CLINICAL VERIFICATION

Alfalfa - A multicentric clinical verification study

P.S. Chakraborty¹, Subhash Kaushik¹, S.S. Nain², Pramodji Singh³, V.G. Prasad⁴, Darshan Singh⁶, K.C. Das⁸, Ojit Singh⁷, P.K. Pradhan⁹, R. Bavaskar⁹, L. Debata5, M.K. Rai¹⁰

Introduction: Clinical verification programme is an ongoing research programme of the Central Council for Research in Homoeopathy since its inception, under which many Indian and rarely used drugs in Homoeopathy have been undertaken. *Alfalfa* is a flowering plant and known for its use as a medicine in toning up the appetite and digestion and favorably influencing nutrition. Disorders like anorexia, nervousness, insomnia, diabetes, lethargy and malnutrition are mainly within its therapeutic range. The Council had undertaken an observational study on *Alfalfa* from October 2005 to March 2010, to determine its therapeutic effect through clinical verification.

Objectives: The primary objective was to clinically verify the symptomatology of *Alfalfa* as observed during the proving conducted by the Council on this drug and the secondary objective was to ascertain the clinical symptoms.

Methods: In this multicentre study, a total of 169 patients from all age groups and both sexes were enrolled from the OPDs of respective institutes and units of the Council following the exclusion and inclusion criteria as per protocol. The informed written consents from the patients were also taken. Their presenting signs and symptoms were recorded in a predefined case recording proforma. Thereafter, on repertorising the symptoms of each patient, if *Alfalfa* was found to be the similimum or very closely similar to the symptoms of the patient, then the case was enrolled. The medicine was prescribed in different potencies like 6c, 30c and 200c in ascending order, as per the need of the case and in accordance with homoeopathic principles. The progress was noted in follow up sheets to determine the effect of the medicine.

Result: The result obtained from the enrolled patients was analysed after the conclusion of the study. It was found that many of the symptoms obtained by proving of the drug (conducted by the Council) were present in the patients clinically and thus stood verified. Apart from these, some clinical symptoms (symptoms which were not exhibited during the proving of the *Alfalfa*, but got cured in the sick, after the administration of the medicine) were also emerged during the study, exploring the wider area of the medicine for its therapeutic use.

Fifty five symptoms of *Alfalfa*, including its proving symptoms (obtained by the Council), were verified during the study and most of these symptoms were of gastrointestinal system, respiratory & nervous system, head, back and sleep. The essence of the medicine lies in its properties like digestive, anti-inflammatory, neurotic and antipyretic.

*Address for Correspondence:

Dr. P.S. Chakraborty

Asstt. Director (H)

Central Council for Research in Homoeopathy

61-65, Institutional Area, Janakpuri, New Delhi -110058

Email: drpsch@yahoo.co.in

¹Central Council for Research in Homoeopathy. New Delhi

²Central Research Institute, Noida (U.P.)

³Homoeopathic Drug Research Institute, Lucknow (U.P.)

⁴ Regional Research Institute, Gudivada

⁵ Regional Research Institute, Puri

⁶ Regional Research Institute, Shimla

⁷Regional Research Institute, Imphal

⁸Regional Research Institute, Kolkata

⁹Clinical Research Unit, Portblair

¹⁰Clinical Verification Unit, Vrindaban (U.P.)

Conclusion: Alfalfa may be considered as a remedy for various clinical conditions like anorexia, coryza, depression, dry cough, fever, headache, irritability, lethargy, sleeplessness, sneezing, cervical pain and weakness. Since Fifty five proving symptoms of the drug were verified during the study, it may be concluded that the drug symptoms were amply verified.

Keywords: homoeopathy; clinical verification; Alfalfa

Introduction

Every system of medicine follows certain rules for clinical use of its medicines. In homoeopathic system, we use medicines guided by their characteristic signs and symptoms.

Though the way of introducing a drug into homoeopathic armamentarium is Drug Proving, but other sources like toxicology, animal experimentation and effects of medicines observed on the sick, also provide data for their clinical use. All medicines, which have been proved fully or partially or introduced through any of the above mentioned sources, need to be verified on the sick to bring out their characteristic signs and symptoms. Those medicines, which have less characteristic signs and symptoms, need to be clinically verified to be put to clinical use in a better way.

