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A systemic review on efficacy and safety of Unani medicines in the management of Daul Shalal al Ra'ash (Parkinson's disease) and Raasha (Tremor) with Contribution of Greco-Arab Physicians

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Abstract

Parkinson's disease (PD) is a common old aged neurological condition, first described by James Parkinson in 1817 as the shaking palsy. Its etiology has not been fully known yet; however, basal ganglion and dopamine receptors are mainly affected. There is no description of this disease in Unani books, but when we look at the Unani literature, there is vast description about the "Rasha" i.e. "tremors". As tremor is the important clinical entity of Parkinson's disease, the Parkinson's tremors can be well visualized under the context of "Rasha", as described by these physicians.

"Rasha" mainly caused by sue-mijaz barid of *Aasab* (cold imbalance temperament of nerves), dryness of nerves and muscles, and unnecessary accumulation of abnormal phlegm in nerves. Unani physicians therefore advocated that its treatment should start with removal of *balgham-e-ghaleez* and appropriate dose of *Munzj* (coction) and *Mushil therapy* (purgative). Later *har mizaj* drugs (hot temperament) along with specific drugs like *Hilteet* (*Ferula foetida*), *Ashwagandha* (*Withania somnifera*), *Jund badaster Castorium*, *Fil-fil siyah* (*Piper nigrum*), *Amla Khushk* (*Embilica officinalis*), *Post-e-Halela Zard* (*Terminalia chebula*), *Tukhm-e-Khaskhaash* (*Papaver somniferum*), *Kishneez* (*Coriandrum sativum*), *Maghz-e-Badaam Sheerin* (*Amygdalus communis Linn.*), *Tukhm-e-Konch* (*Mucuna pruriens*) are advocated.

Our aim is to illustrate the concept and methods of treating Parkinsonism mentioned by Unani Physicians, with the aim of providing economical, readily available and relatively safe drugs and popularizing Unani herbs among people. In light of the above discussion, we can conclude that the spreading of facts about the extensive and competent Unani herbs and general treatment principles applied by Unani physicians will be really efficient in its treatment.

Keywords: *Aasab*, Parkinson's disease, *Rasha*, tremors, Unani medicine

Introduction

Parkinson's disease (PD) is a common neurodegenerative disorder primarily found in elderly people but young people may also affect as well. It is also called paralysis agitans or shaking palsy, is an age-related degenerative progressive brain condition that mainly deteriorates motor brain functions and results in unintended or uncontrollable slowed body movements such as tremors (barely noticeable in just one hand), shaking, stiffness and difficulty with maintaining body balance. It is caused by loss of neurons in part of mid-brain called substantia nigra. This leads to insufficient production of a brain chemical called dopamine. Dopamine is a chemical substance that sends messages to part of brain that controls movement and coordination^[1, 2, 3].

There is no elaborate description of Parkinson's disease as such in Unani literature. However while going through these, one gets enough literature under the heading of "Raasha". Hippocrates (Buqrat, 460- 377 B.C.), the father of medicine, was the first person who described the Parkinson's disease symptom, i.e. *Raasha* (tremor) is quoted by Rhazes (Al-Rhazi, 860- 923), also known as *Jalinoos of Arab*, in *Al-Hawi-Fi-Tib* as "Raasha caused by dryness of organs is the worst type and not curable"^[4].

Avicenna (Ibn Sina, 980- 1037), agreed with Hippocrates descriptions related to "Raasha" and described the treatment and different types of it in detailed^[5].

James Parkinson (London physician, 1755- 1824), gave first formal description of this

disease in “An Essay on the Shaky Palsy” published in 1817. Since then many advances have been made about the etiology and healing of this disease but minute has changed as far as clinical aspect is concerned [6].

Parkinsonism has vivid description in modern system of medicine but there is no description of any disease with such a nomenclature in Unani system of medicine. In Unani literature, there is description of same disease by the name of different symptoms such as *Raasha*, *Istirkha Wa Falij*, *Zouf-e-Aasab*, *Zouf-e-Quwa*, *Ikhhtelaj-e-Aziat*, *Tasallub-e-mutaddad*, *Baroodat-e-Aziat*, etc. [4, 5, 7, 8, 9, 10].

