (36.75%) were female. The mean age of the patients was 29.13 years (SD = 17.95).



Figure 1: The study flow diagram

Table 1: List of symptoms verified						
Symptoms (CCRH proving) <sup>[5]</sup>	Prescribed (prevalence)	95% CI	Improved (%)	95% CI	Not improved	95% CI
Throbbing pain in temples	5 (3.01)	1.11-7.26	4 (80)	35.96-97.97	1 (20)	2.03-64.04
Pain in occiput with heaviness; <i>agg.</i> mental exertion, reading, perspiration, heat of sun; <i>amel.</i> rest	5 (3.01)	1.11-7.26	4 (80)	35.96-97.97	1 (20)	2.03-64.04
Painful styes on both eyelids of right eye	15 (9.04)	2.67-10.36	12 (80)	54.05-93.72	3 (20)	6.28-45.95
Coryza profuse, thin, watery; amel. rest	6 (3.61)	1.47-8.05	5 (83.33)	41.78-98.86	1 (16.67)	1.14-58.22
Reddish pimples on face	55 (33.1)	26.14-40.91	23 (41.82)	29.73-54.98	32 (58.18)	45.02-70.27
Tongue coated white	60 (36.1)	28.94-43.99	37 (61.67)	49.00-72.93	23 (38.33)	27.07-51.00
Empty sensation in stomach; amel. after eating	2 (1.20)	0.21-4.73	1 (50)	9.45-90.55	1 (50)	9.45-90.55
Flatulence; agg. after eating; amel. passing flatus	21 (12.65)	8.18-18.91	9 (42.86)	24.44-63.48	12 (57.14)	36.52-75.56
Constipation with flatulence, great straining during stool; first part of stool hard	10 (6.02)	3.09-11.1	3 (30)	10.33-60.77	7 (70)	39.23-89.67
Flatus offensive, after passing stool	2 (1.20)	0.21-4.73	0 (0)	0-70.98	2 (100)	29.02-100
Insufficient, scanty, mucoid stool; or frequent, profuse stool, with stitching pain in abdomen; <i>amel.</i> after stool	38 (22.89)	16.89-30.17	22 (57.89)	42.18-72.16	16 (42.11)	27.84-57.82
Stool greenish, soft, semisolid, scanty, offensive with cutting pain in the abdomen, <i>amel</i> . after stool	2 (1.20)	0.21-4.73	1 (50)	9.45-90.55	1 (50)	9.45-90.55
Semisolid or loose stool, yellowish stool with gurgling sound, stool containing food particles	3 (1.81)	0.47-5.61	2 (66.67)	20.24-94.37	1 (33.33)	5.63-79.76
Stitching pain in left testicle with swelling	5 (3.01)	1.11-7.26	4 (80)	35.96-97.97	1 (20)	2.03-64.04
Dry cough; agg. heat of sun, amel. rest	9 (5.42)	2.67-10.36	8 (88.89)	54.33-99.99	1 (11.11)	0-45.67
