

# Management of Recurrent urinary tract infection in diabetic patient with Ayurveda and counselling- Case study

Dr. Nishi Arora, M.D., Ph.D. (Ayurved), Associate Professor, A & U Tibbia College & Hospital, New Delhi, India

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# ABSTRACT

A female patient of 56 years came to the Diabetic screening and counselling OPD of Ayurveda and Unani Tibbia college & hospital in February 2015 with chief complaints of increased frequency of micturition and burning sensation in urethra. On examination it was found that she had raised levels of blood sugar & pressure. She revealed about her irregular eating and sleeping patterns, along with non adherence to medicine. She was not obese and also did not have any family history of Diabetes/Hypertension. From this, it was inferred that psychosocial factors could be the reason behind non-adherence,. "Person centric integrated counselling technique" was used along with Ayurveda medicines. The patient underwent about six sessions of counselling and Ayurveda medicines for two months. She could attain normalcy in blood sugar and pressure levels. She could get relieved of urinary tract infection. No relapse of any of the problems was reported in the next six months' follow-up after the regimen. It was concluded from the case that holistic approach of Ayurveda medicines along with "person centric integrated counselling" can efficiently manage recurrent UTIs in Diabetic patients.

Key words; Diabetes Mellitus, Urinary tract infection, "person centric integrated counselling technique", nonadherence

# INTRODUCTION

Predisposition to urinary tract infections (UTIs) in Diabetes mellitus results from several factors. [1]Susceptibility increases with longer duration and greater severity of Diabetes. High glucose content in urine and defective host immune factors predispose to infections. They are also more often caused by resistant pathogens.[2] The high rates of antibiotic prescription, including broad-spectrum antibiotics, for UTI in these patients may further induce the development of antibiotic-resistant urinary pathogens. The other aspect of difficulties in treating a patient of Diabetes mellitus type II is of "non-adherence". Human nature, the complexity of the regimen, and the chronicity of Diabetes also contribute importantly to non-adherence. Nonadherence is a central focus of psychological treatment because of its recoganized association with poor metabolic control and increased risk of diabetes complications.[3]

Non-adherence is often mistakenly attributed to inadequate knowledge about proper diabetes care. Many other psychosocial factors contribute significantly to this problem, such as inadequate social support, time pressures, stress, and health beliefs that are incompatible with the regimen. The psychologist can provide treatment to develop new healthful behaviors, enhance existing healthful behaviors, and extinguish unhealthy behaviors as they relate to improved glycemic control. [4]

Stress is common in diabetes and is brought on by ordinary daily hassles (e.g., driving in traffic, conflict with family members, work deadlines), negative life events (e.g., death of a loved one, financial problems, divorce), and the additional burdens of coping with diabetes. Stress may have direct effects on health via elevated blood glucose value. [5]

Hence, A comprehensive plan for treating the patient came to the OPD of diabetic screaning and counselling was prepared. Ayurveda medicines were prescribed to reduce the physical burden of the patient. Psychological treatment with "person centric integrated counselling technique" was taken up. The gross objectives were as follows:-

• To improve adherence to the diabetes treatment regimen

• To promote pro-diabetic coping behaviors (e.g., diet and exercise)

• To combat Hyperglycemia and UTI with Ayurvedic medicine

• To ensure good quality of sleep and reduce blood pressure

To improve family functioning as it relates to communication and problem solving about diabetes
To provide support for subclinical distress related to diabetes.

## **Case Report**

Mrs. S (56 years) came in the diabetic screening and counselling OPD of A&U Tibbia college and Hospital in February 2015 with chief complaints of increased frequency of micturition with burning sensation in urethra. Detail history taken from the patient revealed that she was suffering from diabetes mellitus type II since 2004. Recurrent urinary tract infection was also reported. She was taking Allopethic medicines for both Diabetes and hypertension. She could not get the desired results out of the medication. On examination, her fasting blood sugar level was detected as 202 mg/dl while post prandial blood sugar was 350mg/dl. Her BP was 168/100mmH. The history was suggestive of some underlying psychosocial cause behind the non-responsiveness occurence and of the problem.Written consent for treatment plan was taken from the patient which included permission for counselling sessions and Avurveda medicines. Building up of rapport with the patient was the goal for the first session. In the next session, she was motivated to vent out her anxieties.After 20-25minutes of free association and catharsis, she felt lighthearted after the session. She narrated her story and problems, to which the counsellor listened to with empathy without becoming judgemental at any point of time. She told that the relationship between her and her family were not cordial.She felt neglected and marginalised in the family. In subsequent sessions, it was clear that she remained in constant stress for long. She started neglecting herself and was very ignorant towards her health and hygiene. The plan of action was also prepared for further sessions.In the next session psychoeducation about the disease and its complications were explained to the patient along with it's causes and persistance.Importance of medicine compliance was also discussed.Further activities of daily living (ADL)were first discussed and then explained according to the need of the patient. Ayurveda medicines were adviced as chandraprabhavati -2 tab thrice daily.Gokshuraadi guggulu,2 tab thrice daily., sajjikshar 125 mg twice daily.Vasannt kusumakar Ras,1tab twice daily.Brihad bangeshwar ras 1 tab twice daily. Sarpagandhavati 2 tab twice daily for two

