Maintenance of Mizāj through Ilāj bi'l Yad

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ABSTRACT: Temperament and structure, both are the tools of *Tabī'at* (Physis), normalcy of which is essential at every aspect from micro to macro level in order to perform desired functions. Both are inter-related to each other, any abnormality in one of them will definitely affect the other upto some extent and then ultimately Af'āl (functions). *Ṭabī'at* preserves and restores health with the help of *Kullīyat Uṣūl e-Ilāj* based on *Asbāb* (factors), Alāmat (sign & symptoms), Uṣūl-e-Tashkhīṣ (principles of diagnosis) and Ilāj (treatment). Unani scholars categorised disease in three form viz., $S\bar{u}$ 'Miz $\bar{a}j$ (dystemperament), $S\bar{u}$ 'Tark $\bar{i}b$ (Structural impairment), and Tafarruq-i-Itti $\bar{s}al$ (discontinuity). $S\bar{u}$ ' $Miz\bar{a}j$ can cause $S\bar{u}$ ' $Tark\bar{\imath}b$ in some conditions, whereas in case of MaradMurakkab these two types are found simultaneously. Sū' Mizāj can be revert back with the help of Ilāj bi'l; Naseeha, Tadbīr, Ghidhā, and Dawā. In case of Sū' Tarkīb, there is need of such intervention by which we can help the body to make it normal as it was before, to the very possible extent. For this Ilāj bi'l Yad is the higher mode of help for *Ṭabī'at*. The teaching methodologies of *Ilmul Jarahat* should be in such a manner that students can understand the holistic approach of Unani Medicine in the field of surgery. This topic will be discussed in detail in this paper, with the help of few diseased conditions under the shelter of Kullīyat Uṣūl e-Ilāj and how Ilāj bi'l Yad is a mode of treatment to restore and reconstruct Sū' Tarkīb directly while Sū' Mizāj indirectly.

Key words: Sū' Mizāj, Sū' Tarkīb, Ṭabī'at, Mizāj and Ilāj bi'l Yad.

Introduction: Tabī'at is a natural power that is endowed by nature to every individual for self preservation which regulates its normal functions. Functions of any part of the body is directly related with its Mizāj and its composition or the structure. When Mizāj and composition are according to its Tabī'at then functions of the body occur smoothly. So, Temperament and structure/composition, both are the tools of *Tabī'at*,² normalcy of which is essential at every aspect from micro to macro level in order to perform desired functions. Both are inter-related to each other, any abnormality in one of them will definitely affect the other upto some extent and then ultimately disturbs the functions. *Ṭabī'at* preserves and restores health with the help of *Kullīyat Uṣūl-e-Ilāj* based on *Asbāb*, Alāmat, Uṣūl-e-Tashkhīş and Ilāj.

The concept of Temperament has its root in the thought of ancient philosophers. Each and every part or organ of a body is furnished with a particular Mizāj and a body as a whole is also contended with a particular temperament that is suitable for its *Ṭabī'at*. *Ibn Sīnā* says that temperament of an organ is specific for each organ, and owing to this, one organ or tissues differs from that of another organ or tissues.³ For example, the 312

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temperament of bones, muscles, fats etc are furnished with specific $Miz\bar{a}j$ which differs from other organs. Furthermore, the $Miz\bar{a}j$ of muscle is not suitable for the bone and vice versa. This is necessary for the maintenance of normal functions of that particular organ or tissue. The structure and composition of a body should be with in its normal limits in order to maintain the homeostasis. Similar is the case of $Akhl\bar{a}t$ (humours), each and every Khilt of our body is bestowed with a particular temperament. These fluids have a normal range, quality and composition i.e. physiological value. When $Akhl\bar{a}t$ are in normal quantity and quality, homeostasis is maintained. When this physiological value is disturbed, $Miz\bar{a}j$ alters and then disease sets in.⁴ Deviation from the normal temperament i.e. $S\bar{u}$ ' $Miz\bar{a}j$ will leads to the Marad (disease) that ultimately effects the functions of the body.