Thick yellow, scanty expectoration, <i>agg.</i> morning, <i>amel.</i> open air	8 (4.82)	2.26-9.60	6 (75)	40.09-93.69	2 (25)	6.31-59.91
Violent itching eruptions, burning, oozing watery, transparent, stringy, offensive fluid; <i>agg</i> . evening, night	3 (1.81)	0.47-5.61	1 (33.33)	5.63-79.76	2 (66.67)	20.24-94.37
Painless, indurated boils in lumbar region with slight tenderness	3 (1.81)	0.47-5.61	3 (100)	38.25-100	0 (0)	0-61.75
Symptoms (other literature)	Prescribed (prevalence) <sup>†</sup>	95% CI	Improved (%)	95% CI	Not improved (%)	95% CI
Acute aching pain in right ear <sup>[6,7]</sup>	16 (9.64)	5.79-15.44	16 (100)	77.31-100	0 (0)	0-22.69
Difficult breathing <sup>[6-8]</sup>	2 (1.20)	0.21-4.73	2 (100)	29.02-100	0 (0)	0-70.98
Unsteady gait <sup>[7,9-12]</sup>	3 (1.81)	0.47-5.61	2 (66.67)	20.24-94.37	1 (33.33)	5.63-79.76
Convulsive, uncontrollable movements of arms and legs <sup>[6,7,9-12]</sup>	5 (3.01)	1.11-7.26	4 (80)	35.96-97.97	1 (20)	2.03-64.04
Dull frontal headache <sup>[6]</sup>	3 (1.81)	0.47-5.61	3 (100)	38.25-100	0 (0)	0-61.75
Aversion to any food <sup>[6,8-10]</sup>	7 (4.22)	1.86-8.84	7 (100)	59.56-100	0 (0)	0-40.44
Appetite decreased <sup>[6,8]</sup>	42 (25.30)	19.03-32.74	23 (54.76)	39.94-68.78	19 (45.24)	31.22-60.06
Excessive thirst <sup>[6-10]</sup>	6 (3.61)	1.47-8.05	6 (100)	55.72-100	0 (0)	0-44.28
Tongue dry <sup>[6,8,10]</sup>	2 (1.20)	0.21-4.73	1 (50)	9.45-90.55	1 (50)	9.45-90.55
Burning while urinating <sup>[6-8]</sup>	2 (1.20)	0.21-4.73	2 (100)	29.02-100	0 (0)	0-70.98
Restless sleep <sup>[6-11]</sup>	8 (4.82)	2.26-9.60	7 (87.50)	50.78-99.89	1 (12.50)	0.11-49.22
Ridiculous dreams <sup>[6-8,11]</sup>	8 (4.82)	2.26-9.60	0 (0)	0-37.22	8 (100)	62.78-100
Delirious and restless at night <sup>[6-11]</sup>	2 (1.20)	0.21-4.73	1 (50)	9.45-90.55	1 (50)	9.45-90.55
Fear of death <sup>[4,6-9]</sup>	4 (2.41)	0.77-6.45	4 (100)	45.41-100	0 (0)	0-54.59
Anxious <sup>[6,8,10]</sup>	3 (1.81)	0.47-5.61	3 (100)	38.25-100	0 (0)	0-61.75
Despondent <sup>[6-10]</sup>	3 (1.81)	0.47-5.61	3 (100)	38.25-100	0 (0)	0-61.75