Hahnemann said that clinical verification is absolutely necessary to develop the pure Materia Medica. But it was Hering, who felt the importance of clinical verification because of the fact that a symptom of proving becomes doubly reliable when it is clinically verified on sick persons and it helps to derive the guiding symptoms of a drug. He mentioned five steps, in order to obtain a characteristic symptom of a drug, in which the fifth and final step is verification of symptoms on the sick, otherwise known as Clinical Verification. It is through clinical verification only that we are able to determine grades to a rubric before finally incorporating it in Repertory. 2

Keeping in view these aspects, Central Council for Research in Homoeopathy (CCRH) has, since its inception, undertaken a separate research programme in which many Indian and rarely used drugs in Homoeopathy have been clinically verified and the outcome has been published in the form of articles and books by the CCRH. The present article is the outcome of an observational study on the drug Alfalfa where data of the drug proving conducted by CCRH, was subjected to verification on sick persons.

Alfalfa is a herbaceous perennial. Its botanical name



Alfalfa plants with flowers

is Medicago sativa Linn. and it belongs to the family of Leguminosae. Its common names are Lasunghas in Hindi, Lucerne, Chilean Clover in English.³ The name Alfalfa comes from the Arabic name "alfisfisa" mutated into Spanish name "alfalfa". The English name "alfalfa" dates back to the mid 19th century. Since then it has been slowly entering into other languages besides English and Spanish. This flowering plant is being cultivated as an important forage crop in the US, Canada, Argentina, France, Australia, the Middle East, South Africa and many other countries. It is known as Lucerne in the UK, France, Australia, South Africa and New Zealand, and known as Lucerne grass in South Asia. It superficially resembles clover, with clusters of small purple flowers.⁴

This leguminous plant has entered India from the north-west viz. Kashmir, Baluchistan, Afghanistan & other countries approached from the north-west. In India the military cantonments have been the great centres of Lucerne growing in Western India, in South Sind, Deccan & Gujarat.⁵

The main activities of *Alfalfa* have been reported in the literature as abortifacient, alterative, antiatherosclerotic, antibacterial, antinflammatory, antipyretic, antiscorbutic, antispasmodic, antithrombic, aperitif, bitter, cardiotonic, choleretic, cyanogenic, deobstruent, depurative, digestive, diuretic, ecbolic, emetic, emmenagogue, estrogenic, fungicide, hemolytic, hemostat, hypocholesterolaemic, hypoglycemic, lactagogue, stimulant, stomachic, tonic.⁶

Alfalfa - A multicentric clinical verification study P.S. Chakraborty et al

In homoeopathy, the whole plant excluding roots is used for the preparation of medicine. It was first proved by A.L. Blackwood.³

Medical uses

Alfalfa has been used as an herbal medicine for over 1,500 years. Alfalfa is high in protein, calcium, plus other minerals, vitamins in the B group, vitamin C, vitamin D, vitamin E and vitamin K.⁴

In early Chinese medicine, physicians used young alfalfa leaves to treat disorders related to the digestive tract and the kidneys. In Ayurvedic medicine, physicians used the leaves for treating poor digestion.⁴

In Homoeopathy, the drug is used for headache, pain in eye, coryza, sore throat, dry cough, anorexia, flatulence, diarrhea, chronic appendicitis, palpitation of heart, pain in neck, disturbed sleep, painful boils, papular and vesicular eruptions, hot flushes of face, nervousness, neurasthenia, sadness, lethargies, weakness, improving lactation in nursing women and helping in gaining weight.^{7,8,9,10,11}.

Objectives

Primary objective: To clinically verify the symptomatology of *Alfalfa* as observed during the proving conducted by the CCRH on this drug. Secondary objective: To ascertain the clinical symptoms (which were not observed during the proving of the drug but disappeared in the sick during the application of the medicine, either partially or completely).

Methodology

Patients for the study were enrolled from the OPDs of eleven Institutes/ Units of the Council, viz. Central Research Institute, Noida (U.P.), Homoeopathic Drug Research Institute, Lucknow (U.P.), Regional Research Institute, Puri (Odisha), Regional Research Institute, Shimla (H.P.), Regional Research Institute, Gudivada (A.P.), Regional Research Institute, Imphal (Manipur), Dr. Anjali Chatterji Regional Research Institute, Kolkata (W.B.), Clinical Research Unit, Port Blair (Andaman and Nicobar Islands), Clinical Verification Unit, Ghaziabad (U.P.), Clinical Verification Unit, Vrindaban (U.P.)

In this multicentre study, 169 patients (95 males and 74 females) were prescribed *Alfalfa* according to the similarity of symptoms during the period October 2005- March 2010. The medicine was procured from

the licensed pharmacy in various potencies, viz. 6C, 30C and 200C. The patients were from all age groups and both sexes. Patients who were on any medication for one week prior to being enrolled in the study were put on a wash-out period of 7 days. The patients, who were suffering from any systemic disease and were under regular medication for that, were excluded from the study and the excluded cases were treated in the general OPD of the institute for appropriate medical care. An informed written consent was obtained from the eligible subjects before initiating the study.