months.Diet chart for Diabetes and Hypertension was provided to the patient.She was motivated for morning and evening walk of atleast 30 minutes.Next counselling session was for teaching stress management techniques.The patiant was taught to learn about working at her cognition level; means to replace negative arbitrary thoughts with positive and motivating ones. The principle of remaing busy with work of choice, and increasing social activities like satsang etc. to remain aware about spiritual aspects of life and hence to be away from daily chios of petty familial issues.Last ,but not the least,Pranayaam was intoduced.

With complete treatment regimen of counselling and medicines, for two months, the patient's Diabetes and Hypertension came under control with fasting blood sugar as low as 100mg/dl and post prandial blood sugar at less than 140 mg/dl. The blood pressure reading was around 130/80mm/Hg. No relapse of urinary tract infection was seen in the next 6 months follow-up. No relapse of Hypertension or surge in blood sugar level was reported.

### Discussion

56 years old Mrs. S approached the diabetic screening and counselling OPD of Ayurveda and Unani Tibbia College & Hospital with chief compliants of increased frequency of micturition and burning sensation in urethra. The patient was found to be suffering from Chronic Diabetes and Hypertension. After exploration, it was inferred that psychosocial factors resulting in non-aherence and self-neglection were more responsible for her suffering rather than the physical ailments. A comprehensive plan was prepared after taking written consent from the patient. In this plan, were Avurveda medicines pescribed and counselling sessions were carried out with "person centric integrated counselling technique". Initial counselling session helped in building up rapport with the patient. In subsequent sessions she vented out her anxieties which provided her with light heartedness. The long stuck lot of distressing thoughts could be eased out this way. The psychoeducation session probably made her understand about the causes and persistance of the disease. Moreover she could also get aware of the importance of medicine compliance and danger of developing complications if appropriate measures could not be taken for controlling Hyperglycemia. Counselling about diet and exercise brought up positive changes in her activities of daily-living. Stress management techniques reduced the stress upon the endocrinal system of the body. Pranayam helped in better oxigenation to the cells and tissues of the body. Adherence started as collaborated

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impact of integrated counselling technique. Ayurveda medicines worked effectively at physical and mental level. Chnadra prabhavati acted probably as immuno modulator for the urogenital system. Gokshuradi Guggulu helped the renal system to excrete out more and more accumulated toxins Sajjikshar worked. to maintain the pH level of urine. Vasant Kusumakar Ras and Brihad Bangeshwar Ras acted upon metabolic system to gain better control over Hypeglycemia. Diet, exercise and stress management also helped in achieving metabolic control. Sarpgandhavati acted in two ways. Firstly, it improved the quality of sleep of the patient and secondly helped out to reduce blood pressure with its alkaloid naming serpentin. In this way the patient could get relief of her long standing problem of Diabetes and

recurrent urinary tract infection with better social cognition.

#### Conclusion

It was concluded from the case study that lifestyle disorders like Diabetes Hypertension and subsequent UTI may result from ignorance and increased stress levels. Person centric integrated counselling technique is an effective intervention for adherence, depression, and glycemic control, with enduring and clinically meaningful benefits for diabetes self-management and glycemic control in adults with type 2 diabetes and depression. Ayurveda medicines help in achieving goal of controlling recurrent UTI in Diabetes and also help in reducing Hypertension in a more comprehensive manner.

### REFERENCES

- 1. Patterson JE, Andriole VT. Bacterial urinary tract infections in diabetes. Infect Dis Clin North Am. 1997;11(3):735-750.
- Joshi N, Caputo GM, Weitekamp MR, Karchmer AW. Infections in patients with diabetes mellitus. N Engl J Med. 1999;341(25):1906–1912.
- 3. Surwitt RS, Schneider MS, Feinglos MN: Stress and diabetes mellitus. Diabetes Care 15:1413-22, 1992.
- 4. Auslander WF, Bubb J, Rogge M, Santiago JV: Family stress and resources: potential areas of intervention in children recently diagnosed with diabetes. Health Soc Work 18:101-13, 1993.
- Schlundt DG, Rea MR, Kline SS, Pichert JW: Situational obstacles to dietary adherence for adults with diabetes. JAMA 94:874-76, 1994.