



## Homoeopathic remedies for the management of type 2 diabetes mellitus: A review

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### Abstract

Diabetes Mellitus is one of the major public health issues for the developing country like India and the developed countries. Metabolic disorder characterized by excessive glucose in blood circulation mainly resulting from inadequate insulin secretion, insulin action or both and insulin resistance. Type 2 diabetes mellitus resulting from mainly increase catabolism and decreased anabolism.

**Keywords:** homoeopathic remedies, type 2 diabetes.

### Introduction

Diabetes mellitus is a syndrome with disordered metabolism and inappropriate hyperglycemia due to either a deficiency of insulin secretion or to a combination of insulin resistance and inadequate insulin secretion to compensate. Type 2 diabetes mellitus (T2DM) group comprising milder forms of diabetes that occur predominantly in adults but occasionally in juveniles. More than 75% of Indian people are under this classification. India is second higher people suffering with this disease in the global<sup>1</sup>. In United Kingdom, Sri Lank, Bangladesh, United States of America, Australia and golf countries have been found to much higher prevalence of diabetes than the native populations of the respective countries<sup>[2-4]</sup>. Premature coronary heart disease is due to excessive fat in intra-abdominal region and insulin resistance<sup>[5]</sup>.

Tissue insensitivity of insulin has been noted in most type 2 diabetes mellitus patients irrespective of weight and has been attributed to several interrelated factors. These include a putative genetic factor, which is aggravated in time by additional enhancers of insulin resistance such as aging, a sedentary life style and abdominal visceral obesity and deficiency in the response of pancreatic B cells to glucose. Hyperglycemia due to resistance to insulin and impaired B cell response to glucose appear. Epidemiologic data indicate strong genetic influences, since in monozygotic twins over 40 years of age, concordance develops in over 70% of cases within a year whenever one twin develops type 2 diabetes mellitus. 60 – 70% obesity patients of North Americans, Europeans or Africans are suffering with type 2 diabetes, 30% cases are from Chinese and japans patients' suffering with type 2 diabetes mellitus. 7 studies had been published detailing the prevalence of the diabetes by the end of the 1960s<sup>6-11</sup>. Migrant Asian Indian more prone to get type 2 diabetes mellitus and metabolic syndrome<sup>12</sup> in various parts of the global such as Fiji, United Kingdom and Mauritius<sup>[3, 4, 13-19]</sup>. This Indian people have more fasting insulin levels compared to the white people<sup>[21, 22]</sup>. Diabetes increased due to junk food and over eats of sweets in Indian school children<sup>[23-25]</sup>.

### Clinical Features

Type 2 diabetes mellitus clinical features are Polyuria, thirst, weakness or fatigue, polyphagia with weight loss, recurrent blurred vision, vulvovaginitis or pruritus, peripheral neuropathy, nocturnal enuresis. Mild hypertension is often present in obese diabetics. Eruptive xanthomas on the flexor surface of the limbs and on the buttocks and lipemia retinalis due to hyperchylomicronemia can occur in patients with uncontrolled type 2 diabetes mellitus who have a familial form of hypertriglyceridemia.

### Investigations

Urinalysis (glucosuria, ketonuria), blood testes (glucose tolerance test, glycoslated hemoglobin, fasting and post pandal) and lipoprotein abnormalities (LDL, HDL, cholesterol) in diabetes.

### Complications of diabetes

In microvascular complications are diabetic cataracts, diabetic retinopathy<sup>[26, 27]</sup>, glaucoma, diabetic Neuropathy include microal buminuria, progressive diabetic nephropathy<sup>[28-30]</sup> (Indian people have less rates compared to the white individuals)<sup>[31]</sup>, gangrene of the feet, diabetic neuropathy include with peripheral neuropathy (distal symmetric polyneuropathy, isolated peripheral neuropathy, painful diabetic neuropathy), autonomic neuropathy ( management of autonomic neuropathy, management of erectile dysfunction), skin and mucous membrane complications. In macrovascular complications are coronary artery disease<sup>[32]</sup> and peripheral vascular disease. The coronary artery disease also higher in Indian people compared to the western countries<sup>[33]</sup>. Peripheral vascular disease is rare in Indian patients compared to USA and UK<sup>[34, 35]</sup>. More than 25% of Indian peoples suffer with diabetic foot ulcer during their life time<sup>36</sup> and 8% of Tuberculosis<sup>[37]</sup>. The Research trials showed that type 2 diabetes mellitus can be prevented in peoples at high risk of developing the disease using lifestyle modification, drugs or a combination of the two<sup>[38-41]</sup>.