Ibn $S\bar{\imath}n\bar{a}$ defines $Mara\dot{q}$ as an abnormal state of the body which directly or indirectly causes disturbance in its normal functioning. This abnormal state can be either $S\bar{u}$ ' $Miz\bar{a}j$, $S\bar{u}$ ' $Tark\bar{\imath}b$ or Tafarruq-i- $Ittis\bar{\imath}al$.\(^3\) Diseases are categorized as $Mara\dot{q}$ Mufrad and $Mara\dot{q}$ Murakkab. When the above said abnormalities are found individually then it is called as $Mara\dot{q}$ Mufrad but in cases where two or more forms of abnormalities are found simultaneously then it is termed as $Mara\dot{q}$ Murakkab.\(^5\) Qarshi writes in his book, Ifadae Kabir Majmal that in the various cases of $S\bar{u}$ ' $Tark\bar{\imath}b$, the $Taba\bar{\imath}$ ' $Miz\bar{\imath}aj$ of the organs gets alter. Therefore $S\bar{u}$ ' $Miz\bar{\imath}aj$ will be definitely found in all types of S' \bar{u} $Tark\bar{\imath}b$. Both of them may occur simultaneously or one by one. As in case of fractures and dislocations there will be both $S\bar{u}$ ' $Miz\bar{\imath}aj$ and $S\bar{u}$ ' $Tark\bar{\imath}b$.\(^6\)

Usually it is evident that the treatment of $S\bar{u}$ ' $Miz\bar{a}j$ is done with $Il\bar{a}j$ bi'l Naseeha, $Tadb\bar{\imath}r$, $Ghidh\bar{a}$, and $Daw\bar{a}$ whereas $S\bar{u}$ ' $Tark\bar{\imath}b$ is related with the $Il\bar{a}j$ bi'l Yad. As such, there seems no relationship between the $Il\bar{a}j$ bi'l Yad and $Miz\bar{a}j$. But if we focus, then all of the treatment directly or indirectly are being done only for the maintenance of the $Miz\bar{a}j$ and thereby sustaining the homeostasis.

ZARAYE ILĀJ (MODES OF TREATMENT): Ilāj in Unani System of Medicine is usually done by looking into their overall mental, physical, social and emotional aspects in the following ways; There are some modes of treatment as per Unani philosophy; Ilāj bi'l Naseeha, Ilāj bi'l Tadbīr, Ilāj bi'l Ghidhā, Ilāj bi'l Dawā, and Ilāj bi'l Yad.

- *Ilāj bi'l Naseeha* (Psychotherapy): It is the use of psychological methods, particularly when based on personal interaction, to help a person change behaviour and overcome problems in desired ways. *Ilāj bi'l Naseeha* aims to improve an individual's well beings and mental health, to resolve or mitigate troublesome behaviours, beliefs, compulsions, thoughts, or emotions.⁷
- *Ilāj bi'l Tadbīr* (Regimental Therapy): In this physical regimens are advised for the treatment of certain ailments, i.e. exercise, massage, bathing etc
- *Ilāj bi'l Ghidhā* (Dietotherapy): Different diets are recommended for the patients of different diseases. Unani physicians gave prime importance to *Ilāj bi'l Ghidhā*. Specific dietary regimens are recommended according to their *Mizāj*.

- *Ilāj bi'l Dawā* (Pharmacotherapy): In this, pharmacotherapy is being given according to the stage of the diseases and by assessing the *Mizāj* of the patient, drug and environment.
- *Ilāj bi'l Yad* (Surgery): It is the treatment of the bodily condition by incision or manipulation, especially with the help of some instruments.⁸

Unani physician had described the treatment of $S\bar{u}$ ' $Miz\bar{a}j$ by $Il\bar{a}j$ bi'l Naseeha, $Il\bar{a}j$ bi'l $Tadb\bar{u}r$, $Il\bar{a}j$ bi'l $Ghidh\bar{u}a$ and $Il\bar{u}aj$ bi'l $Daw\bar{u}a$. The treatment of $S\bar{u}$ ' $Tark\bar{u}ab$ comes under the category of $Il\bar{u}aj$ bi'l Yad. $Il\bar{u}aj$ bi'l Yad is required whenever changes occur in the structure of any organ. Although there are some cases of $S\bar{u}$ ' $Miz\bar{u}aj$ (example $S\bar{u}$ ' $Miz\bar{u}aj$ $Hab{u}ab$ ') in which Ibn $S\bar{u}ab$ has advised to carry out $Fa\bar{u}ab$ (venesection) and cleaning which are the procedure involved in $Il\bar{u}ab$ ' $Il\bar{u}ab$ '

