

## A NOVEL AYURVEDIC ANTI DIABETIC MEDICINE

ANJANA CHAUBE, T.N NAGRAJA, S.K DIXIT, J.K. AGRAWAL\*, MOHAN KUMAR\*\* and BHANU PRAKASH \*\*\*

Department of Rasashastra, Department of Medicine\*, Department of Pathology\*\*, Institute of Medical sciences & department of Metallurgy\*\*\*, Institute of Technology, Banaras Hindu University, Varanasi -221 005.

**Received: 22 May, 1995 Accepted: 21 August, 1995**

**ABSTRACT:** *Nagabhasma prepared according to the technique described in Rasaratnasamuccaya was found to have significant anti-diabetic action. Clinical studies confirmed this finding. The details of the study are presented in this article.*

### INTRODUCTION

Lead (Naga) is one material described as toxic material and used never as a medicine for the cure of ailments in western medicine, But in the ancient Hindu alchemical literature lead is processed pharmaceutically with several herbs in such a way that it becomes suitable for the treatment and cure of several diseases, it becomes non-toxic also as narrated in rasaratnasamuccaya or

R.R.S (Ch 5, verse No. 179).

If Nagabhasma is prepared according to this method it becomes free from all impurities which otherwise produce symptoms of toxicity. Moreover, if this process is repeated ten times, it certainly becomes free from its toxic effect and therapeutically it possesses the quality of a rasayana. The purified metal may be able to check the progress of a disease in the body. This fact is obvious from verse no. 189 of Chapter 5 of

R.R.S.

Again if naga is calcined sixty times by the technique described, it would develop the quality of niruttatwa known to every ayurvedic physician (R.R.S Ch 5, verse

183). As regards the quality and therapeutic value of the drug it is diabetes mellitus and toyameha (diabetes insipidus) and is able to overcome the amadosha of the disease itself

(R.R.S Ch 5, verse 171). Keeping these facts in mind and on the basis of our own clinical experiences we started working on the aforesaid drug to solve the vexing problem of diabetes mellitus. Of the various nagabhasma preparations sastiputa nagabhasma was found to be safe both in animals as well as human beings and effective in the treatment of diabetes mellitus.

### MATERIALS AND METHOD

Naga was purified according to samanya sodhana and visesha sodhana. During samanya sodhana process<sup>1</sup> it was treated with churnodaka through pitara yantra by the process of nirvapa (heating and quenching). In visesha sodhana process<sup>2,3</sup> Naga was treated with nirgundi kvatha (decotion of vitex negundo) and Haridra churna (Powder of curcuma longa). The apparatus and the processes involved remained the same.

After sodhana process the sodhita naga was subjected to the jara process<sup>4</sup> in which it was treated with apamarga churna (powder of *Achyranthes aspera*) accordingly.

The jaritanaga was again subjected marana process. For this purpose the jarita naga along with suddha manahsila<sup>5</sup> and vasa kvatha (decoction of *Adhatoda vasica*) was triturated for three hours to form a semisolid paste, small pellets were made out of this mass of paste and after drying samputikarana process was done these sarava samputas were thereafter subjected to putapaka process through arddha gajaputa, Thus the marana process was repeated in the same manner sixty times<sup>6,7</sup> to obtain the sastiputa nagabhasma of kapota varna or a mixture of black and white colour kapota= dove, varna or a mixture of black and white colour kapota = dove, varna= colour).

This drug was tested on albino rats constantly for forty days. After this period the animals were sacrificed, their liver kidney spleen, brain intestine and bonemarrow were dissected out and studied histopathologically. There were no finding suggesting toxic nature of the preparation.

## CLINICAL STUDY

We can equate madhumeha with diabetes mellitus based on its symptoms, For example the symptom prabhutavila nutrata<sup>8</sup> may be correlated with increased frequency of turbid urine. Kashaya and madhurarasa mutra<sup>9,10</sup> may be correlated with glycosuria and hyperglycemia, Like wise ojakshaya<sup>11</sup> of madhumeha may be correlated with loss of immunity observed in diabetes mellitus. Thus madhumeha, a parallel word used in Ayurveda to denote diabetes mellitus throws light on the basic defect i.e., ojakshaya. In Ayurveda efforts are made to ameliorate the symptoms and

also to improve the general condition of the patient, while I western medicine the aim is to maintain the level of blood sugar within normal range and to treat the symptoms and complications associated with the disease.

12.

Clinical trial of sastiputa nagabhasma was conducted on 30 diabetic patients. The drug was administered in a dose of 120 mg as a single daily dose, Of the 30 patients, 20 patients turned up for the follow-up and remained in the trial for six months.

## RESULTS AND DISCUSSION

Ayurveda has elaborately emphasized the rasayana effect of Naga Bhasma. Therefore, the drug may be effective, chiefly by acting as rasayana specially in providing a sense of wellbeing. It is helpful in enhancement of the oja and immunity, so the patient does not feel any suffering which he must have experienced earlier.

The drug showed no untoward effect in any of the patients during and after the clinical study, Ninety percent of the patients expressed sense of well-being and 70% of the patients showed improvement in the symptoms. 65% of the patients showed reduction in blood sugar and they were taking other hypoglycaemics also along with sastiputa Naga Bhasma. Fifty percent patients, those on Sastiputa Naga Bhasma alone, showed reduction in blood sugar, About 25% of the patients who were taking both synthetic hypoglycaemics as well as sastiputa Naga Bhasma, had hypoglycaemia while previously they had no control on blood sugar when they were using only synthetic drugs, So they were advised to reduce or discontinue the intake of those drugs. The no hypoglycaemic effects in the patients who were administered sastiputa Naga Bhasma alone. Serum creatinine,

blood urea, urine constituents and The satiputa Naga Bhasma can be microscopic elements were not affected recommended as a medicine and also as an during and after the clinical trial. adjuvent along with synthetic medicines for

the management of diabetes mellitus.

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