Efficacy of Homeopathic Mother tincture Amygdalus persica Folium on blood Sugar Level

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ABSTRACT
Background: Diabetes mellitus is a hyperglycemia metabolic disease which occurs due to defect in insulin secretion, insulin action or both. Globally, diabetes mellitus is a serious and costly health problem particularly in developing countries.
Objective: To find out the Efficacy of Homeopathic Mother Tincture Amygdalus persica folium on blood sugar level.
Materials and Methods: A Non-Randomized Uncontrolled trial was performed. We decided to take the patients from both genders, Male & Females. 21 Females and 11 Males suffering from diabetes were enrolled. All the patients were above 30 years of age. 30 Drops were given thrice a day to the patients for 15 days and daily sugar level (Random & Fasting) was monitored.
Results: Total 32 patients were enrolled for this study. Fasting and random blood sugar level were monitored in all patients. Excellent results were seen in fasting blood sugar levels of 5 patients while good control of fasting blood sugar level was observed in 8 patients and no result was seen in 19 patients. 2 patients showed excellent result in their random blood sugar levels while in 18 patients good results were seen and no response was seen in 12 patients.
Conclusion: Our major findings of this study was that “Amygdalus persica folium” has the ability to control blood glucose level significantly. Overall a good improvement was seen in fasting and random blood glucose levels after the use of homeopathic mother tincture “Amygdalus Persica Folium” in diabetes type-2 patients.

INTRODUCTION
Diabetes mellitus is a hyperglycemia metabolic disease (1) which occurs due to defect in insulin secretion, insulin action or both (1, 2). Basically diabetes mellitus disturbs the metabolism of fats, carbohydrates and protein (3, 4). Retinopathy, neuropathy and nephropathy are the complications of diabetes. There are two types of diabetes, one is type-1 and second is type- 2.(5) Type-1 Diabetes is an autoimmigue disorder leading to the destruction of pancreatic beta-cells. (6) Type-2 Diabetes which is a more common form of diabetes mellitus(3) and it is increasing rapidly in population (7).
Globally, diabetes mellitus is a serious and costly health problem, particularly in developing countries. (8) As it is the major cause of morbidity, mortality and long term complication (9). According to the World Health Organization, there are approximately 143 million people with diabetes worldwide and this number is expected to rise to almost 300 million (10). Homeopathy is a commonly used way of treatment for diabetes mellitus and its complications (11) because Patients are not completely satisfied with conventional treatments, that’s why public demand for homeopathy is increasing (12). In acute and chronic conditions of disease, homeopathy found to be very effective. However, in Pakistan, there is a lack of sufficient evidence regarding the homeopathic remedies (13).
Thus the study aimed to evaluate the efficacy of homeopathic mother tincture Amygdalus persica folium on blood sugar level.

RESEARCH METHODOLOGY
This study was carried out to assess the efficacy of
Homeopathic mother tincture Amygdalus persica folium on blood glucose levels. The study was conducted in two different areas of Lahore. A medical camp was arranged under the supervision of a qualified homeopathic physician. Fasting, as well as random blood sugar levels, were monitored before the enrollment of patients. Patients were enrolled according to predefined inclusion and exclusion criteria. The duration of the study was 15 days. At the end of the study, baseline values were compared with the final value. The efficacy criteria was predefined to evaluate the response of homeopathic mother tincture Amygdalus persica folium in diabetic patients as shown in table 1.

<table>
<thead>
<tr>
<th>Remarks</th>
<th>Fasting (mg/dl)</th>
<th>Random (mg/dl)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent control</td>
<td>80-100</td>
<td>80-150</td>
</tr>
<tr>
<td>Good control</td>
<td>100-130</td>
<td>150-180</td>
</tr>
<tr>
<td>Being effective</td>
<td>Continuously decreasing values</td>
<td>Continuously decreasing values</td>
</tr>
<tr>
<td>Not Effective</td>
<td>No Change</td>
<td>No Change</td>
</tr>
</tbody>
</table>

Table 1: Efficacy Criteria

INCLUSION CRITERIA
Patients above 70 and with other types of diabetes were excluded. Patients with a history of major illnesses, patients having complex diseases and patients showing no interest were excluded. Pregnant and lactating women were also not included.

DATA COLLECTION
Patients were assessed for eligibility criteria by qualified homeopathic doctors according to predefined inclusion and exclusion criteria. Patients who fulfil inclusion criteria were given a consent form to be signed. Patient's basic information was taken including name, gender, age and telephone numbers. Vitals was taken, blood glucose level was checked and recorded. Patients were advised to check their glucose level (fasting and random) daily and made a record of them and visit next week. 30 drops of Homeopathic mother tincture Amygdalus persica folia thrice a day was dispensed along with dietary management advice. Also, the patients who were already under allopathic or homoeopathic treatment were considered. In total 64 patients visited, out of which 32 patients were enrolled because others did not fulfil the inclusion criteria.

