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Review Article

A THOROUGH CONCEPTS AND USOOL-E-ILAJ (PRINCIPLES OF TREATMENT) OF POST STROKE COMPLICATIONS, IN UNANI MEDICINEAshfaque Ahmad¹, Farzana Khatoon², Md Sohail³, Badrudduja Khan⁴,¹PG Scholar, Deptt of Moalejat, AKTC, A.M.U Aligarh²M.D. Deptt of Kulliyat, AKTC, A.M.U Aligarh³Assistant professor, D/o Moalejat Z.H.U.M.C Siwan⁴Associate Professor, Deptt of Moalejat, AKTC, A.M.U Aligarh

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Abstract:

Stroke is defined as rapid onset of focal neurological deficit, resulting from diseases of cerebral vasculature and its contents. It is a major public health problems & leading cause of death worldwide. Hemiplasia (Falij Nisfi) is the major problem developed after stroke, caused due to Sudda (obstruction) in vessels, nerves or at the origin of nerves and brain. Falij is a phlegmatic disease, therefore basic line of treatment is Tanqiya wa tadeel, (purification and normalization). Tanqiya means evacuation of morbid abnormal matter from the body, tadeel mizaj means to reestablished Mizaj of that organ from sue- Mizaj. Before evacuation of matter Munzij therapy (Concoction) is necessary in chronic cases. Then mushilat should be applied. Mushil drugs have property to expel the morbid Akhlat from the vessels, neighboring structures and from whole body through intestine. Jali and Mufatteh Sudad are also prescribed. For achievement and application of munzij and mushily therapy there are four mode of principle of treatment like, ilaj bil Tadbeer, Ilaj bli ghiza, Ilaj bil dawa, Ilaj bil yad. There are many single and compound drugs are described in Unani system of medicine which proved effective in the treatment of Failij (hemiplasia) as well as stroke.

Keywords: Unani Medicine, Falij Nisfi, Sudda, Tanqiya wa Tadeel, Munzij

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INTRODUCTION:

Stroke is a major global public health problem. Cerebrovascular diseases were the sixth leading cause of burden of diseases and left 12.6 million people moderately to severely disable worldwide in 2004, in which stroke was the second leading cause of death worldwide [1,2]. A stroke is a medical condition in which poor blood flow to the brain results in cell death. The crude stroke prevalence in different parts of India ranged from 44.29 to 559/100,000 persons during the past two decades. The cumulative incidence of stroke in India ranged from 105 to 152/100,000 persons per year during the past two decades in different parts of the country [3].

In India Indian Council of Medical Research calculated in 2004 that stroke is the main source to increase the death number about 41 %, and the number of strokes will be increased from 1,081,480 in 2000 to 1,667,372 in 2015.

According to Unani system of medicine falij occurs due to the cerebrovascular accident or stroke. Falij is an Arabic word meaning “to halve”. It indicates paralysis (Istirkha) of longitudinal half of the body either starting from the neck sparing head and face or the entire longitudinal half of the body from head to foot. Since it affects one half of the body and leaves the other half unaffected (healthy), it has been named so because of dividing the body into two halves; one healthy and the other diseased. As per Unani Medicine, it is mainly caused by Phlegmatic humour (Balgham) from brain on the nerve origin resulting in loss of sensory and motor function of the affected part of body. It can also occur due to predominance of cold (Burudat) and wetness (Rutubat) on the affected organ. It is characterized mainly by loss of motor power of the affected part with some other symptoms varying with the causative factor.

MATERIAL AND METHOD:

So, “Falij is described as paralysis or paresis of longitudinal half of the body starting either below the neck, sparing head and face or covering the entire longitudinal half of the body, from head to toe.” [4-5]

Risk Factors and Aetiology of the disease: People age 55 or older have a higher risk of stroke than younger people, African-Americans have a higher risk of stroke than people of other races. Men have a higher risk of stroke than women. Women are usually older when they have strokes, and they're more likely to die of strokes than are men. There are some life style risk factors for developing stroke like, overweight, loss of Physical activity, uses of alcohol, smoking and Use of illicit drugs such as cocaine and

methamphetamines. Hypertension, Diabetes, Cardiovascular diseases, family history of stroke, heart diseases, use of birth control pills or hormone therapies are the medical risk factors [6].