One should be very clear in mind that whenever $S\bar{u}$ ' $Tark\bar{\imath}b$ and Tafarruq-i- $Ittis\bar{\imath}al$ occurs, the root cause will be the $S\bar{u}$ ' $Miz\bar{a}j$. Exceptional cases of mechanical injuries resulting in bleeding, penetration wounds, fractures, dislocations, burns etc. appears directly as $S\bar{u}$ ' $Tark\bar{\imath}b$ and Tafarruq-i- $Ittis\bar{\imath}al$ (without $S\bar{u}$ ' $Miz\bar{a}j$ as its root cause). But $S\bar{u}$ ' $Miz\bar{a}j$ will definitely be found along with it or after some time. With the help of $Il\bar{\imath}aj$ $Il\bar{$

TABI'AT & ILĀJ BI'L YAD: Each and every function at every level inside body is being done in order to maintain homeostasis and thereby Mizāj is sustained. Maintenance of static or constant condition in the internal environment of the cell, tissues, organs or the whole body is usually done by a supreme power known as Tabī'at. Abu Sahal Masihi in his book Al Mi'at states that "Tabī'at administer the body involuntary and also performs action suitable to the body. When disease is chronic then in most of the cases Tabī'at removes it little by little or it becomes perplexed and powerless against it." Tabī'at tries to keep the body in healthy and homeostatic state in every aspect. It is evident from the fact that there are various conditions and minor diseases like wounds heals and close up without any treatment, many painful condition subside without the aid of medicine. Tabī'at tries to recover the equilibrium at their very best. But when it is weak, we have to ultimately opt for the other procedures. First of all, Ilāj bi'l Naseeha comes into play that improves the wellbeing and mental health to cope up with the disease state. Then comes the Ilāj bi'l Tadbūr by virtue of which certain ailments are treated. Ilāj bi'l Ghidhā and Ilāj bi'l Dawā is required in order to maintain the Mizāj. Ilāj bi'l Yad comes at the very last when there remains no option to maintain the Mizāj. In short we can say that Tabī'at carries such Mizāj that it does not want much intervention unnecessary, until and unless it is required so.

In $Il\bar{a}j$ bi'l Yad, all the procedures that are used are indirectly are related with the restoration of the equilibrium state of the body that has been disrupted due to $S\bar{u}$ ' $Tark\bar{\imath}b$ and Tafarruq-i- $Ittis\bar{\imath}al$. Activities such as monitoring the patient's blood pressure, pulse, respiratory rate, body temperature, oxygen levels in the blood, fluid therapy, medication transfusion, anaesthesia, rectifying samples for laboratory tests are some examples which are usually done when a patient undergo the course of $Il\bar{a}j$ bi'l Yad.

In cases of the mechanical injuries, first of all *Ṭabī'at* tries to stop bleeding via the process of clotting. But if injury is very severe and bleeding occurs continuously then the first priority should be the rapid control of

haemorrhage that is only done through $Il\bar{a}j$ bi'l Yad. For this purpose tight bandages and stitches are applied so as close the wound. If bleeding still continues then Electro cautery and argon beam coagulator is used to block the vessels end and prevent blood loss. As fluid is also lost from the body, the quantity of humours is affected. Since due to the loss of some of the important components of blood like blood cells, Coagulants etc. are also being lost due to which Kayfiyat of the internal fluid is also disturbed. Over all quantity of humours is affected as a result of $S\bar{u}$ $Tark\bar{u}b$. To cope up with this, fluid therapy is being given that ultimately helps in the restoration of the $Miz\bar{a}j$ Mu tadil. Medications, vitamins and supplements are also used in the I/V fluids so that the ability of the blood to carry oxygen increases. These drugs can increases the number of red blood cells so that the loss can be handle more effectively. Direct blood transfusions are also done. All these steps either directly or indirectly proceed towards the maintenance of $Miz\bar{a}j$ as far as possible.

During the period of surgery, patient vitals are monitored continuously in order to check whether or not patient is in equilibrium state or in other words $Miz\bar{a}j$ Mu^*tadil . Ventilation is assessed by continuous auscultation and oxygen content of blood is monitored by continuous pulse oxymeter. If any derangement is seen in their physiological limit then oxygen is delivered so as to maintain the $Miz\bar{a}j$. Similarly patient's cardiac function is monitored by electrocardiography and patient's heart rate and blood pressure is also observed time to time. In case of emergency when the homeostasis seems to be deranged or disturbed, then emergency intubations and advanced cardiac life support is used in order to maintain these vitals and thereby helps in prevention of $S\bar{u}$ $Miz\bar{a}j$. All the safety precaution are kept in sight like fresh scrub attire are donned daily and changed before the next case.