Historical background [11, 12]

Parkinsonism is one of the oldest known and most common forms of neurodegenerative disorder. According to Hippocrates, *Raasha* happen due to malfunction of brain in hyperpyrexia disappears spontaneously.

Dioscorides (100 A.D.), renowned Unani Scholar of Roman era and author of famous book *Kitab-ul-Hashaish*, discussed about the treatment of *Raasha* in detail as quoted below:

“Jund bedaster (Castorium) is beneficial in both systemic and local forms of *Raasha*. The roasted brain of wild rabbit is useful in *Raasha* which occurs after chronic illness”.

Roofas-Al-Afsi (100 A.D.), famous scholar of Roman era, wrote about 60 books on different topics and asserted that water is more beneficial than alcohol in Parkinsonism because cold water strengthens the Aasab (nerves).

Galen (*Jalinoos*, 1215- 200 A.D.), most famous scholar of Roman era, also discussed about the etiology, classification, and management of *Raasha* in his text. He also asserted that this disease is more severe in elderly people and in young adults it occurs only when there is excessive Baroodat (coldness) in their body. He also described the symptoms of Parkinson’s disease and wrote on tremors of hand at rest, motor function disorders, palpitation, convulsion and shivering. He noted that the aged related tremors were caused by a lack of power to control motion of their limbs.

Contribution of Arab Physicians [7-15]

The Unani system of medicine reaches to Arabian Peninsula after the fall of Roman Empire. During the Arab period of Unani medicine Parkinsonism was described by most of the scholars. Johannes Damascenus (Ibn Masaviyah, 777 – 857 A.D.), was the first Arab physician to discuss about this disease and mentioned that Jund Bedaster (Castorium) and Filfil siyah (*Piper nigrum*) both are very useful in the treatment of this disease.

In the later period, Al-Tabri (Rabban Tabri, 838- 870 A.D.), famous scholar of this period, added some important details about *Raasha* in his book *Firdaus-Al-Hikmat* (Paradise of Wisdom). He mentioned that excessive consumption of water and alcohol on full stomach is an important cause of *Raasha*. According to him, Jund Bedaster (Castorium), Hildeet (*Ferula foetida*), and Roghan-e-Qust have a vital role in reducing the *Raasha*.

Rhazes (Al-Rhazi, 860- 923 A.D.), described the details of various etiological factors and the management of *Raasha* under the context of head disease in first part of his famous book *Al-Hawi-Fi-Tibb*.

Ahmad Ibn Mohammad Al-Tabri (985 A.D.) wrote a full chapter on *Raasha* in *Moalejat-e-Buqratia* and classified the *Raasha* into three major types on the bases of different causes and discuss its management as well.

Avicenna (Ibn Sina, 980- 1037 A.D.), in his famous book *Al*

Qanoon Fil-Tib (Canoon of Medicine) described the etiology, clinical picture, and treatment of *Raasha* in detail. In the 12th century A. D., Ismail Jurjani (1200 A.D.) in his famous book *Zakhira-e-Khwarzam Shahi* described the *Raasha* as a the trembling of organs and said that it occurs in voluntary organs only and is manifested by involuntary movements.

During the Arabic era of Unani medicine *Raasha* was describe by most of the scholars such as Qusta Ibn Luqa (820- 912 A.D.), Sabit Ibn Qarrah, Nooh Ibn Mansoor Al-Qamar, Ibn Zuhr (1091- 1161), and Abu Marwan in their respective text but none of them added much to the work of their predecessors.

Some of the renowned scholars of Indian subcontinent such as Hakim Mohammad Akbar Arzani, Hakim Shareef Khan, Hakim Ajmal Khan, Hakim Mohammad Azam Khan, Hakim Ghulam Jeelani and Hakim Kabeeruddin recognized this disease and also described the detail in their respective book but none of them added to the already existing literature.