Approximately 85% of strokes are caused by sudden onset of inadequacies of blood flow to some part or whole of the brain. The remaining strokes are between haemorrhage into the brain tissue and haemorrhage into the spaces surrounding the brain, most frequently the subarachnoid space.⁷⁻⁸All functions of brain perform by two major powers as Quwwat Mudrika (receptive faculties) and Muharrika (motor faculties).⁹Alterations in any power of brain leads to neurological disorders of brain. Sue Mizaj of brain, nerves, arteries and veins, Sudda(obstruction), Saqta (trauma or apoplexy), waram (congestion), Ghaleez and Luzj Rutubat, Zarba wa Qata-e- A'saabare the other causes of Falij [10-14].

Types of Stroke: There are five major types of stroke:

- 1. Ischemic Stroke:** It occurs when a blood vessel of brain is obstructed. It accounts for 87 percent of all strokes.
- 2. Haemorrhagic Stroke:** Occurs when a weakened blood vessel ruptures. The two types of weakened blood vessels that usually cause hemorrhagic stroke are aneurysms and arteriovenous malformations (AVMs). The most common cause of haemorrhagic stroke is uncontrolled Hypertension.
- 3. TIA (Transient Ischemic Attack: Also known as “mini stroke,”** it's caused by a serious temporary clot. This is a warning stroke and should be taken seriously.
- 4. Cryptogenic Stroke:** In most cases, a stroke is caused by a blood clot that blocks the flow of blood to the brain. A stroke of unknown cause is called a “cryptogenic stroke.”
- 5. Brain Stem Stroke:** When stroke occurs in the brain stem, it can affect both sides of the body and may leave someone in a ‘locked-in’ state. When a locked-in state occurs, the patient is generally unable to speak or move below the neck [15]

Clinical Features:

There are three main features/ problems are found after stroke.

- 1. Physical Features**
- 2. Psychological Features**
- 3. Perceptive Features**

Physical Features: Physical symptoms after stroke include Heaviness in limbs and difficulty in

movements, sudden onset of severe headache, weakness, difficulty in Swallowing Palpitation and muscle twitching numbness and stiffness.

Psychological Features: In post stroke patient's anxiety, unhappiness, fear, desperateness Irrelative behavior, frustration and anger is common [16].

Perceptive Features: Perception is the mental action process of acquiring knowledge and understanding through thoughts, experience and the sense. Cognitive problems after stroke are, Aphasia: Inability (or impaired ability) to understand or produce speech, Dementia: (loss of memory and also major problem developed after stroke is Hemiplegia (falij nisfi). So Trouble with speaking and understanding, seeing in one or both eyes, walking, Headache and Paralysis or numbness of the face, arm or leg are the alarming sign and symptoms of stroke [17].

Discussion:

About the Stroke and its major problem i.e., falij, there are many concepts given by physicians in ancient time which is almost resembles to concepts and management of stroke in present time.

Concepts of Unani Physicians:

Buqrat: Severe Falij is very hard to treat, but at times impossible; even Falij of low intensity is not easily treated

Jalinoos: If Amraaz-e-Balgahmia (phlegmatic diseases) such as Falij (hemiplegia), Ra'asha (tremor), and Sara'a (epilepsy) etc. occurred in childhood, and no treatment seems promising in restoring the lost functions, then as the age progresses the disease is automatically gets faded [18,19].

Razi: The morbid matter should be evacuated every week with Habbe Qoqaya, Jawarish Baladur or Ayarij Hurmus should be given daily to alter the temperament, and massage should be done with Roghan Qust, Habbe Qanturiyun and Safoof Zaravand are also very beneficial in Falij [20].

Ibn Sina: When patients start recovering, starts Riyazat (exercise), massage and Nutool (irrigation) which has the effects of Muhallil (resolvent) and Qabiz (astringent) such as Anisoon, Jundbedastar and Izkhar [20].