Contd...

Table 1: Contd						
Symptoms/new observations	Prescribed (prevalence) <sup>†</sup>	95% CI	Improvement in main complaint (%)	95% CI	Not improved (%)	95% CI
Thermal relations ( <i>n</i> =56)						
Hot patients	11 (6.63)	3.52-11.85	7 (63.64)	35.19-85.02	4 (36.36)	14.98-64.81
Chilly patients	9 (5.42)	2.67-10.36	7 (77.78)	44.28-94.66	2 (22.22)	5.34-55.72
Sensitive to extremes	36 (21.69)	15.84-28.89	23 (63.89)	47.52-77.58	13 (36.11)	22.42-52.48
Desire/craving for food/drink (n=85)						
Spicy, pungent, and chilly food	12 (7.23)	3.96-12.58	9 (75)	46.15-91.73	3 (25)	8.27-53.85
Salty things	28 (16.87)	11.68-23.63	25 (89.29)	71.99-97.10	3 (10.71)	2.90-28.01
Sweets	34 (20.48)	14.78-27.58	30 (88.24)	72.78-95.93	4 (11.76)	4.07-27.22
Sour	8 (4.82)	2.26-9.60	7 (87.50)	50.78-99.89	1 (12.50)	0.11-49.22
Fatty food	2 (1.20)	2.26-9.60	2 (100)	29.02-100	0 (0)	0-70.98
Fried food	4 (2.41)	0.21-4.73	4 (100)	45.41-100	0 (0)	0-54.59
Warm food	3 (1.81)	0.47-5.61	2 (66.67)	20.24-94.37	1 (33.33)	5.63-79.76
Aversion/dislike to food/drink ( <i>n</i> =28)			_()		(*****)	
Salt/salty food	5 (3.01)	1.11-7.26	3 (60)	22.91-88.40	2 (20)	11.60-77.09
Sweets	5 (3 01)	1 11-7 26	3 (60)	22 91-88 40	2 (20)	11 60-77 09
Tinda (vegetable)	2 (1 20)	0 21-4 73	1 (50)	9 45-90 55	1 (50)	9 45-90 55
Appetite $(n=158)$	2 (1.20)	0.21 4.70	1 (00)	0.40 00.00	1 (00)	0.40 00.00
Increased	112 (67 47)	59 71-74 41	77 (68 75)	59 64-76 61	35 (31 25)	23 39-40 36
Thirst (n=158)	112 (01.47)	00.7174.41	11 (00.10)	00.04 / 0.01	00 (01.20)	20.00 40.00
Increased	22 (13 25)	8 67-10 50	11 (50)	30 72-69 28	11 (50)	30 72-69 28
Decreased	16 (9.64)	5 70-15 <i>11</i>	14 (87 50)	62 72-07 76	2 (12 50)	2 24-37 28
Tongue $(n=115)$	10 (3.04)	5.75-15.44	14 (07.50)	02.12-31.10	2 (12.50)	2.24-37.20
Clean	46 (27 71)	21 10-35 28	23 (50)	36 12-63 88	23 (50)	36 12-63 88
Meiot	40 (27.71)	6 72 16 02	23 (50)	20.02.70.07	23 (50)	20.02.70.07
Niolst	10 (10.04)	0.75-10.05	9 (50)	29.03-70.97	9 (50)	29.03-70.97
	2 (1.20)	0.21-4.73	T (50)	9.40-90.00	1 (50) 2 (50)	9.40-90.00
	4 (2.41)	0.78-0.45	2 (50)	0.70.00	2 (50)	15-65
Red Streaks	2 (1.20)	0.21-4.73	0(0)	0-70.98	2 (100)	29.02-100
	3 (1.81)	0.47-5.61	0(0)	0-61.75	3 (100)	38.25-100
laste ( <i>n</i> =109)	4 (0.44)	0 70 0 45	0 (75)	00.04.00.50	4 (05)	0 44 74 00
Bitter	4 (2.41)	0.78-6.45	3 (75)	28.91-96.59	1 (25)	3.41-71.09
Impaired	8 (4.82)	2.26-9.60	0(0)	0-37.22	8 (100)	62.78-100
Loss of	4 (2.41)	0.78-6.45	3 (75)	28.91-96.59	1 (25)	3.41-71.09
Sweetish	2 (1.20)	0.21-4.73	1 (50)	9.45-90.55	1 (50)	9.45-90.55
Urine ( <i>n</i> =101)						
Frequent	8 (4.82)	2.26-9.60	5 (62.50)	30.38-86.51	3 (37.50)	13.49-69.62
Sweat (n=93)						
Amount ( <i>n</i> =85)						
Increased/profuse/excessive	6 (3.61)	1.47-8.05	3 (50)	18.76-81.24	3 (50)	18.76-81.24
Decreased/less/scanty	6 (3.61)	1.47-8.05	6 (100)	55.72-100	0 (0)	0-44.28
Site ( <i>n</i> =10)						
Arm and armpit	4 (2.41)	0.78-6.45	3 (75)	28.91-96.59	1 (25)	3.41-71.09
Face	5 (3.01)	1.11-7.26	3 (60)	22.91-88.40	2 (40)	11.60-77.09
Forehead	3 (1.81)	0.47-5.61	1 (33.33)	5.63-79.76	2 (66.67)	20.24-94.37
Sleep ( <i>n</i> =109)						
Quality ( <i>n</i> =104)						
Disturbed	19 (11.45	7.21-17.54	10 (52.63)	31.70-72.67	9 (47.37)	27.33-68.30
Unrefreshing	2 (1.20)	0.21-4.73	1 (50)	9.45-90.55	1 (50)	9.45-90.55

Contd...

