

**Case Report: Type 2 Diabetes Mellitus (*Ziabetes shakari*)**Abdul Azeez Rizwana<sup>1\*</sup> and MHM Hafeel<sup>2</sup><sup>1</sup>Lecturer, Institute of Indigenous Medicine, University of Colombo, Rajagiriya, Sri Lanka<sup>2</sup>Senior Lecturer, Institute of Indigenous Medicine, University of Colombo, Rajagiriya, Sri LankaDOI: [10.36348/sijtcm.2021.v04i07.002](https://doi.org/10.36348/sijtcm.2021.v04i07.002)

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**Abstract**

A 42 year old lady approached OPD of the Ayurveda hospital, Aniyakanda, Kandana, Sri Lanka and got registered in OPD in February, 2016. She was seeking leach therapy for bluish, dilated and twisted varicose vein at the right popliteal fossa. She reported no history of diabetes mellitus on the past but on advice she did basic laboratory investigations prior to leach therapy i.e FBS, BT and CT. The blood report showed FBS of 220 mg/dl dated on 1<sup>st</sup> of March 2016. This patient was investigated as recently diagnosed case of diabetes mellitus and laboratory test was repeated 03/03/2016 to confirm diagnosis which revealed FBS of 201 mg/dl and PPBS of 240 mg/dl. Patient was advised not to take any allopathic medicine. Treatment was employed according to *ilaj bil dawa* (Pharmacotherapy), half a cup of decoction was prescribed twice a day which consisted 15g of *Amla* (*Phyllanthus embilica*), 15g of *Gilo* (*Tinospora cordifolia*), 15g of posth e *Neem* (*Azadirachta indica*), and 15g of *Darhaldi* (*Coscinium fenestratum*) along with appropriate *ilaj bil ghiza* (Dietotherapy) prescribed. Patient was assessed every other week with repeated FBS for a period of 3 months. The observed mean FBS during the course of treatment was 136 mg/dl. At the end of this case study the FBS was found to be 108 mg/dl. Efficacy of variety of *mufrat advia* (single drug) has been already established by some studies. We need to conduct randomized clinical trial in larger sample size in order to establish the effective management for DM.

**Keywords:** Diabetes Mellitus, FBS, *Ziabetes shakari*, *Ilaj bil ghiza*, *Amla*, *Gilo*, *Neem*, *Darhaldi*.**Copyright © 2021 The Author(s):** This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.**INTRODUCTION**

The prevalence of diabetes is rapidly rising all over the globe at an alarming rate [1]. The global increase in the prevalence of diabetes is due to population growth, ageing, urbanization, an increase of obesity and physical inactivity [1, 2]. Asian countries contribute to more than 60% of the world's diabetic population as the prevalence of diabetes is increasing in these countries. Socio-economic growth and industrialization are rapidly occurring in many of these countries [1]. Diabetes is a major cause of morbidity and mortality worldwide. The word diabetes is derived from the Greek term "*diabanein*" which means to "passing through" or "run through" in reference to the excessive urine produced as a symptom of this disease [3]. Type 2 diabetes used to be called non-insulin dependent diabetes (NIDDM) or adult-onset of diabetes. Type 2 Diabetes is a heterogenous disorder caused by a combination of genetic factors related to impaired insulin secretion, insulin resistance and life style factors such as overeating, lack of exercise, and stress as well as consumption of fast foods [4].

**Pathophysiology or *Mahiyath e marz***

Current theories of type 2 diabetes include a defect in insulin mediated glucose uptake in muscle, a dysfunction of the pancreatic  $\beta$ -cells, a disruption of adipocytes and an impaired insulin action in liver. Type 2 diabetes causes dysfunctions in multiple organs or tissues and leads to severe complications, including renal failure, blindness, slow healing wounds, and arterial diseases. It is not an autoimmune disorder and the susceptible genes that predispose to NIDDM have not been identified in most patients [5, 6].

*Ziabetes Shakari* has been correlated with type 2 diabetes mellitus and described accurately the clinical features and specific complications of disease in classical Unani literature. Although modern terminology did not exist in ancient era but description of excessive heat that cause weakening of liver in *Sue mizaj wa zauf e jigar* and the role of this *mizaj* in *Ziabetes shakari* was described in ancient literature. Dryness of liver is a concept of holism (broader view) in Unani medicine that disturbed the *mizaj* of liver [7, 8].

*Zakariya Razi* stated in his book of *Kitabul Havi*, In this disease conditions the temperature of kidneys become hot due to which it absorbs water, but due to weakness of its retention power (*Quwat e masika*) it eliminate *rutubath* towards bladder i.e. the bladder does not absorb water from kidney.