What causes the condition? [6, 11, 12]

- Precisely why it happens is unclear, but scientist have identified that symptoms occurs due to insufficient action and low dopamine (a neurotransmitter) levels in brain. It happens when dopamine-producing cells of mid-brain not working properly. Dopamine is a chemical substance that sends messages to part of brain that controls movement and coordination.
- Genetic changes
- Exposure to environmental factors (toxins)
- Idiopathic expert don’t know exactly why it happens.
- **Familial:** Appearing in individuals by heredity

According to Galen the basic cause of *Raasha* is weakness of various faculties (Quwa) of the body due to excessive elimination (Kasrat-e-Istifragh), excessive indulgence in coitus, excessive fatigue and starvation. Sometimes it may occur because of humoural overload (Kasrat-e-Akhlat) as they put an extra burden on body’s faculties. Various other causes of *Raasha* mentioned by him include excessive alcohol consumption, excessive eating, chronic diarrhea etc. All these factors produce abnormality in temperament resulting in excessive coldness (Sue Mizaj Barid) in the body. He also said that viscid humours may produce *Raasha* by obstructing the pathway of Rooh-e-Nafsani.

Rhazes stated that main cause of *Raasha* is nerves weakness and it may also occurs due to excessive consumption of cold water and alcohol during fever (Humma).

Ali Ibn Abbas Majoosi (930- 994 A.D.), author of famous book *Kamil-us-Sana*, asserted that *Raasha* is caused by the weakness of motor functions of affected organs and this weakness may result either from intrinsic or extrinsic factors. The intrinsic factors include too much consumption of cold water, alcohol, general debility, presence of viscid humours in motor pathway. All these factors result in the weakness of motor activity of involved organs.

Avicenna (Ibn Sina) mentioned that the basic cause responsible for *Raasha* is the weakness of motor function of involved organs to such extent that it cannot be conquer the resting force applied by mass of the involved organ.

Ismail Jurjani classified its cause into three main categories:

- The weakness of motor activity of organ (Zoaf-e-Quwat-e-Muharrika).

- The weakness of involved organ
- A combination of the above two

What are the risk factors? ^[16]

- **Gender:** It is slightly more common in males than females.
- **Age:** Usually begins around age 60.
- Head injuries
- The average age at which Parkinson's disease starts is sixty years old and risk of developing it increase with age.
- **Toxins:** pesticides, metals, solvents etc.
- Certain drugs:

Prevalence ^[16]: It is second most common age-related neurological brain disease and most common motor disorder of brain. It most commonly affects individuals over the age of sixty years worldwide.

How is it diagnosed? ^[16]

Medical history
Neurological examination
Blood test
CT-scan
MRI
Genetic testing
PET- scan
Lumbar puncture
Skin biopsy

Clinical Presentation ^[6, 11, 16]

Symptoms begin gradually; often involve one side of body. Later become bilateral. Start on with a slight tremor in one hand, feeling of stiffness in the body and progressive dementia in some individuals.

Cardinal symptoms

Tremor: Static tremor, pill-rolling / cigarette making tremor, drum-beating tremor, bread-cutting tremor. It is initial symptom involve one hand then spreads to the leg of same side before becoming bilateral and may also involve the head and jaw. The tremor is present at rest and absent during sleep.

Bradykinesia: Difficulty in initiating voluntary movement e.g getting up from a chair. It is due muscle control problem and most disabling feature of Parkinson's disease.

Postural instability: Poor balance and coordination (fall over or drop things).

Anosmia: Loss of sense of smell.

Hypomimia or Masked facies: Diminished facial expression.

Festinant gait: Loss of arm swing while walking, steps become faster.

Stooped gait: Flexion of neck, trunk and limbs, arms are adducted flexed at elbow and wrist, ulnar deviation of hand.

Hypophonia: Speech problem such as low voice volume

Parkinson's walks: Very short, shuffling steps in which a

person slightly lean forward and feet do not lift far from floor.

Micrographia: Cramped and smaller handwriting.

Sleep problems: Restless legs syndrome.