Beside this, the temperature of the operative area is maintained at a particular temperature i.e. 68-73 °F and the humidity is also maintained at 30-60%. This is usually done for the patient's safety and comfort during the surgical procedures but eventually with the help of these procedures the *Mizāj Mu'tadil* has to be retrieved and maintained. As the *Mizāj al-Fuṣūl* have different effect on the *Mizāj* of the organs or body. 12

In cases of the open wounds, the cleaning procedure is very much necessary because of the risk of infections. Likewise all of the procedures of *Ilāj bi'l Yad* are itself invasive in which patient's skin integrity is compromised. So the risk of infections always remain there. For this purpose strict asepsis or sterile techniques are followed at all times. Dressing is being done frequently in order to avoid the chances of infection. Local application of antibiotics, painkillers etc are being used. The reason behind all these is to keep moderate temperament to promote healthy healing.

Surgery is basically performed on the $S\bar{a}kht$ (anatomy) of the body that is materialistic thing; and as far as matter related to human body is concerned it is of three types viz., solid $(A'd\bar{a})$, liquid $(Akhl\bar{a}t)$ and gas $(Arw\bar{a}h)$. But when we analyse them structurally, these matter are compound in nature. ' $An\bar{a}sir$ is the basic and prime constituents of these three matter. It is also an important fact that elements possess some Kayfiyat (quality) and when these different elements combines with each other to form a compound then this compound will have a definite quality and quantity of these prime constituents in such a ratio that is uniform throughout its

components, that is what we called a *Mizāj*. It states that '*Anāsir* has *Kayfiyat* while compound possesses *Mizāj*. In this context *A'dā*, *Akhlāṭ* and *Arwāh* present in the body are compound in nature and have their definite *Mizāj*.

Any deformity in the elemental components in the part of tissue will imparts its effect and leads to $S\bar{u}$ ' $Miz\bar{a}j$. It means that any disturbance at its elemental level is remote cause of dystemperament while on the other hand, disturbance at compound level is immediate cause of dystemperament. But if we focus, each and every dystemperament will be present at elemental level of the compounds.

 $S\bar{u}$ ' $Miz\bar{a}j$ of any state of body i.e. $A'd\bar{a}$, $Akhl\bar{a}t$ and $Arw\bar{a}h$, or in the units of these three (at cellular level) will ultimately result in $S\bar{u}$ ' $Tark\bar{a}b$ that will require surgical innervation if severity persist. Now we are taking these components of the body to describe the correction of $Miz\bar{a}j$ Mu'tadil with the help of $Il\bar{a}j$ bi'l Yad.

As we know that whole of the human body is a compound of different components as described above. So if we take *A'da Mufrada*, *Akhlāṭ*, and *Arwāḥ* as the macro unit of the human body that the resultant *Mizāj* of human body will be made by these components after the organization and interrelation of different systems of the body. Deviation in any of component at organ level will imparts and affect the cumulative temperament of the whole body.

Understanding of relation of Sū' Mizāj and Ilāj bi'l Yad at the level of Arkān:

Deficiency of the essential limit of specific element that is somewhat which lead to surgery; there is normal required limit of every constituents in the body for example the value of some elements like sodium, potassium, calcium, magnesium, phosphorus, fluoride etc. which show their normal temperament in their limit, excess and deficiency from their range will cause dystemperament at its constitutional level and ultimate will result into $S\bar{u}$ and $Tark\bar{u}b$. For example osteomalacia, in this condition there is lack of vitamin D which is required for the absorption of calcium. So in this, malabsorption of calcium occurs and its normal and required physiological limit hampered resulting in $S\bar{u}$ $Tark\bar{u}b$ which may lead to weakening of the bony tissue. It may further prone to be fractured, and in severe cases of compound fracture there comes the need of surgical innervation to correct that deformity $Tark\bar{u}b$ and help in the restoration of the $Tark\bar{u}b$ of the bone. $Tark\bar{u}b$ because of the other essential elements can be understood in the same way.