### Management

According to *Zakkaria Razi* and *Ibn-e- Sina*, the treatment of *Ziabetus shakari* is based on the following principles:

1. To find out and eliminate the existing causes
2. *Ta'deel-e-mizaj* (Moderation of temperament)
3. *Taqleel-e-ghiza* (Minimize the intake of diet)
4. *Ilaj bil dawa* (Pharmacotherapy)
5. *Ilaj bil Tadbeer* (Regimental therapy)

According to Unani physicians the drugs which correct the *mizaj* (temperament) of kidney and liver or restore the *quwath e masisika* (retention power) and *quwath e jaziba* (absorption power) of kidney are used to manage *Ziabetus shakari* or *Ziabetus haar* [8, 9].

### CASE REPORT

A 42 year old lady approached OPD of the Ayurveda hospital, Aniyakanda, Kandana, Sri-Lanka and got registered in OPD in February, 2016. She was seeking leach therapy for bluish, dilated and twisted varicose vein at the right popliteal fossa. She reported no history of diabetes mellitus on the past and present and also no positive family history but on advice she did basic laboratory investigations prior to leach therapy i.e FBS, BT and CT. The blood report showed FBS of 220 mg/dl dated on 1<sup>st</sup> of March 2016. This patient was investigated as recently diagnosed case of diabetes mellitus and laboratory test was repeated 03/03/2016 to confirm diagnosis which revealed FBS of 201 mg/dl and PPBS of 240 mg/dl. Patient was advised to not to take any allopathic medicine. Many *mufrad advia* (single drug) which contain astringent as well hypoglycaemic activity have been extensively reported by Unani physicians. From that *Amla* (*Phyllanthus embilica*), *Gilo* (*Tinospora cordifolia*), *Neem* (*Azadirachta indica*) and *Darhaldi* (*Coscinium fenestratum*) were randomly selected to reduce blood sugar level of this case.

*Joshanda* (Decoction) was prepared from following fresh *mufrad advia* and half a cup of decoction was prescribed twice a day. Appropriate *Ilaj bil ghiza* was prescribed during the treatment period.

- *Amla* (*Phyllanthus embilica*) -15g
- *Gilo* (*Tinospora cordifolia*) - 15g
- Posth e *Neem* (*Azadirachta indica*)- 15g
- *Darhaldi* (*Coscinium fenestratum*) -15 g

## RESULT

**Table-1: Assessment of FBS**

Date	FBS
<b>Pre treatment</b>	
01.03.2016	220 mg/dl
03.03.2016	201 mg/dl
<b>Post treatment follow up</b>	
10.03.2016	160 mg/dl
31.03.2016	120 mg/dl
07.4.2016	176 mg/dl
28.04.2016	112 mg/dl
13.05.2016	99 mg/dl
23.05.2016	108 mg/dl

Patient was assessed every other week with repeated FBS for a period of 3 months. The observed mean FBS during the course of treatment was 136 mg/dl. At the end of this case study the FBS was found to be 108 mg/dl.

## DISCUSSION

The study was done by Qutubuddin *et al.* (2012) confirmed hypoglycaemic and astringent property of *Gilo*. Hypoglycaemic property of *Neem*, *Amla*, *Gilo*, *Darhaldi* etc were mentioned by Majoosi [10].

## CONCLUSION

Efficacy of variety of *mufrat advia* (single drug) has been already established by some studies. We need to conduct randomized clinical trial in larger sample size in order to establish the effective management for DM.

## REFERENCES

1. Ramachandran, A., Snehalatha, C., Shetty, A. S., & Nanditha, A. (2012). Trends in prevalence of diabetes in Asian countries. *World journal of diabetes*, 3(6), 110.
2. Ramachandran, A., Das, A. K., Joshi, S. R., Yajnik, C. S., Shah, S., & Prasanna Kumar, K. M. (2010). Current status of diabetes in India and need for novel therapeutic agents. *Journal of Association of Physicians of India*, 58(JUN), 7-9.
3. Pathak, A. K., Sinha, P. K., & Sharma, J. (2013). Diabetes – A Historical review. *Journal of Drug Delivery and Therapeutics*, 3(1).
4. Anonymous. (2009). American Diabetes Association. Diagnosis and Classification of Diabetes. *Diabetes*, 32(Suppl.1), 62-66.
5. Misra, U. K., & Kalita, J. (2021). *Neurological Consequences of Nutritional Disorders*. CRC Press.
6. Krishna, Das, K.V. (2008). Text book of Medicine. 5<sup>th</sup> ed. New Delhi: Jaypee brother's medical publisher (P) LTD, 544-546,554-556.

7. Harsh, M. (2006). Text Book of pathology. 5<sup>th</sup> ed. New Delhi: Jaypee brother's medical publisher (P) LTD, pp. 842-47.
8. Ibn, Sina. (2007). *Al Qanoon fit Tib* (Urdu translation by Kantoori GH). Vol-II. New Delhi: Idara Kitabush Shifa, 1031-34.
9. Kabiruddin, M. (2003). Al- Akseer. Vol II. New Delhi (India): Aijaz Publication House, 1195-1199.
10. Majoosi. (2010). AA.Kamelus Sana'ah, (Urdu translation by Kantoori GH).1<sup>st</sup> ed.New Delhi: Idara Kitabus Shifa, 154,467,472,527.