Abstract

The history of diabetes dates back to centuries but no substantial success has yet been achieved in the development of permanent cure. Allopathic medicinal system is expensive, provides only symptomatic relief, fails to revert the body to normal state and the repercussions of long term therapy include severe side effects. To overcome these pitfalls, alternative systems have come into limelight: twenty two medicinal plants used by tribal people of Madhya Pradesh are enlisted for further exploration.

Keywords: Medicinal plants, Madhya Pradesh, Tribals, Antidiabetic.

IPC Code; Int. cl.7 — A61K 3/18, A61P 3/10

Diabetes mellitus, a metabolic disorder is characterized by hyperglycaemia, altered metabolism of lipids, carbohydrates and proteins and an increased risk of complications of vascular diseases. Major indications of diabetes mellitus include excessive thirst, urination, hunger, weight loss, fatigue, apathy, weakness, sleepiness, non-healing wounds, repeated infections and visual disturbances (although not every diabetic display these symptoms).

Diabetes is considered a disease of rich as can be interpreted from its etiology. Major causative factors include diet extra rich in sugars, lack of exercise, obesity, mental stress and strain, excessive sleep and genetic factors. In India, diabetes is increasing at an alarming rate. It is estimated by WHO that every sixth diabetic in the world is an Indian (estimated about 24 million in 2000). Comparison between the rural and the urban population reveals that rate of diabetes in latter is 8.5% and in former it is 2.5%.

Madhya Pradesh is very rich in different kinds of medicinal plants. On detailed survey, it was observed that tribals of this region are using various parts of 22 plants for the treatment of diabetes for centuries.

Plants used for treating diabetes by tribals in Madhya Pradesh

<table>
<thead>
<tr>
<th>Botanical name/Family</th>
<th>Common Name</th>
<th>Part used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acacia nilotica Delile subsp. indica (Benth.)</td>
<td>Babbula</td>
<td>Stem bark</td>
</tr>
<tr>
<td>Broussonetia arborescens</td>
<td>Dhaura</td>
<td>Bark</td>
</tr>
<tr>
<td>Anogeissus latifolia Wall. ex Bedd. (Combretaceae)</td>
<td>Satavar</td>
<td>Fleshy roots, Gladodes</td>
</tr>
<tr>
<td>Asparagus adscendens Roxb. (Liliaceae)</td>
<td>Vamsa</td>
<td>Fruits</td>
</tr>
<tr>
<td>Bambusa arundinacea Willd. (Poaceae)</td>
<td>Salmali</td>
<td>Roots</td>
</tr>
<tr>
<td>Bombax ceiba Linn. syn. B. malabaricum DC. (Bombacaceae)</td>
<td>Amahaldi</td>
<td>Roots, Rhizomes</td>
</tr>
<tr>
<td>Curcuma amada Roxb. (Zingiberaceae)</td>
<td>Khamaul</td>
<td>Tubers</td>
</tr>
<tr>
<td>Dioscorea alata Linn. (Dioscoreaceae)</td>
<td>Amla</td>
<td>Fruits</td>
</tr>
<tr>
<td>Emblica officinalis Gaertn. syn. Phyllanthus emblica Linn. (Euphorbiaceae)</td>
<td>Malu</td>
<td>Fruits</td>
</tr>
<tr>
<td>Ichnocarpus frutescens R. Br. (Apocynaceae)</td>
<td>Kalududhi</td>
<td>Roots</td>
</tr>
<tr>
<td>Lawsonia inermis Linn. (Lythraceae)</td>
<td>Madayanika</td>
<td>Juice of leaves</td>
</tr>
<tr>
<td>Mallotus philippensis Muell. -Arg. (Euphorbiaceae)</td>
<td>Sindur</td>
<td>Red powder</td>
</tr>
<tr>
<td>Mesua ferrea Linn. (Guttiferae)</td>
<td>Nagkesara</td>
<td>—</td>
</tr>
<tr>
<td>Ocimum americanum Linn. (Lamiaceae)</td>
<td>Vanulksi</td>
<td>Whole plant</td>
</tr>
<tr>
<td>Oroxyylum indicum Vent. (Bignoniaceae)</td>
<td>Syonaka</td>
<td>—</td>
</tr>
<tr>
<td>Pseudarthria viscida Wight &amp; Arn. (Fabaceae)</td>
<td>Salaparni</td>
<td>—</td>
</tr>
<tr>
<td>Roussea minor (Gaertn.) Alston (Convolvulaceae)</td>
<td>Vidhara</td>
<td>Roots</td>
</tr>
<tr>
<td>Scindapsus officinalis Schott (Araceae)</td>
<td>Gejappal</td>
<td>Shoots</td>
</tr>
<tr>
<td>Sphaeranthus indicus Linn. (Asteraceae)</td>
<td>Mundi</td>
<td>—</td>
</tr>
<tr>
<td>Tephrosia villosa Pers. (Fabaceae)</td>
<td>Sharpaunika</td>
<td>—</td>
</tr>
<tr>
<td>Terninalia arjuna (Roxb.) Wight &amp; Arn. (Combretaceae)</td>
<td>Kahu</td>
<td>—</td>
</tr>
<tr>
<td>Urena lobata Linn. (Malvaceae)</td>
<td>Vachita</td>
<td>—</td>
</tr>
<tr>
<td>Urgenia indica Kunth (Liliaceae)</td>
<td>Vanpiaz</td>
<td>Bulbs</td>
</tr>
</tbody>
</table>

References

In this column for the benefit of our patrons we are trying to include simple tips from medical experts of various systems of medicine.

