Clinical evaluation of an Ayurvedic Formulation in the management of Avaranajanya Madhumeha (Type 2 Diabetes Mellitus)

DEVASHISH BHARDWAJ, VENIT K. AGNIHOTRI and PRANAV PANDYA

Abstract
A research plan has been developed in the present study to address the problems associated with Avaranajanya Madhumeha (type 2 diabetes). This research plan is based on the treatment methods of Ayurveda (ancient Indian medicine) and utilization of modern scientific methods as research tools. A specific ayurvedic herbo-mineral formulation has been prepared in Ghansatt (solid extract) form; the selected eight herbs and one herbo-mineral have anti-hyperglycemic (PRAMEHA HARA) and anti-hypercholestermic (MEDOHARA) properties with rejuvenative (RASAYANA) effects as described in classical ayurvedic methods. 15 diagnosed type 2 diabetes mellitus patients were selected through accidental sampling. Ayurvedic formulation was prescribed to type 2 diabetes patients for one year along with dietary restrictions. Diabetic diagnostic parameters of these patients like Fasting Blood Sugar (FBS), Post Patrum Blood Sugar (PPBS), Glycocylated Hemoglobin (HbA1C) and Urine Sugar Fasting were monitored every three months; these were measured before and after intervention. The obtained data were statistically analyzed through paired t-test. There was significant reduction in FBS level, PPBS level, HbA1C level and urine fasting sugar level in type 2 diabetes patients who completed the clinical trial successfully. Thus, ayurvedic formulation treatment lead to an overall significant reduction in blood sugar and urine sugar levels in type 2 diabetes patients. No side effects were noted during the study period. This study suggests that the ayurvedic formulation had very good hypoglycemic effects proved by clinical improvement and bio-chemical analysis of diabetes parameters in the treatment of type 2 diabetes mellitus.

Key Words: Madhumeha, Type 2 diabetes mellitus, Ayurvedic formulation and Blood glucose.

Madhumeha (sweet urine disease, diabetes mellitus) is a disease, which has plagued man for centuries, especially in the more developed areas of the world. It is considered one of the five leading causes of death in the world and an important human ailment afflicting people from various walks of life in different countries. In India, it is proving to be a major health problem, especially in the urban areas.

In this disease, polyuria and honey urine was noted as early as 400 BC by the Indian Physician Charaka. He has described this disease as ‘Madhumeham’, which means honey in the urine (Sharma, 1983). Acharya Sushruta (Nidana, 6/27) has mentioned that in Madhumeha, the vitiated doshas remain in the lower part of the body owing to the inefficiency of various Dhamanis, i.e. vessels (Shastri, 1995). Madhumeha was declared kashtasadhya (difficult to treat) and even asadhya (incurable) by ancient ayurvedic scholars. They have explained that all types of prameha (diabetes), if left or partially treated, convert into kashtasadhya madhumeha (difficult to treat diabetes, i.e. type 2 diabetes mellitus - T2DM) (Ch.Su.17/80); and later on, if not treated properly, a period comes when it converts to asadhya madhumeha (incurable diabetes, i.e. type 1 diabetes mellitus – T1DM) (Sharma, 2001).