

Type 2 Diabetes Mellitus Control by Acupuncture and Prescribed SUO-XI Healthy Lifestyle: A Case Report

¹Dr. Sm. Shahidul Islam, Visiting Consultant & Acupuncture Specialist, Suo-Xi Hospital (Acupuncture), Shaan Tower, Chameli Bag, Santi Nagar, Dhaka, Bangladesh.

²Dr. M. Shaifur Rahman, Associate Professor & Head, Department of Food Engineer and Technology, State University of Bangladesh, Dhaka, Bangladesh.

³Sabina Yasmin, CEO, Suo-Xi Hospital (Acupuncture), Shaan Tower, Chameli Bag, Santi Nagar, Dhaka, Bangladesh.

⁴Shayita Islam, Associate Writer, Suo-Xi Hospital (Acupuncture), Shaan Tower, Chameli Bag, Santi Nagar, Dhaka, Bangladesh.

Corresponding Author: Dr. Sm. Shahidul Islam, Visiting Consultant & Acupuncture Specialist, Suo-Xi Hospital (Acupuncture), Shaan Tower, Chameli Bag, Santi Nagar, Dhaka, Bangladesh.

How to citation this article: Dr. Sm. Shahidul Islam, Dr. M. Shaifur Rahman, Sabina Yasmin, Shayita Islam, “Type 2 Diabetes Mellitus Control by Acupuncture and Prescribed SUO-XI Healthy Lifestyle: A Case Report”, IJMACR- July - 2023, Volume – 6, Issue - 4, P. No. 05 – 09.

Open Access Article: © 2023, Dr. Sm. Shahidul Islam, et al. This is an open access journal and article distributed under the terms of the creative common’s attribution license (<http://creativecommons.org/licenses/by/4.0>). Which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Type of Publication: Case Report

Conflicts of Interest: Nil

Abstract

Background: As a worldwide epidemic, type 2 diabetes mellitus (T2DM) demands urgent attention all over the world as well as in Bangladesh. However, the effectiveness of traditional chines abdominal acupuncture treatment and the healthy life style modification can significantly reduce blood sugar level, improve metabolic and endocrine illnesses of type 2 diabetes mellitus patients as an alternative supplemented medicine base treatment.

Objective: The goal of this case study is to highlight traditional chines abdominal acupuncture & healthy life as an alternative treatment to reduce the level of blood

sugar level, improve metabolic and endocrine illness of type 2 diabetes mellitus patients.

Method: This was a case study of a 38 years old female patient who was diagnosed as a type 2 diabetes mellitus patient with high blood sugar of RBS 8.9 mmol/ L. She wanted to be treated by abdominal acupuncture through traditional chines methods and follow prescribed Suo-Xi life style modification to reduce blood sugar level and improved metabolic & endocrine illness.

Outcomes: A 3 month’s abdominal acupuncture was done once a week and prescribed Suo-Xi life style modification. After the combination of acupuncture & life style modification, patient’s blood sugar level hba1c

significantly dropped from RBS 8.9 mmol/ L to 5.4 mmol/L.

Conclusion: This case study showed that traditional abdominal acupuncture and prescribed Suo-Xi healthy life style combination not only effectively reduced blood sugar, but also significantly improves the metabolic and endocrine illnesses of the study patients.

Keyword: Type 2 diabetes mellitus(T2DM), Traditional chines, Abdominal acupuncture, Suo-Xi healthy life style.

Introduction

Consistently high blood glucose levels, a metabolic illness known as type 2 diabetes mellitus (T2DM), are brought on by a combination of factors, including insulin resistance and decreased insulin production.[1] According to the International Diabetes Federation, 9.2% (642 million) of adults will have type 2 diabetes by 2040, up from the current 10.4% (415 million).Uncontrolled hyperglycemia has been shown to increase the incidence of certain diabetes complications , due to its vascular toxicity.[2] The major cause of death among people with type 2 diabetes is cardiovascular disease, which is one of the most common macro vascular consequences. [3] Hospitalization for heart failure was found to raise the incidence of type 2 diabetes by 33%, according to a registry analysis. [4] About 35% of diabetic individuals will develop diabetic nephropathy12.3% will develop diabetic retinopathy, and 29.2% will acquire diabetic peripheral neuropathy. [5,6] These microvascular problems are a result of the high blood sugar levels that are characteristic of diabetes. [7] On top of that, diabetes patients of all ages and sexes spend anything from \$612 billion to \$1099 billion annually on medical care, or between 11 and 20 percent of the total. [8,9] A prominent alternative

treatment, acupuncture, was first documented in a TCM classic, The Yellow Emperor's Classic of Internal Medicine, some three thousand years ago.[10] Acupuncture can be effective for treating sickness, according to TCM, since it stimulates the body's meridian points (called acupoints).[11] Several studies have demonstrated the positive effects of acupuncture on metabolic and endocrine illnesses include polycystic ovary syndrome, thyroid dysfunction, obesity, and type 2 diabetes.[12,13] A variety of acupuncture and associated techniques, such as electroacupuncture (EA), acupressure, moxibustion, warm acupuncture, and transcutaneous acupoint electrical stimulation, are being used to treat these conditions, with most treatments focusing on the body or the ear.[14,15]