Table 1: Contd						
Position ( <i>n</i> =10)						
Left	5 (3.01)	1.11-7.26	3 (60)	22.91-88.40	2 (40)	11.60-77.09
Right	3 (1.81)	0.47-5.61	2 (66.67)	20.24-94.37	1 (33.33)	5.63-79.76
Supine	3 (1.81)	0.47-5.61	2 (66.67)	20.24-94.37	1 (33.33)	5.63-79.76
Mind ( <i>n</i> =55)						
Sad, depressed, melancholic	20 (12.05)	7.69-18.22	16 (80)	57.82-92.51	4 (20)	7.49-42.18
Desire to live alone	10 (6.02)	3.09-11.1	8 (80)	47.94-95.41	2 (20)	4.59-52.06
Dull	2 (1.20)	0.21-4.73	1 (50)	9.45-90.55	1 (50)	9.45-90.55
Fearful	3 (1.81)	0.47-5.61	3 (100)	38.25-100	0 (0)	0-61.75
Forgetful, weak memory	6 (3.61)	1.47-8.05	6 (100)	55.72-100	0 (0)	0-44.28
Restless	6 (3.61)	1.47-8.05	3 (50)	18.76-81.24	3 (50)	18.76-81.24
Irritable	22 (13.25)	8.67-19.59	18 (81.82)	60.88-93.29	4 (18.18)	6.71-39.12
Desire for company	3 (1.81)	0.47-5.61	3 (100)	38.25-100	0 (0)	0-61.75
Aversion to noise, light and crowd	7 (4.22)	1.86-8.84	7 (100)	59.56-100	0 (0)	0-40.44
Memory sharp	4 (2.41)	0.78-6.45	2 (50)	15-85	2 (50)	15-85

\*As a rule of thumb, a minimum of two prescriptions for each symptom have been considered for enlisting. CI: Confidence interval; CCRH: Central Council for Research in Homoeopathy

Patients spanned all age groups, but majority were 18 years or below (n = 61, 36.97%) and 19–30 years (n = 45, 27.27%). One hundred and fifty-seven (95.15%) were Hindu, 81 (63.78%) were unmarried, and majority (n = 74, 53.62%) were by occupation student. Mean body mass index (BMI) was 22.02 (SD = 4.78), and most of the patients (n = 46, 49.46%) belonged from the normal BMI range of 18.5–24.9 [Table 2].

Among the 166 patients, a total of 23 different types of clinical diagnoses were obtained; acne was the most frequently diagnosed condition (n = 55; 33.13%) [Table 3].

Among the proving symptoms, the following three were observed most frequently: "white coated tongue" (n = 60; success rate 61.67%, 95% CI: 49–72.93%); "reddish pimples on face" (n = 55, success rate 41.82%, 95% CI: 29.73-54.98%); and "insufficient, scanty, mucoid stool; or frequent, profuse stool, with stitching pain in abdomen; amel. After stool" (n = 38, success rate 57.89%, 95% CI: 42.18–72.16%). Symptoms achieving a success rate of 75% or higher were: "throbbing pain in temples," "pain in occiput with heaviness; agg. Mental exertion, reading, perspiration, heat of sun; amel. Rest," and "stitching pain in left testicle with swelling" (80% each, 95% CI: 35.96-97.97%); "painful styes on both eyelids of right eye" (80%, 95% CI: 54.05–93.72%); "coryza profuse, thin, watery; amel. Rest" (83.33%, 95% Cl: 41.78–98.86%); "dry cough; agg. Heat of sun, amel. Rest" (88.89%, 95% CI: 54.33–99.99%); "thick yellow, scanty expectoration, agg. Morning,

*amel.* Open air" (75%, 95% CI: 40.09–93.69%); and "painless, indurated boils in lumbar region with slight tenderness" (100%, 95% CI: 38.25–100%) [Table 1].

Among the existing symptoms available from other literature, the most frequently observed symptoms were as follows: "appetite decreased" (n = 42, success rate 54.76%, 95% CI: 39.94-68.78%); "acute aching pain in right ear" (n = 16, success rate 100%, 95% CI: 77.31–100%); "restless sleep" (n = 8, success rate 87.5%, 95% CI: 50.78-99.89%); and "ridiculous dreams" (n = 8, success rate 0%, 95% CI: 0-37.22%). Symptoms achieving success rate of 75% or higher were: "acute aching pain in right ear" (100%, 95% CI: 77.31–100%); "difficult breathing" and "burning while urinating" (100% each, 95% CI: 29.02–100%); "convulsive, uncontrollable movements of arms and legs" (80%, 95% CI: 35.96–97.97%), "dull frontal headache" (100%, 95% CI: 38.25-100%); "aversion to any food" (100%, 95% CI: 59.56-100%), "excessive thirst" (100%, 95% CI: 55.72–100%), "restless sleep" (87.5%, 95% CI: 50.78-99.89%), "fear of death" (100%, 95% CI: 45.41-100%), and "anxious," and "despondent" (100% each, 95% CI: 38.25-100%) [Table 1].