Tabri: He treated a patient having complains of lower limb paralysis and weakness with Majoon Usba and applied Roghan Malkangni, patient recovered within few days [20].

Improving from a stroke depend on several factors such as the extension and area of the lesion speed with which the blood irrigation is re-established and the previous state of health. Three things can happen after suffering a stroke:

1. Immediate recovery (minutes or hours). This is the case of Transient Ischaemic Attacks,

which generally do not leave after effects.

2. A recovery to a greater or lesser extent. In this case recovery normally takes weeks or months and requires rehabilitation.
3. Worsening of the patient. This can be due to neurological causes or other complications such as fever, infections or others.

Stroke care may be organized at three levels - a basic stroke care facility, a primary stroke care facility and a comprehensive stroke care facility. The basic stroke care facility should be the minimum setup at district hospitals; primary stroke care facility should be mandatory for all medical colleges and multispecialty hospitals; and well-equipped hospitals including some medical colleges should develop comprehensive stroke care facilities [21].

Usool-e-ilaj (Principle of treatment): There are basic usool-e-ilaaj for the treatment of stroke:

1. Evacuation of phlegmatic waste products (Istifraagh-e- fuzlaat-e- balghamiya)
2. To maintain temperamental equilibrium (Ta'adeel-e- mizaj)
3. Strengthening of nerves (Taqwiyat-e- a'asaab)
4. Dietary modification/ restriction (Taql-e-ghiza)

There are four mode of principal of treatment in Unani medicine as in modern medicine for achievement of above Usool-e-ilaj

1. Ilaaj bil Tadbeer (Regimenal Therapy):
2. Ilaaj Bil Ghiza (Dietotherapy):
3. Ilaaj bil Dawa (Pharmacotherapy):
4. Ilaaj bil Yad (Surgery):

Ilaaj bil Tadbeer (Regimenal Therapy):

1. Enema (Huqna): Huqna used for the treatment of constipation.
2. Massage (Dalk) with rubefacient liniment
3. Cupping (Hijamah)
4. Irrigation (Nutool)
5. Riyazat (Exercise).
6. Shamoom (smelling)
7. Occupational therapy
8. Counselling
9. Others Regimenal therapies

It was proved that High levels of physical activity reduce the risk of stroke by about 26%.²²Physical exercises as part of a rehabilitation program following a stroke appear safe. Cardiorespiratory fitness training that involves walking in rehabilitation can improve speed, tolerance and independence during walking, and may improve balance [23].

Patients who have suffered a stroke are more prone to having falls, so it is important to do the exercises recommended to strength the muscles and train equilibrium at home.

Occupational therapy: If difficulties arise to carry out daily living life include both daily self-care activities (washing, dressing, and eating) occupational therapy may be beneficial. This consists of capacitating people who suffer incapacitating states to carry out the daily tasks required and to achieve maximum independence and integration to improve their independence.

Counselling: Depression is particularly common and may interfere or slow down the rehabilitation process. Anxiety is also frequent (with or without attacks of panic), emotionalism (going from crying to laughing without any reason, crying or laughing without any apparent cause).

In case of hemianopsia, (Sight impairments), family members must remind the patient to look towards the affected side, as with a little training, the hemianopsia is compensated by turning the head to look towards the damaged side.²⁴

Ilaaj Bil Ghiza (Dietotherapy): Nutrition, specifically the Mediterranean-style diet, has the potential for decreasing the risk of having a stroke by more than half.²⁵ A balanced diet, with sufficient protein and caloric intake and good hydration are essential for the patient's good general state. Bad nutrition is a frequent problem and can give rise to skin ulcers, oedemas, and reduction of defences, making it easier to contract infections. If the patient can swallow properly, the diet must be similar to a normal diet. Food rich in fibre must be taken into account to avoid constipation.

Dietary Recommendation: Ma-ul- Asl (Honey water), Ma-ul- Shaier (Barley water), Aghziya-e-yabisa (like Whole grain bread), Meat of Partridge, sparrow, pigeon etc recommended by Unani physicians.²⁶ Thick vegetable cream, fruit puree, yoghurt, custard, egg pudding, scrambled eggs, thick semolina soup, minced meat, mild fish should be advised.