Other symptoms

1. Stiffness and rigidity of body (arms, legs, and trunk): lead pipe rigidity
2. Anxiety
3. Blinking less
4. Trouble with focusing
5. Problem with thinking and mood such as depression
6. Fatigue
7. Dysphagia: trouble with swallowing, chewing
8. Constipation
9. Incontinence of urine
10. Skin related problems
11. Sexual dysfunction
12. Dementia, delusions, hallucinations

Management: Unani system of medicine is based on the unique concept of Akhlat (humours) namely- black bile, yellow bile, blood, and phlegm, that had to stay in balance to maintain a healthy life. According to Unani system one of the important causes of genesis of diseases is derangement in proportion of humours (sue-mijaz maddi). Diseases of phlegmatic temperament mostly affect those organs and people who already have phlegmatic temperament. Parkinsonism mostly found in phlegmatic temperament subject, which shows that this disease is associated to phlegmatic temperament (Mijaz-e-balghami) ^[17, 18, 19].

The ancient Unani physicians have mentioned a number of drugs in the management of *Raasha*. These drugs as well as their formulations are being successfully used till now without any adverse effects. Various important polyherbal formulations mentioned by Unani physicians are as follows:

Majoon-e-Jograj Gogul

Parkinson's disease mainly involves the phlegmatic patients because of phlegmatic temperament of brain and the disease has same clinical picture as mentioned in the phlegmatic disorders in classical Unani literature. Some ingredients MJG such as Filfil-syah (*Piper nigrum*), Kasni (*Cichorium intybus*), Mukil (*Commiphora mukul*), Sheeraj hindi (*Plumbago indica*), and Zanjabeel (*Zingiber officinalis*) have expulsive effect on abnormal phlegm, black bile and other putrefied humours (Fasid akhlat). Some ingredients in the formulation are nervine stimulant such as Jund-Badaster (*Castorium*) Aqarqarha (*Anacylus pyrethrum*) and some of them are sedative such as Badaam (*Prunus amagdalus*), some of them have tremors relieving property such as Qust Sheerein (*Saussurea lappa*) and Jund Badaster (*Castorium*). MJG has the property to lessen the tremors linked to neuromuscular disorders and has been used by the Unani physicians for the same purpose without any known side effects. That's why MJG indicated by Unani physicians for the ailments of neuromuscular disorders, tremors, paralysis, brain debility and brain tonic. The ineffective impulses coordination from the extra pyramidal tract to skeletal muscles and brain stem is the root cause of Parkinsonism tremors, most likely MJG facilitate the coordination between synaptic interconnections of extra pyramidal tract

and higher motor tract. MJG is helpful in improving the symptoms of various neurological disorders of extra pyramidal tract and has cumulative properties to relieve the symptoms such as rigidity, flexed posture, bradykinesia, masked face, aphasia, micrographia associated with the disease.

The ingredients of MJG such as Filfil-syah (*Piper nigrum* Linn.), Kasni (*Cichorium intybus* Linn.), Aqarqarha (*Anacyclus pyrethrum*), Jund-Bedaster (*Castorium*), Peepli-Mol (*Piper longum*), Peepal (*Ficus religiosa*) and Mukul (*Commiphora mukul*), also have the properties of brain tonic and to expel the abnormal phlegm (Balgham-e-Fasid) from the body. There is not much improvement in micrographia, unbuttoning, aphasia and masked face with the use of MJG due to lack of neurotransmitter (GABA, Dopamine, Acetylcholine) in the ingredients of formulation.

Apart from this, other properties related with digestive system, genitourinary systems, and hepatobiliary system, are also found in this formulation. It is a fact that the disease especially involves the old people, who also having the problems concerned with digestive system (constipation) and genitourinary system in this age group. Therefore, it is the supplementary advantage of MJG for them. The chemical component of different ingredients present in MJG are antioxidants, polysaturated fatty acids, free fatty acids, monosaturated fatty acids, zinc, selenium, manganese, biotins, phytosteroid, which have additive effect in resolving the symptoms [6, 20, 21, 22, 23].

