**Reviewer’s Comments**

****

**A Brief Introduction of Urinary Symptomatology- Greco Arab medicine**

**ABSTRACT**

Greco Arabphysicians have explained diseases as well as their signs and symptoms. They have documented the importance of urinary Symptomatology in diagnosis of disease and other conditions of body. They have classified the symptoms on the basis of time period, temporary or permanent etc. They discussed the factors affecting the urine presentation related to urinary tract condition. Symptomatologyrelated to urine available in the Greco Arab classical books were being surveyed. After extensive review of literature, it was found that; Unani physicians were very much familiar to diseases of urinary tract and their signs and symptoms. Urine Symptomatology is very important aspect of medical science; every physician must know the presentation of diseases to make good differential diagnosis, right diagnosis and treatment.

**Keywords:** Symptomatology, Alamat, urine, signs, symptoms.

**INTRODUCTION**

Symptom is an apparent expression of disease whereas sign is that which guides a physician to the proper diagnosis of disease. In Unani system of medicine, there are discussions about symptoms of diseases as well as of health1.

Signs and symptoms provide information about present, past and the future conditions of the patient's state i.e. health, disease and intermediate state. Knowledge of present state indicators (*alamate dallah*) are useful to the patient as it helps him to follow the proper management and what he must do; knowledge of the past condition or commemorative indicators (*alamate mozakkirah*) are advantageous to the physician as it reveals his skill and hence earns the confidence of his patient. Knowledge of the future conditions or prognostic sign and symptoms (*alamate taqadmatul marifa*) are useful for both as it alerts the patient and physician forecasts about disease and gets reputation 1, 2, 3.

The state of health and disease is evidenced by knowing the functions of organs i.e. normal or abnormal. Thus the condition of the brain is shown by the state of the movement, by the state of the sensory functions and other psychic functions. The state of health and disease of the heart is made known by the pulse and respiration and the status of the liver either normal or abnormal is perceived by the characters of the faecal matter and urine.

**Classification of sign and symptom**

1. On the basis of health and disease

(i) Healthy (Alamat-e-sahiyah)

* Structure of organ
* Temperament of organ
* Functions of organ

(ii) Disease (Alamat-e-mardiyah)

2. On the basis of time period

* Present signs (Alamat-e-muzakkirah)
* Past signs (Alamat-e-dallah)
* Future signs (Alamat-e-munzira /Taqdeematul marifa)

3. On the basis of temporary or permanent

* Temporary (Alamat-e-muwaqqita)
* Permanent (Alamat-e-ghair muwaqqita)

4. On the basis of complete or partial

(i) Complete (Alamat-e-kulliyah)

* Alamat-e-awqat amrad (symptoms according to stages of disease)
1. Onset (Ibtida)
2. Increment (Tazayyid)
3. Acme (Inteha)
4. Decline (Inhetat)
* Acute symptoms (Alamat-e-amrad hadda)
* Alamat-e-bohran

(ii) Partial (Alamat-e-juziyah)

 5. Determinants of temperament (Alamat-e-amzajah)

 6. Symptoms of structural diseases (Alamat-e-amrad e tarkib) 1, 2, 4, 5

In external diseases the sign and symptoms are objective and can be observed through external senses. Discharges from body give information about internal diseases e.g. urine; sweating, faecal matter etc. following characteristics of urine are of diagnostic value.

**Characteristics of Urine**

**Constituents of urine**

If the stone particles are present in urine indicates the presence of renal or urinary bladder stone. Sediments of urine have a diagnostic importance e.g. white flaky sediments denotes ulceration of urinary bladder while red ones come from the kidney, fatty sediments indicate dissolution of solid and liquid fat in the body.

**Colour**

Different colour of urine stand for different diseases e.g. red sediment denotes disease of kidney while white for urinary bladder Red colour urine is a sign of haemorrhage from kidney, urethra or in urinary bladder. The pistachio green colour urine indicates cold temperament of person. The various shades of yellow colour urine show some degree of heat, over activity, pain, starvation or insufficient fluid intake. White transparent urine denotes coldness of temperament. Raw meat washing colour or blood stained water indicates weakness of liver or excess of blood in the body. Purple colour urine is of fatal prognosis as it points out to the combustion of yellow bile and black bile with the production of abnormal humours.