The bronchi are air passages connecting the windpipe (trachea) with the sacs of lungs (alveoli), where oxygen is taken up by blood. Bronchitis is an inflammation of bronchi causing excessive mucus production and swelling of the bronchial walls.

Chronic bronchitis is the term applied when coughing and sputum continues for 2-3 months and returns each year for at least two years generally lasting slightly longer each time. According to the Unani system of medicine 'Sual' or cough is an act by which body tries to remove the irritating substances from organs (lungs). The act of cough is performed by contraction and relaxation of chest muscles and diaphragm. Sometimes chronic bronchitis is associated with airflow obstruction and may be associated with breathlessness.

Causes

According to Unani system of medicine, chronic bronchitis is caused due to accumulation of excessive phlegm in the respiratory system that causes irritation to the sacs of the lung thereby resulting in cough. The incidence of chronic bronchitis is more in winter and spring season. It is more prevalent in males. Cigarette smoking is the most prevalent causative factor of chronic bronchitis. It rarely occurs in non-smokers. Environmental pollution plays a major role in the development of the disease especially excessive quantity of SO₂ organic and inorganic dust.

Symptoms

Initially it begins with cough associated with expectoration of small amounts of sputum each morning. In this period the quality of life of the individual is absolutely normal. Gradually, cough becomes more frequent during daytime and even at night. The sputum, which initially was white in colour, may now become yellowish. At a later stage breathlessness and wheezing (a whistling sound produced while breathing) may be present. With the progression in the disease, the quality of life of the individual deteriorates. If the quality of life of the patient is such that he is unable to carry out the daily activities of living independently then he should immediately consult a physician.
DO's
1. Bed Rest.
2. Stay indoors in warm atmosphere.
3. Annual vaccination against influenza.
4. Vaccination once against bacterial pneumococcal pneumonia.
5. Regular exercise which includes walking or bicycling 3 times per week.
6. Oral dietary supplements to improve muscle strength.
7. Easily digestible meals without overeating.

DON'T's
1. Avoid smoking as it increases the disease.
2. Use of hair spray, deodorant spray and paint.
3. Cough suppressants.
4. Sedatives.
5. Diet having wet and cold temperament aid in the production of sputum; hence fat, curd, cold water and citrus fruits should be avoided.

Home Remedies
The following preparations are useful in the treatment of chronic bronchitis.

Preparation No. 1
Leaves of Gaozaban (Onosma bracteatum Wall.) 4g, seeds of Khatmi (Althaea officinalis Linn.) 6g, fruits of Sapestan (Cordia obliqua Willd.) 10 no., root of Mulethi (Glycyrrhiza glabra Linn.) 4g and fruits of Unnab (Ziziphus jujuba Mill.) 5 no. All the ingredients after boiling in 250 ml water, strained and sweetened with sugar may be taken twice daily.

Preparation No. 2
Juice of Adrak (Zingiber officinale Rosc.) 12 ml with 12 g of honey two or three times a day.

Preparation No. 3
Powder of Kakda singhii (Pistacia integerrima Stewart ex Brandis) 1 part and powder of Balela (Terminalia bellerica Roxb.) 1 part mixed with juice of Adrak and made into pills of the size of Bengal gram can be taken two to three times daily.

Preparation No. 4
One laung, Syzygium aromaticum (Linn.) Merrill & Perry with Paan leaf (Betel) twice daily.

Preparation No. 5
A piece of Mulethi, kept in hot ash till it becomes soft can be chewed and the juice is swallowed, two to three times a day.

Preparation No. 6
One part powder of Kakda singhii is mixed with equal part of powder of Sonth (Dried root of Zingiber officinale) 5 g of this powder may be taken twice or thrice daily.

Preparation No. 7
Gaozaban (5g), Mulethi (5 g) and 24 g of Misri are boiled in water, strained and 20 ml of this is taken twice daily.

Pharmacopoeial Medicines
2. Dayaqooza – 5-10 g with water twice daily.
3. Hab-e-sual (Pills) – Taken as lozenges according to need.
4. Iksir-e-sual – 1 tablet with honey twice daily.
5. Sualin – 2 tablets grounded and mixed with lukewarm water twice daily.

Dr Jamal Akhtar, Dr Nighat Anjum and Dr Bilal Ahmad
Unani Experts TKDL, NISCAIR
E-mail: jamal@niscair.res.in