### **Borax**

Borax is Awkwardness inclined to drop things from hands; chronic urticaria, diarrhoea before and during menses, great weakness of joints and weariness; intolerable itching at the tip of coccyx.

### **Tarentula**

In tarent h is copious urine with sugar, diabetes with grief, anxiety restlessness and weakness with emaciation. Patients impulsive violent, irritable, hysterical, feigns sickness.

### **MERC Sol**

Merc is intense thirst through the tongue looks moist, frequent urging to urinate, trembling of hands, excessive perspiration, quantity of urine more than the water drunk. Large flabby tongue with imprints of teeth.

### **Plumbum Met**

It is urine frequent, ineffectual tenesmus, albuminous, low specific gravity excessive and rapid emaciation, weakness, loss of memory, obstructed flatus with intense colic, paralysis of lower limbs, gastralgia, constant vomiting, chronic intestinal nephritis.

### **Heper Sulph**

Hep sulph is slightest injury causes suppuration, over sensitive physically and mentally, peevish and unreasonably anxious extremely sensitive to cold air, urine voided slowly, without force drops vertically, bladder weak, stool sour, while undigested and fetid, itching of glans; menses late, scanty, profuse sweat.

### **Phosphoric Acid**

It is Best suited to persons of originally string constitution who have become debilitated by loss of vital fluids, sexual excess, or a long succession of moral emotions as grief, care, disappointed affection. Pale sickly complexion, eye sunken and surrounded by blue margins. Is listless apathetic indifferent to the affairs of life; prostrated and stupefied with grief, to those things that used to be of most interest, especially if there be debility and emaciation. Profuse urination at night of clear watery urine white forms a white cloud at once.

### **Nitric Acid**

It is great general weakness feeble reactions; extreme sensitivity and nervous trembling, are market features in this remedy. Patients greatly broken by long suffering, finally anemia and emaciation are marked. Male sexual organs are in constant stare of irritability. Sexual desire is increased and erections troublesome at night. The female is greatly troubled by the constant itching and burning and sexual desire.

Syzygium Cumini India has a very long History of using herbal drugs as the main course therapy for treating a number of Diseases. Herbal drugs therapy is regarded as an important for the treatment of a wide range of disease. However envious improvements have been observed in modern system, but India herbal plant provide a rich source for health care to present different pathological status. Syzygium belongs to family Myrtaceae and is known as a kala jamun. The World Health Organization (1980) has also recommended the evaluation of the

effectiveness of plants in conditions where there is lack of safe synthetic drugs. Ancient Greeks were well known to this tree in 500 BC. According to the literature, A slow growing species, it can reach heights of up to 30 m and can live more than 100 years. Its dense foliage provides shade and is grown just for its ornamental value. At the base of the tree, the bark is rough and dark grey, becoming lighter grey and smoother higher up. The wood is water resistant. The leaves which have an aroma similar to turpentine, are pinkish when young, changing to a leathery, glossy dark green with a yellow midrib as they mature. The leaves are used as food for livestock, as they have good nutritional value. Syzygium cumini trees start flowering from March to April. The flowers are fragrant and small, about 5 mm in diameter. The fruits develop by May or June and resemble large berries; the fruit of Syzygium species is described as "drupaceous". The fruit has a combination of sweet, mildly sour and astringent flavor and tends to colour the tongue purple.

Cephalandra Indica Indian systems of traditional medicines namely Homoeopathy, Ayurvedia and Unani nearly about 200 plant species for treatment of various diseases from ancient times. About sixty thousand plant species were used for medicinal purpose worldwide. The World Health Organization (WHO) estimated near about 80% of world population both in developing and developed countries use herbal drugs for various ailments. This plant is one of the tremendous plants of Homoeopathy system and Ayurveda. Which is commonly known as kundru. Cephalandra Indica widely used in homoeopathy as a mother tincture for type 2 diabetes mellitus. Abroma Augusta This plant widely used in Homoeopathy System of Medicine as Mother Tincture for indication of diabetes mellitus. It was first prover by Dr. D.N. Ray. This plant family sterculiaceae commonly known as ulatkambal and devils cotton. Abroma Augusta is small tree with velvety branches. It is located in Africa, Asia and Australia. In India mainly in Meghalaya, Assam, Kerala, Arunachal Pradesh, Tripura. This plant 4 m height and reach up to 8 m. Stems yield a fibre. This plant flowering around from June to November. Plant leaves used for diabetes as well as female complaints also. This plant clinical indicated for albuminuria, sleeplessness, amenorrhoea, carbuncle, debility, dysmenorrhoea and weakness of brain. Mind is irritable, excitable mood, forgetfulness, depression, morose, anxious, unable to moody. Head is empty feeling, rolling of the head and vertigo, heaviness and discomfort, much giddiness, weakness of vision, puffiness of the lids, heaviness, eyes easily tired, inclination to drop eyes closed, pain and watering of the eyes, sneezing several times, nose watering and dryness with desire to rub, face pale, yellow, wrinkled, old looking, itching eruption on the face with burning sensation, furuncles of the face, dry, burring throat, painful, difficulty in swallowing solids but drinking relieves throat symptom temporarily. Stomach hungry feeling with faint feeling, desire for all kinds of foods, a feeling of emptiness in the stomach. Gymnema Sylvestre This plant belongs to asclepiadaceae<sup>[42]</sup>. Gymnema Sylvestre slow growing, medical plant in peninsular and central in India. It is more in Australia, Africa and India. In India more in Kerala, Andhra Pradesh, Tripura and Arunachal Pradesh. This plant consistence of anthraquinones, flavones, hentri acontane, pentatria contane, alfa and beta chlorophylls, phytin, resins, d-quercitol, tartaric acid, formic acid, lupeol, beta amyirin. Rhus Aromatica Fragrant sumac is a woody plant that