Understanding of relation of Sū' Mizāj and Ilāj bi'l Yad at the level of Akhlāţ:

 $S\bar{u}$ ' $Miz\bar{a}j$ occurs when the body or its organs deviate from normal temperament. $S\bar{u}$ ' $Miz\bar{a}j$ may occur due to the $Asb\bar{a}b$ $M\bar{a}dd\bar{\iota}$ (materialistic cause) known as $S\bar{u}$ ' $Miz\bar{a}j$ $M\bar{a}dd\bar{\iota}$ and it may also occur due to non-materialistic causes i.e. $S\bar{u}$ ' $Miz\bar{a}j$ Sada. Ibn $S\bar{\imath}n\bar{a}$ says that, the rising of disease can be said to be the result of abnormality in the quantity and quality of the humours that is responsible for formation of morbid matter either in the form of pus or abnormal growth of particular tissue. Ia

> In the first case of excess in the quantity of humour, where humour may be healthy in temperament but excessive in quantity, so that the organs or channels bearing that *Khilt* become overburdened and overfilled. There begins the risk of increased rupture; there is the increased pressure of the fluid over the vessels thereby may cause the abnormal conditions like edema, increased blood pressure and other.

➤ In case of deviation in the quality of humour, the natural nutritive faculty become overwhelmed because the capacity of the digestive process of the body are made inefficient. Most of the chronic and degenerative diseases such as tumour, arthritis, etc. have their ultimate origin in the unhealthy quality of humour.

Both of the above condition ultimately leads to $S\bar{u}$ ' $Miz\bar{a}j$ of that particular organ and may cause $S\bar{u}$ 'Tarkib if persist. It is not necessary that these two conditions will occurs separately but deviation in the Kayfiyat and Kammiyat may occur simultaneously as well. For example in case of abscess, Kayfiyat and Kammiyat both are effected. It should also be kept in mind when we see things in applied way then there would be combination of both i.e. Kayfiyat and Kammiyat, that will effect simultaneously and when one changes then the other one will definitely alters.

As we know that $Akhl\bar{a}_l$ represents the fluids of body. Each and every fluid of our body has its normal values that contribute towards its $Miz\bar{a}j$ Mu'tadil. Excess and deficiency of these fluids will lead to $S\bar{u}'Tark\bar{u}b$. In addition to increased or decreased amount of these fluids, Ta'fun of $Akhl\bar{a}_l$ (toxicity inside fluids) and incorporation of $Akhl\bar{a}_l$ Ghayr Mehmuda also contribute towards $S\bar{u}'Miz\bar{a}j$ of $Akhl\bar{a}_l$ and a time comes when this $S\bar{u}'Miz\bar{a}j$ results into $S\bar{u}'Tark\bar{u}b$ which at last requires $Il\bar{u}j$ bi'l Yad. For example; Thyroid hormone (part of $Akhl\bar{a}_l$) is released from thyroid gland and regulates body metabolism, body temperature and heart rate and thereby maintains $Miz\bar{a}j$ of the whole body and that of organs. The function of thyroid gland is controlled by hypothalamus that release thyroid stimulating hormone. The reference range of parathyroid hormone is 10-65 pg/ml or 10-65 ng/L. When this range exceeds, it causes thyroid gland to release more amount of thyroid hormone due to this over stimulation gland swell up and increases in size. More amount of thyroxine is being released resulting in increased body temperature, increased heart rate and increased metabolism. 15-16 In this condition $Tab\bar{t}yat$ alone cannot compensate to maintain these conditions and a time comes where $Il\bar{u}j$ bi'l Yad has to be opted. In this case, partial thyroidectomy is done by removing the extra mass and ultimately maintaining the $Miz\bar{u}j$ of the organs and the body.

Dialysis is a condition in which the blood of the body has to be purified with the help of machine. Normally purification of the blood occurs by kidney but if the function of the kidney is compromised than the waste product of the bodily organs in the fate of various metabolic activities will remain there and there toxic effects will be produced over the body. This accumulation of waste and undesired by products in the blood will lead disharmony of the normal composition of the blood which will result in $S\bar{u}$ ' $Miz\bar{a}j$ and $S\bar{u}$ ' $Tark\bar{\imath}b$ of the blood. So dialysis in this context may be a classical example to keep normal temperament of the blood and then body in relation to surgical intervention.