**Odour**

Odour of urine also guides the physician towards proper diagnosis e.g. in case of urinary tract infection, passage of bad odour urine. If the urine is odourless, it denotes to either a cold temperament or excessive immaturity of humours. In acute febrile conditions, odourless urine is a sign of failing innate heat. If in the course of an acute febrile disease urine is foul-smelling without evidence of ulceration in the urinary passage, it is sign of bad prognosis. If in an acute fever urine has a sour smell; is a sign of early death because it shows that the innate heat failed to mature the urine.

**Consistency**

Unani physicians documented the importance of consistency of urine in terms of sign and symptoms. Concentrated urine is found if the viscid phlegm is eliminated through urine during filtration because of dominance of phlegm and urine of thin consistency is the sign of excessive intake of water or obstruction in any part of body. If digestion and excretion are good, thick urine is sign of good prognosis. If thick urine with headache and body ache found in parson, he is likely to develop fever. Thick urine may be due to pus discharge from abscess in urinary tract. Turbid urine which is passed freely and in large quantities indicate recovery from paralysis1.

**Quantity and frequency**

Under this heading, Unani physicians explained that the quantity and quality of intake of foods and drinks alter the schedule and frequency of excretions. Drinking of more watery substance as well as nervousness, cold weather, local application of cold temperament drugs etc. increase the urine frequency and hot weather, excessive sweating, dehydration and less water intake lead to decrease urine frequency and quantity. Polyuria results either from some wasting disease or elimination of liquefied wastes. Jurjani documented in *Zakhira* (book written by Jurjani), in *Ziabitus* there is a excessive frequency of urine because of weakness in kidneys1,2,3.

**Essentiality or non essentiality**

If, the elimination of urine is according to normal colour, odour, consistency, frequency etc. then it is termed as essential elimination of urine. Non essential or abnormal elimination indicates the abnormal condition of passage (becomes wider), abnormal quantity and consistency of urine as well as state of power of elimination.

**Factors altering the characteristics of urine**

**1. Seasonal effect**

In hot season, quantity of urine decreases and in cold season increases.

**2. Age period**

According to age, urine exhibits different sign and symptoms.

In childhood- the temperament (*mizaj*) is hot and wet. It is documented that in this age diluted urine is bad sign because fluidity is used in growth and development of organs in childhood. That is why urine must be concentrated to show the proper utilization of fluidity in the body for same work. In adulthood- urine is yellowish and moderate density. In middle age it is pale and watery and in old age urine is pale, watery and of low density, if it becomes dense, it denotes to stone formation.

**3. Psychic effects**

Psychological disorders and psychic reactions also alter the sign and symptoms. If in dark thin urine, the sediment is uniformly dispersed; mental confusion is likely to follow. Due to excessive anger colour of urine becomes yellow and concentrated and in nervousness the colour of urine becomes white and thin consistency.

**4. Gender**

In women the urine is always white, dull, thick and turbid than in men. During pregnancy urine is clear but it has faint colour at the top. Bluish urine is a sign of early pregnancy and if urine is reddish and on shaking becomes turbid the pregnancy is likely to be in an advanced stage. After coitus the male urine shows the presence of inter wined threads.

**5. Food and drinks**

Intake of food and drinks also alter the characteristics of urine e.g. light green colour urine is due to intake of spinach or green leafy vegetables, eating of beet root changes the colour of urine towards reddish etc. quantity of drinks or fluid intake also alter the consistency and quantity of urine2,3,5.

**CONCLUSION**

Urinary Symptomatology documented by Greek Arab physicians has been reviewed and found that they were very much familiar about signs and symptoms related to urinary tract diseases. Their writings must be studied and follow the instructions to diagnose and treat the diseases in a proper way.

**ACKNOWLEDGEMENT**

All contributors are highly thankful for their support specially Professor Mohd Zulkifle sir for his innovative ideas, corrections and other inputs.

**CONFLICT OF INTEREST**

Nil

**REFERENCE**

1. Shah MH. The General Principles of Avicenna’s Canon of Medicine. Idara Kitab-ul-Shifa, New Delhi, 2007.

2. Jurjani I. Zakhira Khawarazm Shahi. Idara Kitabus Shifa, New Delhi, 2010.

3. IbnSina IA. Al Qanoon Fit Tib. Idara Kitabus Shifa, New Delhi, 2010.

4. Baghdadi IH. Kitabul Mukhtarat Fit Tib. CCRUM, New Delhi, 2004.

5. Majoosi IA. Kamilus Sana'ah. CCRUM, New Delhi, 2010.