Actions of MJG [6]:

Munaffis-e-Balgham (Expectorant)

Mukhrij-e-Balgham

Munaffis-e-Mawad-e-Fasida

Muharrik-e-Aasab (Nervine stimulant)

Musakkin (Sedative)

Daf-e-Sara (Antiepileptic)

Naaf-e-Nisyan (Memory booster)

Muqawwi-e-Qalb (Cardiotonic)

Naaf-e-Falij Wa Laqwa ((Beneficial to hemiplegia and Facial palsy)

Muqawwi-e-Dimagh (Brain tonic)

Mufatteh-e-Sudud (Deobstruent)

Dose of MJG: 6 gm twice a day for 90 days.

Composition of MJG

S.N.	Unani Name	English Name	Botanical Name
1	Abhal	Savin Berry	<i>Juniperus Sabina</i> Linn.
1	Aqarqarha	Pellitory	<i>Anacyclus pyrethrum</i>
3	Badaam	Almond	<i>Prunus amygdalus</i>
4	Bhangra	Eclipta	<i>Eclipta alba</i>
5	Devdar	Himalyn Cedar	<i>Cedrus deodara</i>
6	Filfil-syah	Black Peppers	<i>Piper nigrum</i> Linn.
7	Jund Badaster	Castor	<i>Castorium</i>
8	Kasni	Chicory	<i>Cichorium intybus</i>
9	Kabaab khandan	Toothache fruit	<i>Zanthoxylum alatum</i>
10	Mukul	Mukul	<i>Commiphora mukul</i>
11	Pudeena	Mint	<i>Mentha arvensis</i>
12	Peepal	Peepal tree	<i>Ficus religiosa</i>
13	Peepli-Mol	Dried Catkins	<i>Piper longum</i>
14	Qust Sheerein	Costus	<i>Saussurea lappa</i>
15	Sheetraj Hindi	Costus	<i>Plumbago indica</i>
16	Tej Bal		<i>Zanthoxylum alatum</i>
17	Zuranbad		<i>Zinjiber zerumbeth</i>
18	Zanjabeel		<i>Zinjiber officinalis</i>

Trifal Muqawwi-e-Dimagh: it is potent unani formulation, having dopaminergic neurons protective ingredients for reducing PD symptoms. It is recommended to improve cognitive dysfunctions, mental functions, eye sight, enhances mental power, reduces oxidative stress, increase anti-oxidant enzymes, improve activity of tyrosine hydroxylase (an enzyme that help in synthesis of dopamine in dopaminergic neurons) The recommended dose is 20 gm/day.

Majoon-e-Falafsa and Majoon-e-Beladur: Effective in preventing neurons damage, reducing oxidative stress, possess an anti-apoptotic, anti-inflammatory and anti-oxidative properties. Hence, play a key role in reversing the underlying neuropathological changes associated with the disease.

Khamira Abresham Hakeem Arshadwala: Reduce the cognitive dysfunction associated with the disease [24].

Safoof of Waj: Waj (*Acorus calamus*), Aqarqarha (*Anacyclus pyrethrum*), Tukhm-e-konch (*Mucuna pruriens*), Asgandh (*Withania somnifera*), Khulanjan (*Alpinia galangal*) each 1 gm and use 5 gm twice a day with milk before meals orally for 90 days gives best results.

Ma'ul Asal Murakkab

Make fine powder of Ustukhudoos (*Lavandula stoechas*) and use 3 gm once a day with 100 ml of warm *Ma'ul Asal Murakkab* orally before breakfast for 90 days gives significant improvement in Parkinson's symptoms [11, 16].