Alongside, most frequently observed symptoms were as under: "Appetite increased" (n = 112, success rate 68.75%, 95% CI: 59.64–76.61%); "clean tongue" (n = 46, success rate 50%, 95% CI: 36.12–63.88%); and "thermal relations: Sensitive to extremes" (n = 36, success rate 63.89%, 95% CI: 47.52–77.58%). Symptoms achieving success rate of 75% or higher were: "chilly" (77.78%, 95% CI:

Table 2: Sociodemographics	of the patients
( <i>n</i> =166)	
Features	n (%)
Gender ( <i>n</i> =166)	
Male	105 (63.25)
Female	61 (36.75)
Age: Mean±SD	29.13±17.95
Age (years) (n=165)	
≤18	61 (36.97)
19-30	45 (27.27)
31-50	33 (20)
51-70	20 (12.12)
≥71	6 (3.64)
Religion (n=165)	
Hindu	157 (95.15)
Islam	7 (4.24)
Christian	1 (0.61)
Marital status (n=127)	
Married	46 (36.22)
Unmarried	81 (63.78)
Occupation (n=138)	
Business	22 (15.94)
Service	21 (15.22)
Student	74 (53.62)
Homemaker	13 (9.42)
Retired	7 (5.07)
Others	1 (0.72)
BMI: Mean±SD	22.02±4.78
BMI ( <i>n</i> =93)	
Underweight (<18.5)	23 (24.73)
Normal (18.5-24.9)	46 (49.46)
Overweight (25-29.9)	19 (20.43)
Obese I (30-34.9)	3 (3.23)
Obese II (35-39.9)	2 (2.15)

BMI: Body mass index; SD: Standard deviation

44.28–94.66%); "desire for spicy, pungent, chilly food" (75%, 95% CI: 46.15–91.73%); "desire for salty things" (89.29%, 95% Cl: 71.99-97.1%); "desire for sweets" (88.24%, 95% CI: 72.78–95.93%); "desire for sour" (87.5%, 95% CI: 50.78-99.89%); "desire for fatty food" (100%, 95% CI: 29.02-100%); "desire for fried food" (100%, 95% CI: 45.41-100%); "thirst decreased" (87.5%, 95% CI: 62.72-97.76%); "taste bitter," "taste loss of," and "sweat arm and armpit" (75% each, 95% CI: 28.91–96.59%); "sweat scanty" and "forgetful, weak memory" (100% each, 95% CI: 55.72–100%); "sad, depressed, melancholic" (80%, 95% Cl: 57.82-92.51%); "desire to live alone" (80%, 95% CI: 47.94–95.41%); "fearful" and "desire for company" (100% each, 95% CI: 38.25–100%); "irritable" (81.82%, 95% CI: 60.88–93.29%); and

Table 3: Most frequently obtained clinical diagnoses	
Clinical diagnoses	n <sup>*</sup> (%)
Acne	55 (33.13)
Dyspepsia, flatulence, etc.	21 (12.65)
Diarrhea, dysentery	20 (12.05)
Earache	16 (9.64)
RTI*	15 (9.04)
Styes	15 (9.04)
Constipation	11 (6.63)
Headache	10 (6.02)
IBS**	8 (4.82)
Chorea, convulsion, tremor	8 (4.82)
Abscess and boil	6 (3.61)
Headache	6 (3.61)
Orchitis	5 (3.01)

\*RTI: Respiratory tract infection; \*\*IBS: Irritable bowel syndrome; \*Conditions with a minimum of 5 diagnoses have been listed in this table. Total diagnoses do not reflect total number of patients because the patients presented with multimorbid conditions. Other diagnoses were eczema, benign hypertrophy of prostate, sterility, leucorrhea, vertigo, piles, insomnia, scabies, and hypertension

"aversion to noise, light and crowd" (100%, 95% CI: 59.56–100%) [Table 1].

### DISCUSSION

During the study, 34 symptoms of *M. lasiodora* were verified, of which 18 symptoms were from the proving of the medicine conducted by the Council, and the rest 16 were clinical re-confirmation of symptoms from other literature. Alongside, 47 new symptoms were identified as clinically associated symptoms, improved wholly or partially, or showing improvement in the main complaint. Many symptoms achieved improvement percentage of 75% or higher, still, the frequency of prescriptions on the basis of those remained compromised; for example, "difficult breathing" (symptom from other literature) had a success rate of 100% (95% CI: 29.02–100%), but had a poor prescribing frequency of twice only on the basis of this very symptom.

