

INDIGENOUS DRUGS IN THE MANAGEMENT OF DIABETES

There exists quite a discrepancy in information on the usefulness of indigenous drugs in the management of diabetes mellitus.

Ayurvedic literature refers to usefulness of plant extracts in diabetes mellitus, while pharmacological studies in the last 3-4 decades have not borne out adequate effectiveness of such hypoglycaemic agents.

A review of clinical trial with some of the preparations, i.e. *Gymnema sylvestre*, *Cocinea grandis*, *Casearia esculenta* and *Poterium spinosm* was reported in 1980¹. Central Drug Research Institute has as well from time to time published data on scope of indigenous drugs in treatment of diabetes mellitus².

Literature from other countries especially Middle-East, wherein practice of indigenous drug is as well followed, has shown that certain plants, leaves, roots, bulbs, seeds, fruits and flower are indeed effective hypoglycaemic agents.

Napralert (natural product Alert) at the College of Pharmacy, University of Illinois, Chicago, has now established computerized data on all plant products than have hypoglycaemic effect. W.H.O. has of recent encouraged research in Traditional Medicine in the developing countries.

One would like to speculate as to possible information gap in provision of discrepant findings in relation to hypoglycaemic agents.

1. The active ingredient is not identifiable, while the method of preparation of drug using indigent practices may have proportionately more of active principle or an effective combination than what the modern methods of extraction have been able to achieve.
2. Observations that effect of indigenous drugs becomes perceivable generally after certain periods varying from 7-21 days and is not immediate offers possibilities of slow metabolic changes at cellular level or secondary drug effects.
3. Conventionally, blood glucose or serum insulin response is gauged for the effectiveness of a hypoglycaemic agent. There is possibility that eumetabolic status in diabetes may be in fact related to alterations in gut absorptive function or peripheral tissue receptor changes.
4. Other factors are, lack of uniformity in herbs, difference in composition within different parts of the same plant, differences due to vegetation stage, effects of climate and geographic location where the herbs were collected⁴. An attempt is made in this issue to review the present status on the usage of indigenous drugs in the management of diabetes.

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References

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