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 peculiar sensations, modalities and any associated or concomitant symptom with the main symptom. Special attention was given to the causation, mental symptoms, thermal reactions, cravings, aversions, perspiration, sleep, dreams, appetite, thirst, stool, urine etc.

Having noted all this information, the symptoms were repertorised using a repertory prepared for this purpose by the Council to help the investigator to convert in to rubrics and subsequently to the consult the Materia Medica, to see if the characteristics of the patient matched with those of Alfalfa.

Thus, if Alfalfa was found suitable for the patient on the basis of similarity, it was prescribed in 6C potency. If Alfalfa is not indicated, the patient was excluded from the study and treated in the General O.P.D. of the Centre. The changes in presenting symptoms and signs were recorded during the follow-up visits. Any kind of improvement was followed by placebo. If there was no change in symptoms and signs for a considerable period, next higher potencies like 30C and 200C potencies were prescribed. If no change was observed, even after 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 appearance of severe symptoms, sufficient to cause considerable discomfort to the patient, called for change of medicine or therapy.

Results

The data of all the cases were collected, compiled and analysed. The clinically verified symptoms are given in Table-1 along with the number of patients prescribed on the basis of symptoms available or proving records

(drug proving profile generated by CCRH) and also the number of patients who got relief after administration of *Alfalfa*. The numericals superscripted along with the symptoms in the Table-1 denote the literatures cited. Part of the main symptom (character, modalities, concomitants, etc.) which was not observed during the proving but disappeared in the patients during the study either partially or completely and are not mentioned in the referred literature has been kept along with the

main symptom in italics. In the column 'Improvement status', the first figure denotes the number of patients who had the symptom and to whom the medicine was prescribed and the second figure denotes the number of patients who got relief of the same symptom. Table-2 contains those symptoms which are not found in the proving literature of the medicine, but found to have disappeared after the application of *Alfalfa*, otherwise known as clinical symptoms.

Table-1: Clinically verified symptoms observed during during the study

Location	Symptom(s)	Improvement Status
Mind	Gloomy with palpitation, no inclination to work ⁷	4,2
	Irritable ^{8, 9, 10}	8,8
	worse during evening ^{8, 9, 10}	4,4
	No desire to work ⁷	2,1
	Gloomy, irritable and palpitation of the heart ⁷	1,1
Head	Heaviness in head, agg. at night, amel. in morning ^{7,8}	20,15
	with no inclination to work ⁷	2,1
	Dull heavy felling in occiput, agg. towards evening ^{8,9,10}	1,1
	Violent headache ^{9,10}	3,3
	Frontal headache ⁷	18,14
	dull, heavy ⁷ agg. at night	4,4
	amel. in morning	3,3
	amel. walking	1,1
	amel. by washing with cold water ⁷	1,1
Nose	Coryza with sneezing ⁷	35,32
	agg. in open air	4,4
	agg. in morning	27,24
Throat	Irritation in throat, amel. from tea, hot drinks ⁷	4,4
	with hoarseness	1,1
Stomach	Appetite impaired ^{9,10}	4,3
	Appetite increased ^{9,10}	2,1
	Sensation of hunger at all time ¹⁰	2,2
	Desire to eat frequently, can't wait for regular meal ^{9,10}	1,1
	Thirst increased ^{9,10}	11,11
Abdomen	Abdomen distended with flatus ^{8,9,10}	7,7
Cough	Dry cough ⁷	18,14
	agg. at night	13,11
	with irritation in throat	2,2

Alfalfa - A multicentric clinical verification study P.S. Chakraborty et al

Location	Symptom(s)	Improvement Status
	with fever, bodyache and sneezing	5,3
Rectum	Frequent urging to pass stool ⁷	2,2
	Burning in anus ⁷	5,4
Urine	Frequent urging to urinate ^{9,10}	2,1
Chest	Feeling of discomfort in chest ⁷	1,1
Back	Pain in neck ⁷	24,17
	agg. in morning ⁷	18,12
	drawing pain in neck, agg. in morning, 1 lying down and moving forw	vard 2,1
	Aching pain and pain in back agg. by movement, amel. by hot application	n 4,4
	Acute cramping pain	17,11
Skin	Painful boils on middle of right leg ⁷	1,1
	Red papular eruption on left leg7	1,1
Sleep	Disturbed sleep ⁷	13,11
	with lethargic feeling ⁷	12,10
	with weakness ⁷	1,1
	Sleeplessness	4,4
Generalities	Dull aching pain in whole body ⁷	9,6
	with weakness ⁷	1,1
	Lethargic ⁷	4,4
	Weakness ⁷	38,19
	with giddiness	1,1
	with headache and desire to sleep ⁷	1,1
	profound, after fever	1,1
	on walking	16,12