can grow to around 2 to 4 m (6.6 to 13.1 ft) tall with a rounded form. It produces yellow flowers in clusters in March or April before the leaves emerge, before anthesis. Pistillate (female) plants bear hairy red drupes in July or August that can last until the next March if not eaten by birds or small mammals. The leaves and stems of fragrant sumac have a citrus fragrance when crushed, hence the species name. Leaves resemble those of its relative poison ivy, but fragrant sumac is not poisonous. It inhabits mostly uplands areas, while poison ivy has no odour and can inhabit various habitats<sup>[43]</sup>. The leaves are alternate and trifoliate with the middle leaflet being the largest of the three. It develops a good autumn colour like other sumacs of bright yellow to red to red purple. Some are grown by large, diverse nurseries or by native plant nurseries and are infrequently planted in landscapes in the Midwest and East. It grows in full deep shade to full sun and well drained soils slightly acid to well alkaline with a pH range of about 6.0 to 8.5. It has a shallow, fibrous root system and is easily transplanted. Some of its branches can trail upon the ground and root and it can ground sucker to form a colony, depending on the site. While this species is not really well known and used often by landscapers and homeowners, the cultivar 'Gro low' is commonly planted as a high groundcover, and some are sold at most any nursery or garden center. However, buying this plant is done mostly by landscape architects and designers, (or by customers influenced by nursery personnel recommending it), who know the plant, while most homeowners do not know it and look instead for bushes or groundcovers with pretty flowers or evergreen foliage. 'Low Gro' sumac grows about 2 ft high and easily spreads 6 to 8 ft around, developing good autumn colour<sup>[44]</sup>.

### Repertory Diabetes

Sugar: Aceta ac, adren, am acet, arg m, arg n, aristol, arn, ars bro, ars iod, ars, asciep, vinc, asr, aur mur, bell, bor ac, bov, bry, caps, carb ac, ceanoth, cham, chel, chimaph, chionath, coca, col, colch, crot, cupr ars, cur, eup purp, ferr iod, ferr mur, flour ac, glon, glycerine, grind, helleb, helon, iod, iris, kali br, kreos, lach, lecith, lyc, lyssin, morph, mosch, murex, nat m, nat s, nit ac, op, phos ac, phos, phlorid, plumb iod, pod, rhus, seuka, sec, sil, sizygy, strych, ars, sul, tar, tarax, tereb, uran n, urea, vanad. Pancreatic origin: Iris, pancreat, phos.

Diabetes with swollen ankle and acidosis (an abnormal production of acid in body and its defective elimination): with or without sugar in the urine, where there is great thrist; weakness and pallor and loss of flesh (acet ac). Excessive urination with sugar – arg nit.

- Diabetic, acidosis: soda bicarb and lithi carb
- Diabetes mellitus with dyspepsia - ura nit.
- Diabetes gangrene-ars alb.
- Diabetes insipidus-scilla.
- If chiefly in the night – phs ac and murex
- .Diabetic itching – dolichos
- Diabetic complication – graphites
- Diabetic complicated with albuminaria-canth
- Voracious appetite and costive bowels. Thirst, nausea
- Dry skin, dry tongue, urinates copiously – Lactic acid.

### Conclusion

Homoeopathic medicines are based up on Similia, Similbus Curentur, “likes cure likes”. All homoeopathy medicines will prescribe on bases of totality of symptoms. Homoeopathic medicines are safe, economic and human friendly.

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