Dietary Restriction: Aghziya-e- mughalliza and Aghziya-e- murattiba should be avoided. Consumption of Milk, Paneer, All cold Mizaj (Temperament) vegetables, Extensive use of Apple and Pomegranate, alcohol and tobacco should be restricted [27].

Ilaaj bil Yad (Surgery): Patients may have particular problems, such as dysphagia, which can cause swallowed material to pass into the lungs and cause aspiration pneumonia. The condition may improve with time, but in the intervening, a nasogastric tube may be inserted, enabling liquid

food to be given directly into the stomach. If swallowing is still believed unsafe, then a percutaneous endoscopic gastrostomy (PEG) tube is passed and this can remain indefinitely.

Definitive therapy within the first few hours is aimed at removing the blockage by breaking the clot down (thrombolysis), or by removing it mechanically (thrombectomy)

Ilaaj bil Dawa: For attaining Tanqiya (Purification) &Tadeel-e-Mizaj (Normalization in temperament), Munzij (concoctivetherapy), Mus'hil (purgativedrugs therapy), Muqawwiyat, (Tonic), Muhallil (anti-inflammatory), and Muqawwi Roghan for local applications should be used.

There are three phase of treatment;

First step: For the purpose of concoction Gul-e-Angabin Asli (honey rose water) or Ma-ul-usool (Vegetables water)²⁷ with luke warm water and Ayarij (anypurgative) mix with Tiryaaq (antidote) 1 gm for seven days may be extending up to 14 days depends on severity of Falij.

Second step: Oral administration of *Mushil-e-balgham* (Purgatives of phlegm) for proper evacuation of matter from the body

Third step: Uses of Muqawwiyat, Oils of hot temperament for strengthening of nerves (*Taqwiyat-e- A'asab*), After Mus'hil; Muqawwi-e-Maida (stomachic) drugs are prescribed.

Munzij-e-Balgham drugs (concoctive drugs):

There are the many munzij-e-balgham drugs such as, Parsiaoshan (*Adiantum capillus-veneris*), Baikh Karafs (*Apium graveolens*), Baikh Kasni (*Cichorium intybus*), Ood Saleeb (*Paeonia officinalis*), Gauzaban (*Borago officinalis*), Gulqand (*Rosa damascene*) proved effective in the treatment of falij. Other unani single drugs like, Daar chini, Mastagi, Zaranbaad, Ood-e-Favana, Ustukuddus, Khatmi, khurdul, Aqar qarha, Badyan, maweez munaqqa, ustukhuddus, Bekhe-Kibr are also prescribed in Unani texts [14-29].

Mus'hil-e- Balgham drugs:

Ustukhuddus (*Lavandula stoechas*), Barg Sana (*Cassia angustifolia*), Turbud (*Operculina turpethum*), Maghz faloos (*Cassia fistula*), Roghan Zard (Ghee) etc

Murakab (Compound Drugs):

There are many compound drugs used in falij like, Gulqand,¹⁴ Tiryaaq Arba, Tiryaaq Samaniya, Jawarish Bladur, Arq Badiyan, Sheera Badiyan, Ayaarij Feqra, Ayaarij Loghaziya, Habb-e- Ayaarij, Majoon Azaaraqi, Habb-e- Faalij, Majoon Jograj Googul Roghan-e- shifa, Majoon Seer Alvi Khani, Habb-e- Faalij Mulaayin, Roghan-e- Qust

CONCLUSION:

Falij (Hemiplegia), occurs with the complication of stroke. In Unani texts there are no clear descriptions found in the name of stroke, but indirectly, its symptoms, causes, management described widely under the contexts of Falij. Falij is the Phlegmatic disease and occur due to predominance of cold (Burudat) and wetness (Rutubat). If we manage falij, in the light of basic principles and four mode of treatment like, Ilaj bil Tadbeer, Ilaj bil Ghiza, Ilaj bil Dawa, Ilaj bil Yad, then it may be proved effectively in present as well as in future. These basic mode of treatment play a critical role in those patients who disabled in their daily life

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