Table-2: Clinical symptoms observed during during the study

Location	Symptom(s)	Improvement Status
Stomach	Anorexia	11,9
Fever	Fever agg. in morning	7,7
Extremities	Cramp in calf muscles	1,1

Repertory

A concise repertory of the verified symptoms according to the structure of the J. Kumzli's Kent's Repertorium Generale has been compiled for quick

reference.¹² Rubrics and sub-rubrics in italics are new rubrics i.e. not mentioned in Kent's repertory while rubrics and sub rubrics in roman letters are existing rubrics of the said repertory which were reconfirmed through verification in this study.

MIND URGING, frequent SADNESS (GLOOMY) **BLADDER** palpitation, heart, with **URGING** to urinate, frequent no inclination to work, with COUGH IRRITABILITY, evening **DRY**, night palpitation, heart, with bodyache with WORK, aversion to mental fever, with **HEAD** irritation in larynx HEAVINESS, sneezing, and morning, amel. **CHEST** night discomfort feeling of dull occiput, evening **BACK** no inclination to work PAIN, ACHING hot application amel. PAIN, motion, on Forehead, cold applications amel. CRAMP-LIKE, Cervical region DULL pain, morning, amel. DRAWING, Cervical region night morning walking lying, while cold applications amel. moving forward **VIOLENT EXTREMITIES NOSE** CRAMPS, Lower Limb, CORYZA, morning Leg, calf air, open **ERUPTIONS Leg,** middle of right, painful sneezing, with boils **THROAT** Leg, left IRRITATION, tea, hot drinks amel. red, papular voice, hoarseness with **SLEEP STOMACH DISTURBED APPETITE**, impaired lethargic felling, with increased weakness, with tormenting (cannot wait for regular meal) **SLEEPLESSNESS** wanting **FEVER** THIRST, extreme **MORNING ABDOMEN GENERALITIES DISTENSION**, flatus with LASSITUDE (Lethargic) **RECTUM** PAIN, dull, aching PAIN, burning weakness, with

Alfalfa - A multicentric clinical verification study P.S. Chakraborty et al

WEAKNESS, fever, after

giddiness with headache with sleep desire to, with walking, from

Discussion

The study of the drug *Alfalfa* was done on 169 patients of all age groups. During the study, 55 symptoms of this drug were verified (including the symptoms obtained from proving of the medicine by the Council), out of which 5 relate to mind, 9 to head, 3 each to nose & throat, 9 to gastrointestinal system, 4 to cough, 1 each to urine & chest, 5 to back, 2 to skin, 4 to sleep, 1 each to fever & extremities and 7 symptoms to generalities.

Thus, mind as well as every system of the body is influenced by *Alfalfa* but it predominantly acts on the respiratory system, head, nervous system, gastrointestinal system, sleep & back. Clinically it is found useful for anorexia, coryza, depression, dry cough, fever, flatulence, giddiness, headache, irritability, pain in neck, prostration, sleeplessness and sneezing.

The medicine primarily affects the nose, back, head, sleep & stomach besides mind. Its general modalities are agg. in morning and at night and among the particular modalities agg. in open air, movement, walking are important to be noted whereas amel. from hot drinks, hot application and morning have been verified in a number of clinical conditions.

Alfalfa is a very good medicine for general prostration with no desire for work. Patient is gloomy and irritable which is mostly marked in evening. It is also proved to be useful in headache which is marked with heaviness in frontal region, better in morning, in cold weather and washing by cold water.

Alfalfa is indicated in heaviness of head which is worse at night and better in the morning. Violent headache especially in frontal region is better from cold water application. The medicine is found to relieve coryza which is worse in morning and in open air.

The medicine was also found to relieve dry cough at night, better after taking hot drinks, tea etc. Its cough is mostly accompanied with hoarseness of voice and irritation in throat.

Alfalfa has its reputation as an appetizer in homoeopathic literature and our study also confirms it. It not only corrects anorexia but also can regulate appetite which helps to maintain normal health. However, there is a contradictory symptom like anorexia (emerged as a clinical symptom) and increased appetite with sensation of hunger all the time, which has also been verified during the study.

It induces normal sleep correcting lethargy and weakness. It induces a general feeling of wellbeing by alleviating sadness and irritability of mind which is generally worse during evening.

