

CLINICAL VERIFICATION OF HYPOGLYCAEMIC EFFECT OF CEPHALANDRA INDICA IN PATIENTS OF DIABETES MELLITUS

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Summary

A study was undertaken to clinically verify the hypoglycaemic effects of *Cephalandra indica* on patients of Diabetes Mellitus. Selection of *Cephalandra indica* Q for the trial is based upon its hypoglycaemic activity observed in 'in-vitro' trials conducted on albino rats by Central Council for Research in Homoeopathy. Study was limited to patients of Non-Insulin Dependent Diabetes Mellitus. The patients are given *Cephalandra indica* Q in doses of 1 drop/kg body weight, per day (in divided doses), and blood and urine sugar levels are monitored at frequent intervals. It was observed that *Cephalandra indica* Q helped in fairly large number of Diabetes Mellitus cases in reducing and stabilising blood sugar levels, without any toxicity or side effects.

Introduction

A project has been undertaken under CCRH to clinically verify the hypoglycaemic effects of *Cephalandra indica* on patients of Diabetes Mellitus (N.I.D.D.). The project was started in 1986 after observing the results of experiments conducted at Drug Standardisation Unit of the Central Council for Research in Homoeopathy.

Experimental studies have revealed that regular administration of drug *Cephalandra indica* Q, *Absinthium* D1 and *Resina laricis* D3 exhibited perceptible hypoglycaemic activity at a micro dose level ranging from 25u ml to 75u ml/100gm body weight (b.w.) through an I.P. route of administration. *Syzygium jambolanum* Q has been found toxic at dose level of 50u ml/100gm b.w. *Abroma Augusta* Q has mild hypoglycaemic effect in doses of 50u ml to 0.1ml, yet it does not stabilise blood sugar level corresponding to such activity.

Cephalandra indica Q did not show any toxicity and had shown stabilising effect on blood sugar level after the withdrawal of the drug. *Cephalandra indica*, a member of the *Cucurbitaceae* family, is a *perennial*

herb. It possesses the reputation of being an excellent remedy in reducing the amount of sugar in the urine of patients suffering from Diabetes Mellitus and mitigating their sufferings.

Symptomatology

Diabetes mellitus and insipidus—Biliousness, bilious complaints; poisonous boil, abscess, and carbuncle; burning pains all over the body; profuse urination; giddiness; dysentery, white and bloody; headache owing to excessive exposure to sunrays; chronic fever associated with burning of eyes, face and other parts of body; dropsy, jaundice, flatulence, haemorrhage from the stomach; blood-poisoning.

Mind—Moroseness; fretfulness; disinclination to do any work.

Head—Giddiness, worse after urination.

Face—Redness of face with burning.

Eyes—Burning of eyes.

Mouth—Excessive dryness of mouth with great thirst for large quantities of water at a time, worse after urination.

Throat—Dryness of throat.

Appetite—Loss of appetite.

Abdomen—Full of wind and distended.

Urine—Passage of copious quantity of urine at a time; clear urine, exhaustion and weakness after urination; presence of sugar in urine.

Stool—Greenish, mucus stools mixed or tinged with blood; pain before and during stool.

Sensations—Burning sensation exists all over the body, ameliorated by anything cold or cold applications.

Generalities—Over-sensitiveness to noise and external impressions.

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Material and Method

A study of 146 cases (M65, F81) was done on patients of varying age groups (Table I). All these cases were recorded on the prescribed proforma which includes **presenting complaints, physical and mental generals, general physical examination**, systemic physical examination, fundoscopic examination of **eyes, urine analysis and blood sugar level (fasting and post prandial estimation**, Table II) before starting the treatment. (The cases having either paucity of characteristic symptoms or were having symptomatology of *Cephalandra indica* Q. were included in the study.) Each patient was given diet chart and advised to take full diet precautions and to do exercises regularly. Blood sugar level was tested after every 15 days till it stabilized. Again, this level is taken as baseline blood sugar level for assessment of hypoglycaemic effect of *Cephalandra indica* Q. The drug was given to all these cases according to their body weight (one drop/kg b.w. per day). Blood sugar level of each patient was monitored every two weeks.