Safoof-e-Rasha: it has an excellent effect in improving the sign and symptoms of Parkinson's disease. In an open Clinical study conducted on 15 patients between the age group 50- 80 years in the department of Moalejat, Ajmal Khan Tibbiya College, AMU, Aligarh in 2011, it was found that pill rolling movements, which were present in eleven cases initially improved in four cases at the end of treatment and patients were able to perform their routine work in a better way. It may be mainly due to belladonna like activity of hyocine and hyocyanine present in Ajwain Khurasani. The hyocine and hyocyanine would have affected the basal ganglion and substantia nigra (seat of origin of Parkinsonism), in that way reducing the tremor and even rigidity. The Muqaww-e-Aasab (Neurotonic) activity of Akarkarha and Hilteet might be an additional reason for overall improvement of the disease. The sedative activity of Tukhm-e-Kahu also play a significant role in reducing the tremors, which is probably the most disturbing to the patient and hampers his routine work [25].

Dose: 5 gm twice a day for 60 days

Composition of Safoof-e-Rasha

S.N.	Unani Name of Drug	Botanical Name
1	Ajwain Khurasani	<i>Hyoscyamus niger</i> Linn
2	Aloe	<i>Aloe barbadensis</i> Mill
3	Akarkarha	<i>Anacyclus pyrethrum</i> DC
4	Hilteet	<i>Ferula foetida</i> Regel
5	Tukhm-e-Kahu	<i>Lactuca sativa</i> Linn

Various important single drugs mentioned by Unani physicians are as:

- Jund badaster (*Castorium*): 3-4 gm given with warm water is very beneficial in tremors.
- Fil-fil siyah (*Piper nigrum*), is also very useful in this disease
- Massage of Roghan-e-Qust should be used locally on affected part.
- Massage of Jund badaster (*Castorium*), Hiltet (*Ferula foetida*), Aqarqarha (*Anacyclus pyrethrum*), each 3 gram with Roghan-e-Zaitoon on affected part is much beneficial [6].

Conclusion

Parkinson's disease is the most common neurodegenerative disorder and thought to be caused by a combination of hereditary and environmental factors. According to estimates, approximately 50,000 Americans are diagnosed with Parkinson's disease each year. In the present study, an attempt is made to treat the Parkinson's disease patients with oral Unani drugs to evolve an effective Unani treatment. The Majoon-e-Jograj Gogul, Itrifal Muqawwi-e-Dimagh, Majoon-e-Falasma, Majoon-e-Beladur, Khamira Abresham Hakeem Arshadwala, Safoof-e-Rasha, Safoof of Waj, are all effective in resolving the different sign and symptoms of disease, including a sense of well-being with no observable adverse effect may be prescribed safely to the patient of Parkinson's disease. It can be concluded that the selected Unani formulations produced a significant effect in relieving the clinical symptoms and signs of Parkinson's disease. Though, the biological mechanism through which these drugs reduce the clinical symptoms and signs remain unclear and need to be validated with experimental and clinical studies.