There is acute aching, drawing pain in neck and back under the action of this medicine which is aggravated in the morning, by lying down or moving forward.

On the skin, it produces papular or vesicular eruptions particularly painful boils, mostly found on the legs.

Beside these, it is also found useful for cramps in calf muscles and fever, which have emerged as clinical symptoms of *Alfalfa*.

Conclusion

This study shows that *Alfalfa* can be considered as an important medicine for relieving various clinical conditions like anorexia, coryza, depression, fever, headache, lethargy, sneezing, sleeplessness, cervical pain, fever, irritability of mind and weakness. During the study, 19 (nineteen) symptoms out of 23 (twenty three) symptoms of drug proving conducted by the Council were verified, along with a good number of clinical symptoms, which were relieved wholly or partially. Basing on these findings it may be said that the drug was amply verified. All these verified symptoms confirm the scope of its therapeutic action. Further studies may be conducted to re-verify the symptoms and to deduce its clinical importance again and again so that more reliable characteristics of Alfalfa can be ascertained.

Acknowledgement

The authors are thankful to Dr. Alok Kumar, Director General In-charge, Central Council for Research in Homoeopathy, for giving valuable suggestions in the construction of this article. Valuable guidelines provided by Prof. C. Nayak, former Director General, CCRH, in supervising the study and thoroughly reviewing the article, are sincerely acknowledged too.

The suggestions given by Dr. Anil Khurana, A.D.(H), while critically reviewing the contents of the article and making numerous corrections in the draft article is sincerely acknowledged.

The authors are deeply indebted to Drs. Vikram Singh, D.D.(H) and Krishna Singh, former A.D.(H), for rendering enormous help, guidance and expert advice in the study as and when was needed. This challenging task could not have been completed without the critical inputs of the following research personnels of the Council viz. Drs. R.K.Ray, R.P.Yadav, Yogindar Rai, V.K.Singh, A.K.Bhakat, M.D.John, Mohan Singh, P.K.Chandra, D.K.Singh, A.K.N. Singh, M.Sah for extending their assistance in collection of data for a shorter period from time to time. We thank them for their support and co-operation.

The facilities and infrastructure provided by the Programme officers and In-charges of the respective Institutes/Units in the continuation of the project is deeply acknowledged. Thanking them individually may not be possible but Council gratefully acknowledges their help.

We are also thankful to Dr. C.D. Lamba, Research Officer (H), CCRH, New Delhi, for her technical assistance in this study for a brief period. Special thanks are also extended to Dr. N. R. Mondal and Dr. S. S. Ramteke, for preparing the concluding reports of the study at their Institutes. Contribution made by Dr. Diptikanta Singh, SRF (H), CCRH, New Delhi, for helping in preparing the manuscript is also acknowledged with deep appreciation.

Refrence

1. Haehl Richard. Samuel Hahnemann, His Life & Work.

- Vol.-II. Reprint ed. B. Jain publishers Pvt. Ltd. New Delhi: 2003.pp. 233-234,299
- Hering C. The Guiding Symptopms of Our Materia Medica. Vol.I. Reprint ed. B. Jain publishers pvt. Ltd. New Delhi: 2000.
- Govt. of India. Homoeopathic Pharmacopoeia of India. Vol.2. New Delhi. 1984: pp. 30-31
- http://en.wikipedia.org/wiki/Alfalfa last accessed on 22.02.2012.
- Nadkarni K.M. The Indian Materia Medica. Reprint 3rd ed. Vol.1. New Delhi. Popular Prakasan Pvt. Ltd. 1976: p. 774.
- 6. Duke James A. Hand book of Medicinal Herbs. 2nd ed. India. CRC press. 2006: 10-11.
- 7. Central Council for Research in Homoeopathy. Homoeopathic Drug Provings.1st ed.2005: 17-18.
- Anshutz E. P. New, Old and Forgotten Remedies.
 2nd ed. New Delhi: B. Jain, Publishers (P) Ltd.1996: 16-19.
- Boericke W. Pocket Manual of Homeopathic Materia Medica and Repertory. Reprint 9th ed. New Delhi: B. Jain Publishers (P) Ltd.1997: 24-25.
- Murphy Robin. Lotus Materia Medica. 2nd revised ed. New Delhi: B. Jain Publishers (P) Ltd. 2002: 60-62.
- Phatak S.R. Materia Medica of Homoeopathic Medicines. Reprint 1st ed. New Delhi. B. Jain Publishers (P) Ltd. 1991: 27.
- Kunzli J. Kent's Repertorium Generale. Print Indian Edition. B. Jain Publishers (P) Ltd. New Delhi. 1987.