Case report

Sabera Sultana, a female 38 years old patients developed type 2 diabetes mellitus came to us for acupuncture treatment. Her main complaint was high levels of blood sugar (RBS was 8.9 mmol/ L). Her symptoms were increased thirst, urination and hunger; hyperhidrosis (excessive sweating), exhaustion, irritability and impatience, yellow urine, excessive urination during the night, thirst with a dry mouth and throat, weight loss, dull pain in the liver and spleen areas, lower back pain on and off. He had a bowel movement with dry stools once a day in the morning after breakfast at 7am. She had abdominal distension after eating. His tongue was red with a yellow coating, cracks in the middle with tooth marks on the side, and the tip of his tongue had begun to atrophy. His pulse was rapid and strong. Her abdominal ultrasound showed a fatty liver.

Patient's Socio & Clinical Profiles

- Female
- Age 38 years

- Occupation: Housewife
- Height -5 feet 4 inch
- Weight - 54 Kg
- BMI - 20.4 Kg/m²
- IBW - 59.56 Kg

Patient’s RBS & hba1c Investigation Findings

Random Blood Sugar (RBS)

- Before treatment- RBS: 8.9 mmol/L
- After treatment- RBS: 5.4 mmol/L

Hba1c

- Before 3 months-7.4%
- After 3 months- 6.1%

Methods: Traditional Chinese acupuncture method (TCM) was applied.

Acupuncture Treatment Strategy: Abdominal acupuncture.

Treatment protocol: Acupuncture once a week.

Frequency

1 treatment a week, 12 times per treatment course. 3 groups of acupoints were used alternately for 3 months.

Lifestyle modification: 2000 kcal/day.

feet up, first to the left side of the body and then to the right. With the tonification-purgation method, disposable sterile needles of size 0.25x25mm are inserted perpendicularly in all locations to a depth of 10-15mm. Patient-preferred intensity levels of a continuous wave are applied to acupuncture needles inserted ipsilaterally at the acupoints li11 (quchi), pc6 (neiguan), st36 (zusanli), and sp6 (sanyinjiao), and bl15 (xinshu), yishu (ex-b 3), bl20 (pishu), and bl23 (shenshu). Needles are left in place for 30 minutes at a time at each session, and acupuncture points are needled on both sides, in rotation.

Outcomes

Following three months of traditional chinese abdominal acupuncture treatments, her fasting blood glucose levels decreased and stabilized at 5.4 mmol/l. Her liver and spleen stopped hurting. Sweating levels became lowered. Her sleep quality enhanced and her energy levels returned to normal, so that she no longer experienced daytime fatigue. In the morning, between 6 and 7 o'clock, before breakfast, she had to go to the bathroom. One nighttime urination per night was achieved.

Discussion

Diabetes mellitus is a long-term condition brought on by either insufficient insulin production by the pancreas or improper insulin utilization by the body. There is a fully developed body of knowledge in traditional chinese methods(tcm) that diabetes mellitus and possesses uncommonly in-depth knowledge of this disease's origins and mechanisms, clinical manifestations, risk factors, complications, treatment strategies, and nursing care. Diabetes mellitus can be caused by a lack of viscera, an unhealthy diet, mental health problems, or renal damage. Various visceral metabolic disorders, including stomach heat, spleen weakness, heart fire, dry lungs, liver stagnation, phlegm and dampness, and