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Conflict of Interest

Not available

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References

1. Ahangar NA, Hakim MH, Siddiqui MMH. Efficacy of Safoof-e-Rasha in Parkinsonian Tremors- a Clinical Study. *Hippocratic Journal of Unani Medicine*. 2011;6(1):23-27.
2. Boon Nicholas A, *et al.* Davidson's Principles and Practice of Medicine. Ed 20th, Churchill Livingstone, Elsevier; c2006. 160-71, 231, 239-40, 244-46, 746-50, 970-71, 1179, 1181-82, 1218-21.
3. Fauci Anthony S, *et al.* Harrison's Principles of Internal Medicine. Edn 1st, Mc Graw Hill Publishers, USA. 1998;97:113-16, 424.
4. Rhazi Abu Bakar Mohammad Bin Zakariya, *Kitab-ul-Mansoori*. Urdu Translation by Central Council for Research in Unani Medicine, New Delhi, 1991, 323.
5. Kantoori GH. *Tibb-e-Islami Ka Encyclopedia* (Urdu Translation of Al-Qanoon Fit-Tib), Vol. III, Part I, (Original author- Shaikh Ali Bin Abdullah Ibn Sina), Lahore; c1992. p. 117-119.
6. Shoaib M Mohsin Mohammad, Siddiqui MY. Therapeutic Evaluation of Majoon-e-Jograj Gogul in Parkinson's disease. *Hippocratic Journal of Unani Medicine*. 2010;5(4):1-14.
7. Al-Qamri Abul Mansoor Al-Hasan Bin Nooh. Ghina Mina Ma Tarjuma-e-Minhajul Ilaj (Urdu Translation by Khan Walliullah), 1255H, 38-40
8. Ali Hakeem Syed Ayub. *Tarjuma Zakheera-e-Sabit Bin Qarrah* (Original author- Abu Saeed Sanoon Bin Sabit Bin Qarrah), Litho Color Printers, Aligarh, 1987, 69.
9. Jurjani SAhaikh Ismail. *Zakheera-e-Khwarzam Shahi* (Urdu Translation by Hadi Hasan Khan), Munshi Naval Kishore, Lucknow; c1878. p. 812-813.
10. Tabri Abul Hasan Ahmed Bin Mohammad. *Moalejat-e-Buqratiya* (Urdu), Central Council for Research in Unani Medicine, New Delhi. 1995;1:403-406.
11. Shoaib M, Mohsin M, Siddiqui MY. Historical Perspective of Parkinsonism and Ra'asha. *Hamdard Medicus*. 2012;55(1):39-44.
12. Al-Rhazi Abu Bakr Mohammad Ibn Zakaria. *Al-Hawi-Fil-Tib* (Urdu translation). CCRUM, New Delhi. 1997;1:9-48.
13. Tabri Abul Hasan Ali Ibn Sahl Rabban. *Firdaus-ul-Hikmat-Fil-Tib* (Urdu translation by Hakim Rashid Ashraf Nadvi). Edn 3rd, Diamond Publication, Lahore. 1996;1:534-535.
14. Kabeeruddin Hakim Mohammad. *Tarjuma Kabeer Sharah-e-Asbab* (Original author Nafis Bin Kirmani). Vol. I, Hikmat Book Depot, Hyderabad, YNM, 198-201
15. Ibn Zuhri Abu Marwan Abdul Malik. *Kitab-ul-Tayasar Fil-Medawat Wa Tadbeer*. Edn 1st, Central Council For Research in Unani Medicine, New Delhi; c1986. p. 80-82.
16. Sheikh MH, Faroqui MA, Ihsan ALM. Therapeutic response of Unani Medicine in the management of Daul Shalal al Ra' ash (Parkinson's disease). *Int J Adv Pharm Med Bioallied Sci*. 2022;10(2):37-43.
17. Omole OB, Ogunbanjo GA. The evolution of gout (an old lifestyle disease). *SA Fam Pract*. 2009;51(5):396-398.
18. Internet Museum of the Royal Pharmaceutical. 2006. Society. www.museum@rpharms.com
19. Fourtunas Costas. Perceptions of gout (podagra) during the Byzantine era, with a special focus on a poem by Michael Psellus. *JNephrol*. 2013;26(22):S110-S112.
20. Rastogi Ram P, *et al.* *Compendium of Indian Medicinal Plants*. Vol. II, Publication and Information Directorate, New Delhi, 1993, 40, 166, 539, 613, 718.
21. Rastogi Ram P, *et al.* *Compendium of Indian Medicinal Plants*. Publication and Information Directorate, New Delhi, 1993, 156, 197, 260, 420-422, 503, 690-693.
22. Rastogi Ram P, *et al.* *Compendium of Indian Medicinal Plants*. Publication and Information Directorate, New Delhi. 1993;184:467-69, 569.
23. Nadakarni AK. *Indian Materia Medica*. Edn 3rd, Vol I,

- Bombay Popular Prakashan, Bombay, 1982, 32, 97, 140, 167, 295-96, 313, 552, 710, 788, 969, 1011, 1302, 1308.
24. Khan NG. Khazinatul-Advia. Lucknow: Munshi Nawal Kishore Press; c1913, 3.
 25. Nazir A Ahangar, Hakim MH, Siddiqui MMH. Efficacy of Safoof-e-Rasha in Parkinsonism Tremors- A Clinical Study. Hippocratic Journal of Unani Medicine. 2011;6(1):23-27.

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