Similarly $S\bar{u}$ ' $Miz\bar{a}j$ at the level of $Akhl\bar{a}t$ and its preservation with the help of $Il\bar{a}j$ bi'l Yad can be understood with other examples, such as

- Hydrocephalus
- Ascites
- pleural effusion

- Hydrothorax
- Hydrocele etc.

Understanding of relation of Sū' Mizāj and Ilāj bi'l Yad at the level of A'dā:

Every organ in the body has its normal bodily structure and physiological functions that basically maintains and contribute *Mizāj Mu'tadil* of that particular organ. Any disturbance and diseased condition of the organs disrupting its structural composition ultimately produces su Mizāj affecting the functions of the organs and then the body.

In the cases of Myocardial Infarction there is no enough blood to distribute to all the tissues of the heart. It may be because of Tazayyuq 'Uruq (that comes under the category structural impairment) or may be blockage because of the plaque. Tazayyuq 'Uruq and closure of the vessels because of plaque comes under the category of $Amr\bar{a}d$ -i-Khilqat that comes under the category of structural diseases. Because of this the $Miz\bar{a}j$ of the heart or its cells gets disturbed and ultimately the function of the heart in the form of fast heart rate, tightness in the chest etc. Not only $Miz\bar{a}j$ of heart gets disturbed but it also produces effect over the other organs and changes their temperament too. In order to maintain $Miz\bar{a}j$ in the cardiovascular system and provide adequate blood to the tissues, blood flow must be redirected continually to the tissues as they become more active. For this purpose, $Il\bar{a}j$ bi'l Yad is being used. Angioplasy and Coronary artery bypass graft is usually done to remove blockage and to maintain the blood flow and homeostasis. With the help of these surgical procedures we are ultimately maintaining the temperament of heart. So $Il\bar{a}j$ bi'l Yad not only helps in the treatment of $S\bar{u}$ ' $Tark\bar{u}b$ but also $S\bar{u}$ ' $Miz\bar{u}j$ of heart as well as other organ effected by it.17

Various varieties of abscess are seen in surgical practice like Abscess on neck, axilla, groin, popliteal abscess, gluteal abscess, deltoid abscess etc. Abscess is the localised collection of pus that is generally produced by cellular death and liquefaction caused by the production of toxins by infective organisms. Since cellular death occurs and then accumulation of the pus, this somewhat disturbs the structural component of that organ. As a result of this condition, there is increased temperature at the effected site and that of the whole body, pain and swelling along with the loss of function. What basically happens is the alteration in the $Miz\bar{a}j$ and $Tark\bar{a}b$ of the organ resulting in $S\bar{u}'Miz\bar{a}j$ and $S\bar{u}'Tark\bar{a}b$. This should be kept in mind that, Abscess usually develops slowly and takes some times to reach at a level where $Il\bar{a}j$ bi'l Yad is required. Sometimes abscess subsides only with the help of $Il\bar{a}j$ bi'l Dawa but when the condition becomes severe and there is persistent fever and chills and organ itself has been damaged too much and due to it the major functions are being disturbed then with the help of $Il\bar{a}j$ bi'l Yad pus has to be drained out. With the help of this surgical procedure we usually correct $S\bar{u}'Tark\bar{a}b$ and then of course the $S\bar{u}'Miz\bar{a}j$ of the affected organ. After this daily dressings are being done in order to keep it safe from infections and to promote fast healing. This also contribute to maintain the $Miz\bar{a}j$.

Another example is *Bars* (Vitiligo), where the pigment producing cells of the skin (melanocytes) die or stop producing melanin resulting in the appearance of white patches over the skin. Unani medicine has described this under the case of $S\bar{u}$ ' $Miz\bar{a}j$ $Mustaw\bar{\imath}$. Along with other treatments, $Il\bar{a}j$ bi' I Yad is also being done more

recently and is depicted as a very effective solution. Different approach of skin tissues and cellular auto-grafting emerged and provided increased re-pigmentation state.¹⁹

Similar is the case of Haemolysis in which the *Mizāj* and *Tarkīb* of the RBC is disturbed. Blood transfusions, plasmapheresis, blood and marrow stem cell transplants, splenectomy are being done for the ultimate cure. All of the above treatments come under the category of *Ilāj bi'l Yad*.

