Comprehensive Ayurvedic Care in Type-2 Diabetes

Ashok Kumar Panda*

National Research Institute of Ayurvedic Drug Development, Central Council for Research In Ayurveda Science, Department of AYUSH, Ministry of Health & FW, India

As the demand for alternative therapies, disease prevention, increasing trend of non-communicable diseases and a more spiritual approach to life becomes ever more important in this electronic age so Ayurveda accounts for $ 60 billion of a $ 120 billion “global herbal market”. Diabetes is one of the non-communicable diseases and rapidly emerging as a major health care problem. Ayurveda therapy is the Indian system of medicine prevailing since ancient times and Department of Ayurveda, Yoga, Unani, Siddha and Homeopathy (AYUSH) Government of India is making efforts to promote ayurveda system of medicine to extend the benefit of ayurveda to all the people. Ayurveda cannot reach to the expected mark of popularities may be due to the lack of focused concerted scientific research and the abuse of these systems by quacks [1]. There are significant efforts of Central Council of Research in Ayurveda Sciences (CCRAS) on scientific research in Ayurveda special reference to metabolic diseases. The name “diabetes mellitus means sweet urine. Prameha in Vedic literature with special reference to the “Kauchika Sootra” of Atharva Veda. In Ayurveda, diabetes mellitus comes as Ikshu meha (Sweet urine) as Kaphaja Prameoha and Madhu meha (Sweet urine) as Vataja Prameha. The family history of diabetic is well known to Susruta. Charak classified as Krusha (Non-obese diabetic) and Shula Prameha (Obese diabetic). Comprehensive cares in Ayurveda in diabetic are the modalities of treatment starts from agni (Digestive fire), Ama (undigested food), Gara/dushi visa (Toxin), Kosta (defecation habit), Vyasana (drinking/smoking habit), exercise - co morbidity and complication of diabetic and it is not merely hypoglycaemic herbal medicine. It includes diet, exercise, Yoga therapy, sodhana/ Panchkarma (purification) and administration of single herb or compound formulations.

The prevalence of type 2 diabetes has increased greatly from 4% to 13% over the past decade and it is found difficult to treat effectively in the long term. Treatment and care of diabetes represents a substantial portion of the national health care expenditure of the country as well as person. Type 2 diabetes represents a syndrome with disordered metabolism of carbohydrate and fat. The most prominent clinical feature is hyperglycaemia (fasting plasma glucose level=126 mg/dl, or glycosylated hemoglobin A1c (HbA1c)>6.9%). In most patients with type 2 diabetes, the onset is in adulthood, most commonly in obese people over 40 years of age. We observe that majority of patients are overweight or obese and will be unable to achieve or sustain normoglycaemia with modern anti diabetic agents; a sizeable proportion of patients will eventually require Alternative therapy to maintain long-term glycaemic control, either as single herb/formulation or in conjunction with modern oral anti-diabetic therapy [2]. 21.5% general public have the first choice to treat diabetic in Ayurveda and Seventy three percentage of diabetic patients prefer effective Ayurveda medicine for their treatment either as food supplements or as drug. Secondary failure of Metformin and other hypoglycaemic agents are more than 20%. The outpatient strength of type-2 diabetic patient in government Ayurveda hospital is about 7% in India as today’s Ayurveda clinicians are presented with an extensive range of single herb and formulation for type 2 diabetes. Our preliminary study shows that 57% people seek treatment due to poverty and cannot able to bear modern anti diabetic drugs and treatment cost in terms of doctor’s charge and laboratory expenses. 25% patient thought Ayurvedic drugs are safe and effective to use for long term and 15% patients seek Ayurveda treatment as modern drugs are not acting and doctor want to introduce Insulin therapy. Insulin and insulin analogues were also reported to be associated with higher cancer incidence. Because there are several defects like-agni (digestive fire), Ama (undigested food), Gara/dushi visa (Toxin), Kosta (defecation habit), Vyasana (drinking/smoking habit), co morbidity, complication of diabetic in the body’s chemistry that develop as Type 2 diabetes changes over time, there are many tools used to treat it. In its earliest stages, Type 2 diabetes can often be controlled effectively by becoming more active and by managing food to reduce the body’s need for insulin. This may involve promoting a modest amount of weight loss, controlling and distributing carbohydrate intake through the day, or both. When the disease has progressed to the point where blood sugars are not controlled by activity and food management alone, several types of oral medications (pills) and/or Panchakarma may be used singly or in combination to regain blood glucose control. Their effectiveness is judged by testing the blood sugar periodically throughout the day.

The selection of initial drug/formulation are based on a clinical parameters like-Agni (digestive fire), Prakrut (constitution), Ahara shakti (digestive power), Vyayama shakti (Physical strength) and biochemical assessment of the patient and safety considerations. Oral antidiabetic agents should be initiated at a low dose and titrated up according to glycaemic response, as judged by measurement of glycosylated haemoglobin (HbA1c) concentration, supplemented in some patients by self monitoring of capillary blood glucose. Pharmacological studies and evidence bases on clinical studies are limited [3-6]. The commonly prescribed single herb is Karela (Momordica charantia), Guduchi (Tinospora), and Mesasringi (Gymnema sylvestre). The Other Poly herbal compounds are Amree-plus granules (AIMIL), Karmin Diabecon (Himalaya), Madhumehantak (Nutri), Zpter (Solumiks), Diabind (IND), Vasanta kusumakara Rasa, Triphala Churna, Chandraprava Vati. These main classes include agents that stimulate insulin secretion (Gymnema sylvestre), reduce hepatic glucose production (Katuki), delay digestion and absorption of intestinal carbohydrate (Karela) or improve insulin action (Chandraprava vati). We are confirmed drug’s clinical efficacy by targeting postprandial hyperglycaemia. Our Preliminary observational data suggesting that Amree-plus granules (AIMIL) may provide better glycaemic control. Some Ayurvedic Practitioner prescribing Triphala churna in prediabetic individuals having non alcoholic fatty liver.

The primary outcome of our studies reveals that single herb and exercise can control post prandial blood sugar up to 200 mg/dl. Comprehensive care in Ayurveda can control post prandial blood
sugar above 400 mg/dl. It takes one month to three months to reach the absolute control of Post prandial blood sugar [7]. However, intensive lifestyle intervention can be more effective along with the Ayurveda drug/formulations. Although there is widespread use of herbal dietary supplements that are believed to benefit type 2 diabetes mellitus, few have been proven to do so in properly designed randomized trials; their efficacy for intermediate-term glucose control remains unclear.

References