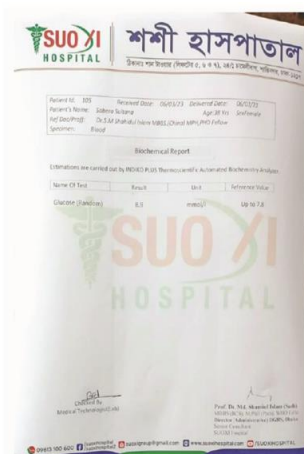


Figure I: Patient's RBS Report before treatment

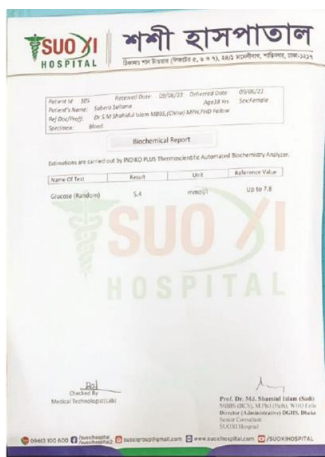


Figure II: Patient's RBS Report after treatment

Acupuncture manipulation

After using an alcohol-soaked cotton ball to sterilize each insertion place, the needles are inserted from the

kidney inadequacy, contribute to diabetes mellitus etiology. Constant urination, thirst, weakness, and poor digestion are additional symptoms that may improve with acupuncture treatment for diabetes issues. Self-monitoring blood glucose values below 8.6 mmol/l are common targets for those with type 2 diabetes undergoing therapy. [16] the patient's success in managing type 2 diabetes thanks in part to electro acupuncture treatment. Once tcm has brought blood sugar under control, a change in lifestyle is crucial. Type 2 diabetics can benefit from a nutritious diet (low-glycemic index food), frequent exercise, and weight control to keep their blood glucose levels within a healthy range. One's lifestyle should be adjusted by replacing things like raw food, cold drinks, sugar and saturated fats, coffee, and alcohol with things like three square meals a day, regular bedtimes, and no smoking. In addition, maintaining mental calm and emotional steadiness is crucial in the clinical management of type 2 diabetes, therefore refraining from ruminating is of paramount importance.

Conclusion

Type 2 diabetes can be effectively treated with the help of traditional chinese methods (tcm) of abdominal acupuncture & healthy life style modification. It is a safe and effective combination of commonly used medications to treat diabetes-related complications. In addition to lowering blood sugar, this example demonstrates that electro acupuncture can alleviate patient's subjective symptoms, allow them to take less of their diabetes medications, and halt the course of type 2 diabetes. This case further demonstrates the validity of tcm as a means of achieving non-invasive, beneficial effects on health.

References

1. American diabetes association. Classification and diagnosis of diabetes: standards of medical care in diabetes - 2018. *Diabetes care* 2017;41(suppl 1): s13-27.
2. Ogurtsova k, da rocha fernandes jd, huang y, et al. Idf diabetes atlas: global estimates for the prevalence of diabetes for 2015 and 2040. *Diabetes res clin pract* 2017; 128:40-50.
3. Forbes jm, cooper me. Mechanisms of diabetic complications. *Physiol rev* 2013; 93:137-88.
4. Cavender ma, steg pg, smith sc, et al. Impact of diabetes mellitus on hospitalization for heart failure, cardiovascular events, and death. *Circulation* 2015; 132:923-31.
5. Tesch gh. Diabetic nephropathy - is this an immune disorder? *Clin sci (lond)* 2017; 131:2183-99.
6. Rodriguez-poncelas a, miravet-jimenez s, casellas a, et al. Prevalence of diabetic retinopathy in individuals with type 2 diabetes who had recorded diabetic retinopathy from retinal photographs in catalonia (spain). *Br j ophthalmol* 2015; 99:1628-33.
7. Bansal d, gudala k, muthyala h, et al. Prevalence and risk factors of development of peripheral diabetic neuropathy in type 2 diabetes mellitus in a tertiary care setting. *J diabetes investig* 2014; 5:714-21.
8. Da rocha fernandes j, ogurtsova k, linnenkamp u, et al. Idf diabetes atlas estimates of 2014 global health expenditures on diabetes. *Diabetes res clin pract* 2016; 117:48-54.
9. World health organization national health account database 2014. Available at: <http://apps.who.int/nha/database>. Accessed november 10, 2018.

10. White a, ernst e. A brief history of acupuncture. *Rheumatology (oxford)* 2004; 43:662-3.
11. Acar hv. Acupuncture and related techniques during perioperative period: a literature review. *Complement ther med* 2016; 29:48-55.
12. Liang f, koya d. Acupuncture: is it effective for treatment of insulin resistance? *Diabetes obes metab* 2010; 12:555-69.
13. Zollman c, vickers a. *Abc of complementary medicine. Users and practitioners of complementary medicine.* *Bmj* 1999; 319:836-8.
14. Feng y, fang y, wang y, et al. Acupoint therapy on diabetes mellitus and its common chronic complications: a review of its mechanisms. *Biomed res int* 2018; 2018:3128378.
15. Cheng fk. An overview of the contribution of acupuncture to thyroid disorders. *J integr med* 2018; 16:375-83.
16. Mayo clinic, a1c test. (2022).