OVERVIEW OF THE STUDY

RESULTS
A significant reduction was seen in patients fasting blood glucose levels. 80-100 mg/dl fasting blood glucose levels was recorded in 85 patients while 100-130 mg/dl value was seen in 8 patients and slow improvement was seen in 19 patients. As shown in results, Amygdalus persica folium found to be effective for good glycemic control in diabetic patients.

<table>
<thead>
<tr>
<th>Serum Glucose (mg/dl)</th>
<th>Patients</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-100</td>
<td>5</td>
<td>Excellent</td>
</tr>
<tr>
<td>100-130</td>
<td>8</td>
<td>Good</td>
</tr>
<tr>
<td>Continuously decreasing values</td>
<td>19</td>
<td>Effective</td>
</tr>
<tr>
<td>No change</td>
<td>0</td>
<td>No Change</td>
</tr>
</tbody>
</table>
Excellent control in random blood glucose level was in 2 patients while good control was seen in 18 patients. In 12 patients slow but effective results were obtained. Overall a good and effective result of homeopathic mother tincture “Amygdalus persica folium” was seen in all patients as showed in table 3.

<table>
<thead>
<tr>
<th>Serum Glucose (mg/dl)</th>
<th>Patients</th>
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</tr>
</thead>
<tbody>
<tr>
<td>80-150</td>
<td>2</td>
<td>Excellent</td>
</tr>
<tr>
<td>150-180</td>
<td>18</td>
<td>Good</td>
</tr>
<tr>
<td>Continuously decreasing values</td>
<td>12</td>
<td>Effective</td>
</tr>
<tr>
<td>No change</td>
<td>0</td>
<td>No Change</td>
</tr>
</tbody>
</table>

Table 3: Random blood glucose level

**DISCUSSION**

Homeopathy is a complementary & alternative medicine and public interest increasing day by day for diabetic medication towards this way of treatment (6). Basically, Type-2 diabetes occurs due to defect in insulin secretion which results in increased blood glucose levels (14). It is a major cause of mortality and morbidity. Type-2 diabetes currently affecting 140-150 million people worldwide. (15)(16). T2D is also known as insulin-resistant diabetes, non-insulin dependent diabetes, and adult-onset diabetes (17). High trends of hospitalization, retinopathy, neuropathy and traumatic amputation, are the associated risk factors of diabetes mellitus (18).

Diabetes mellitus is the fourth leading cause of death in developed countries and globally, diabetes imposes a great economic burden on the healthcare system. In
Pakistan prevalence of diabetes mellitus is high (19). In 1995, 4.3 million people were with diabetes mellitus and this number is expected to rise 14 million in 2025 (20). Thus this study was conducted to evaluate the efficacy of homeopathic mother tincture Amygdalus persica folium on the blood sugar levels.

There could be the following possibilities in describing the mode of action through which the Homeopathic Mother Tincture “Amygdalus persica folium” seems to be helpful in hyperglycemic conditions, although there is a need for further study to demonstrate the actual mechanism of action of “Amygdalus persica folia” clearly. Either by inhibiting the absorption of glucose from the intestine or by enhancing the peripheral utilization of glucose in the body. The “Wormicidal” action of “Amygdalus persica folium” known in old times could also be reason of its action (because there is high prevalence of worms living in large gut that might secrete their by-products in the gut which interferes in the insulin binding mechanism, so Amygdalus Wormicidal action cleans the gut that leads insulin to act in proper way maintaining the level of glucose in blood.

Criteria for diagnosis of diabetes, if fasting blood glucose levels is > 126 mg/dl and random blood glucose levels are> 200 mg/dl (2, 21). That is why in this study fasting and random blood glucose levels were monitored. Fasting and random blood sugar levels of diabetic patients were checked and recorded on data collection form before administration of homoeopathic mother tincture “Amygdalus persica folium”. The duration of the study was 15 days. Baseline values were compared with the final results. Patients were advised to use 30 drops of homoeopathic mother tincture “Amygdalus persica folium” thrice a day for regular use along with dietary management.

In 6% patients excellent random blood glucose control was seen while 56% of the patients showed good control and 38% patients showed slow but effective control in their levels. Results showed that Amygdalus persica folium is effective in lowering the blood glucose level and has hypoglycemic effect. So it can be clinically used. To control diabetes, self-care is very important. Regular checkup of diabetic patients is very important to avoid any long term complication (22). Thus Public awareness about diabetes and its complication is also very important (23).

CONCLUSION

Our major findings of this study were that “Amygdalus persica folium” has the ability to control blood glucose level significantly. Overall a good improvement was seen in fasting and random blood glucose levels after the use of homeopathic mother tincture “Amygdalus Persica Folium” in diabetes type-2 patients.

REFERENCES