TABLE I

Age incidence		Total	Male	Female
Range	— Minimum	21 years		
	— Maximum	74 years		
Age groups:		Total	Male	Female
1 day — 20 years		—	—	—
20 years — 30 years		4	1	3
30 years — 40 years		16	4	12
40 years — 50 years		46	23	23
50 years — 60 years		54	23	31
60 years and above		26	14	12

TABLE II

Blood sugar level grouping		Total	Male	Female
Fasting sugar level (in mg%)				
80 — 120 mg%		28	12	16
120 — 180 mg%		56	28	28
180 — 250 mg%		44	18	26
250% mg and above		18	7	11
Post prandial in %				
120 — 180 mg%		43	24	19
180 — 250 mg%		50	19	31
250 — 300 mg%		29	14	15
300 mg% and above		24	8	16

Results

Each case was observed for a minimum period of 6 months to 3 years and improvement indices were prepared (Table III). Out of 146 cases, 46 cases did not report after the first visit, another 20 cases are still under observation. Out of rest of the 80 cases, 64 cases have shown improvement after the intake of *Cephalandra indica* Q, in which 35 cases had marked improvement; 24 cases moderate improvement and 5 mild improvement.

TABLE III

Improvement indices	Total	Male	Female
Not reported	46	20	26
Reporting cases	100	45	55
Improved*	64	29	35
Marked	35	14	21
Moderate	24	12	12
Mild	5	3	2
Not Improved	15	4	11
Worse	1	1	—
Under observation	20	11	9

* Criteria taken for improvement level:

Marked—When patient is asymptomatic and blood sugar touches normal level.

Moderate—Symptomatic relief with more than 50% reduction in increased blood sugar, above normal level.

Mild (i) Symptomatic relief with less than 50% reduction in increased blood sugar, above normal level.

(ii) Patients with marked improvement showing recurrence in same or less intensity.

Inference

The study conducted shows that *Cephalandra indica* does possess the hypoglycaemic effect as shown by reduction in sugar levels of the patients (Table IV) and it also helps in mitigating the sufferings of the patients (Table V).

Fundoscopy of patients was done before starting the treatment and also during the treatment. In one patient Grade I retinopathic changes disappeared after 4 months of treatment.

As such no patient reported any toxic effect of this drug.

(Contd on page 38)

II. Cases treated with immunosuppressive drugs

Increase of old, suppressed lesion with no recovery and poor general condition. New lesions over other parts of the body.

Increase of old, suppressed lesion with self-limiting course and reduction in frequency, duration, and intensity of disease in subsequent exacerbations.

13. **Alopecia Areata**

Increase in falling of hair from other parts of body and scalp.

Falling of hair should stop with reappearance of hair over already affected area.

A proper understanding of the 'nature' of aggravation observed after the administration of an indicated remedy, as to whether it is the 'disease aggravation' or 'homoeopathic aggravation' will help a great deal in the judicious management of the case and an early recovery. As the 'homoeopathic aggravation' does not need any further medication, and the prescriber shall be confident of the recovery phase, whereas the 'disease aggravation' will tell the prescriber to select alternative indicated medicine for the timely recovery of the ailment.

(Contd. from page 21)

TABLE IV

Pathological findings

Urine examination	Total No. of cases given			No. of cases mitigated		
	T	M	F	T	M	F
Sugar	24	14	10	13	5	8
Blood Examination	Before treatment			During treatment		
Fasting	T	M	F	T	M	F
80 — 120 mg%	28	12	16	43	23	20
120 — 180 mg%	56	28	28	38	17	21
180 — 250 mg%	44	18	26	14	3	11
250 mg% and above	18	7	11	5	2	3
Post Prandial						
120 — 180 mg%	43	24	19	43	21	22
180 — 250 mg%	50	19	31	27	12	15
250 — 300 mg%	29	14	15	12	7	5
300 mg% and above	24	8	16	18	5	13

TABLE V

Response to treatment regarding symptoms

	Total No. of cases given			No. of cases mitigated		
	T	M	F	T	M	F
Polyuria	32	15	17	24	12	12
Polydypsia	27	13	14	16	7	9
Hunger excessive	18	7	11	8	3	5
Pruritis vulvae	6	—	6	6	—	6
Itching	6	4	2	4	3	1
Cramp in legs	9	3	6	11	4	7
Lassitude	33	18	15	27	13	14
Weakness	39	33	16	29	18	11
Fatigue	37	21	16	25	14	11