Clinical conditions found to be improved by the medicines were a headache, stye, coryza, acne, otalgia, dyspepsia, flatulence, constipation, diarrhea, orchitis, cough with dyspnoea, dermatitis, boils, chorea, urinary tract infection, and insomnia. The spheres of action identified were head, eyes, nose, face, ear, stomach, abdomen, rectum, genitourinary system, chest, skin, nervous system, and sleep. Few mental symptoms were elicited – anxiety, fearful, fear of death, and desire for company; delirium and restless at night with ridiculous dreams; sad,

depressed, despondent, melancholic, irritable, aversion to noise, light and crowd, desire to live alone; both dull and sharp patients.

Traditionally, Mygale, like other spider remedies, has been used for diseases of nervous system, like chorea, convulsion, tremor, etc., Our study shows that it may also be used in styes safely since 80% patients were improved after treatment, suggesting its certain usefulness in this condition. Strikingly, all the 16 patients (100%) suffering from otalgia were also improved. Preliminary findings point to a differential discussion between M. lasiodora and Pulsatilla nigricans. The prevalence of decreased thirst is significantly higher in the Mygale population (decreased thirst improved 14/16 vs. increased thirst improved 11/22,  $\chi^2 = 5.788$ , P = 0.016 two-tailed) than in the *Pulsatilla* population, while this symptom is generally known as a keynote for Pulsatilla. Besides, the data obtained are not statistically significant enough to give any specific comment on the thermal reaction of Mygale (improvement: hot 7/11, chilly 7/9, sensitive to extreme 23/36;  $\chi^2 = 0.656$ , P = 0.720 two-tailed). These findings are probable and need to be confirmed in future observations of clinicians.

The action on skin was marked with itching, burning, and oozing of thin watery offensive discharge. Moreover, it has been successfully used in boils in lumbar region with indurations but with painlessness. All these skin symptoms have emerged as new pathogenesis of the drug through its proving. Response to treatment to all these complaints increases the probability of the drug in curing such illness in clinical practices. Moreover, our initial observation also elicited two polar symptoms – excessive thirst (literature symptom) and decreased thirst (new symptom). Assessment of likelihood ratio (LR) for these two symptoms and analysis of polarity is required for further verification and confirmation.

Apart from the above observations, during the study, a group of valuable symptoms also emerged reflecting the general characters of the drug and thereby widening the probable scope of its therapeutic applicability. These were a desire for salty things and sweets, increased appetite, excessive or decreased thirst, and decreased sweat. Obtained mental features were sad, depressed, melancholic mood; forgetful and weak memory; irritability; and aversion to noise, light, and crowd. These may be considered as useful clinical concomitants, carrying much importance to prescribe the medicine. Moreover, the overall results generated were contributed by different study sites, indicating enhanced generalizability of the study findings.

## CONCLUSION

Being an observational study, this paper cannot address the inherent limitations of its study design, e.g., the placebo effect, the therapeutic relationship with the clinician (empathy, compassion, social desirability, etc.), the regression effect toward the mean, and the use of undisclosed concomitant treatments, if any. On many occasions, limited number of prescriptions was generated for specific symptoms making interpretation difficult. Hence, further confirmation of the symptoms in larger sample size and prospective estimation of LR in Bayesian method in general practice settings is necessary before inclusion of the symptoms in homoeopathic Materia Medica and Repertory.

#### Acknowledgment

The authors deeply acknowledge Dr. Vikram Singh, Former Deputy Director, CCRH, Dr. Krishna Singh, Former Assistant Director, CCRH and Dr. Subhash Kaushik, Scientist - 4, CCRH for their contribution toward the monitoring of data collection for a shorter period from time to time during the study. We gratefully acknowledge the active cooperation and participation made toward the study by the patients and the supporting staffs.

#### **Financial Support and Sponsorship**

Central Council for Research in Homoeopathy.

#### **Conflicts of Interest**

There are no conflicts of interest.

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#### मइगेल लासिओडोरा– एक बहुकेन्द्रीय निरीक्षण होम्योपैथिक नैदानिक सत्यापन अध्ययन

संदर्भः नैदानिक सत्यापन परिषद का जारी अनुसंधान कार्यक्रम है जिसने कई दूर्लभ होम्योपैथिक दवाओं का सत्यापन किया है।

उद्देश्यः माइगेल लासिओडोरा के रोग लक्षण विज्ञान के सत्यापन के दौरान सुधरे हुए लक्षणों की जांच द्वारा नैदानिक सत्यापन करना।

**पृष्ठभूमि और प्रारूपः** इस बहुकेन्द्रीय निरीक्षण अध्ययन में, 166 रोगियों को उपलब्ध दवा रोगलक्षण विज्ञान और निर्धारित योग्यता मापदंड के मिलान करने के बाद पंजीकृत किया गया था। दवा को होम्योपैथी नियमों के अनुसार 6सी, 30सी, 200सी और 1एम पोटेंसी में दिया गया।

प्रयुक्त सांख्यिक विश्लेषणः आंकडों को वर्णनात्मक सांख्यिक शब्दों में प्रस्तुत किया गया था।

परिणामः १६६ मामलों का विश्लेषण किया गया; पुरूष/महिलाः १०५/६१; औसत आयु २९.१३ वर्ष।

चिकित्सकों द्वारा विषयात्मक रूप से जांचे गये 'नैदानिक मामलों' में से 104 को सफलता और 62 को विफलता मिली। कम से कम दो नुस्खों को प्रत्येक लक्षण के लिए चुनी गई सूची का सही नियम माना गया। सत्यापित किए गए लक्षणों की संख्या निम्न थीः सिद्ध किए गए लक्षण (एन=18), अन्य साहित्य से लक्षण (एन=16) और नए निरीक्षण (एन=47)। आंकडों को माध्य, मानक विचलन एन (प्रतिशत) और 95 प्रतिशत विश्वस्त अंतरालों (सीआई) में प्रस्तुत किया गया।

**निष्कर्षः** कुल 34 उपलब्ध लक्षणों को सत्यापित किया गया और 47 नए लक्षणों को पहचाना गया। सावधानीपूर्वक निष्कर्ष आवश्यक हैं। आगे बड़े नमूने की प्रतिरूप और सामान्य प्रैक्टिस सेटिंग में संभावता अनुपात का अनुमान, भावी बायेसियन पहुंच से होम्योपैथिक साहित्य में लक्षणों को शामिल करने से पहले आवश्यक है।

#### Mygale lasiodora- estudio homeopático observacional multicéntrico verificación clínica

#### RESUMEN

**Contexto:** La verificación clínica es un programa de investigación en curso del *Council* que ha verificado muchos remedios homeopáticos raros.

**Objetivos:** Verificación clínica de la sintomatología de *Mygale lasiodora* determinando los síntomas mejorados durante la verificación.

**Diseño:** En este estudio observacional multicéntrico, se incluyeron 166 pacientes cuya sintomatología coincidía con el fármaco disponible y que cumplían los criterios de elegibilidad especificados. El remedio se prescribió en las potencias 6C, 30C, 200C y 1M, conforme a los principios homeopáticos.

Análisis estadístico: Los datos se presentaron en forma de estadísticas descriptivas.

**Resultados:** Se analizaron 166 casos; varones/mujeres: 105/61; edad media: 29,13 años. Según el juicio subjetivo de los médicos, se determinó un "éxito clínico" en 104 casos y un "fracaso clínico" en 62. Un minimo de dos prescripciones se considero para la iincludion de cada sintoma como una regla. El número de síntomas verificados fue el siguiente: síntomas de patogenesia (n=18), síntomas de otras bibliografías (n=16) y nuevas observaciones (n=47). Los datos se presentaron como medias, desviaciones estándar, N (%) e intervalos de confianza del 95% (IC del 95%).

**Conclusiones:** Se verificó un total de 34 síntomas disponibles y se identificaron 47 síntomas nuevos. Es necesario interpretar estos resultados con precaución. Antes de incluir los síntomas en la bibliografía homeopática deben replicarse estos resultados en muestras más amplias y se ha de efectuar una estimación de la relación de probabilidad en la práctica clínica con un enfoque prospectivo bayesiano.