Understanding of relation of Sū' Mizāj and Ilāj bi'l Yad at the level of Arwāḥ:

All the gaseous component of the human body comes under the category of $Arw\bar{a}h$. Some of them are every important while others are not. All of them have normal physiological limits beyond which these gases will produce toxic effects on the body and will disturb the homeostasis of the body. Each and every organ of the body have a required range of $Arw\bar{a}h$. Deficiency and excess of these, will alter the $Miz\bar{a}j$ of that organ.

For this account, a condition known as Pneumothorax or collapsed lung is being taken. The space between the chest wall and lung is known as pleural space. Under the normal conditions it contains 0.1-0.2ml/kg of fluid along with less than 1.5g/dL of protein concentration.²⁰ It does not contain any gases at all. Pneumothorax occurs when the air gets trapped into this Pleural space, resulting in the collapse of whole lung or a part of it. As a result of which its structure and functions are compromised producing the $S\bar{u}$ ' $Miz\bar{a}j$ and $S\bar{u}$ ' $Tark\bar{u}b$ of the affected part. Some cases of it, heal without any treatment or with the help of $Il\bar{u}j$ bi'l $Daw\bar{u}a$ whereas in some cases $Il\bar{u}j$ bi'l Yad becomes necessary. The standard treatment among $Il\bar{u}j$ bi'l Yad for this condition involves insertion of a small tube between the ribs and clavicle in order to release the gases. This usually helps to bring back the normal structure and functions of 'Udw Mawuf and contribute on the way to maintain the homeostasis.

Conclusion

When we say a body has $Miz\bar{a}j$ Mu'tadil, it means that it perform its function smoothly and is in a homeostatic state. The elements inside the human body and all of the four fluids namely Dam, Balgham, $Sawd\bar{a}$ and $Safr\bar{a}$ have their normal physiological limits. When this limit deranged then the homeostatic condition of the body is affected resulting in $S\bar{u}'$ $Miz\bar{a}j$, $S\bar{u}'$ $Tark\bar{a}b$, Tafarruq-i- $Ittis\bar{a}l$ and obviously results into the altered functions. All the treatments described in Unani system of medicine i.e. $Il\bar{a}j$ bi'l Naseeha, $Il\bar{a}j$ bi'l $Tadb\bar{u}r$, $Il\bar{a}j$ bi'l $Tadb\bar{u}r$, $Il\bar{a}j$ $Tadb\bar{u}r$, $Tadb\bar{u}r$, Tad

REFRENCES:

1. Khan, K.Z., (2012), *Umur-e-Tabiya*, 4th edition, Idara Kitab al-Shifa, New Delhi, Pp. 18,19

- 2. Kabiruddin, H., (2001), *Ifadah-e-Kabir Mufassal*, Published by Director NCPUL, New Delhi, Printed At J. K. Offset, Jama Masjid, Delhi, Pp. 199,200
- 3. Ibn Sina, (1993), *Canon of Medicine*, English translation of the critical Arabic text, Jamia Hamdard, New Delhi, Pp. 13,119,120
- 4. Ahmed, S. I., (1980), *Introduction to Al-Umur Al-Tabiyah*, Mrs Nuzhat Ishtiaq, Saini printers, Pahari Dhiraj, Delhi, Pp.32-35
- 5. ASAB, M.A., Amir, H., Smicozzi, M., (2013), Avicenna medicine: A new translation of 11th century Canon, Healing Art press, Pp.103-109, 315-319
- 6. Qarshi. A.A., (2014), *Ifadah-e-Kabir Majmal*, translated by *Hakim Kabiruddin*, MR Offset press, New Delhi, Pp.73-77, 177
- 7. Psychotherapy [Online], cited at: https://en.wikipedia.org/wiki/Psychotherapy cited on: 20 May 2020
- 8. Latif, A., (2019), Huqna (Enema and Basti) Therapy, Prowess publishing, Pp. xx
- 9. Verma, R.L., & Keswani, N.H., (1975), The physiological concepts of Unani medicine, Delhi, Pp.145,146
- 10.Center for bloodless medicine and surgery, [Online] cited at: https://www.hopkinsmedicine.org/bloodless medicine surgery/bloodless techniques.html cited on: 26 June 2020
- 11.Intraoperative care, [Online], cited at: https://www.encyclopedia.com/medicine/encyclopedias-almanacs-transcripts-and-maps/intraoperative-care-0 cited on: 26 May 2020
- 12. Hamdani H.S.K.H. (1920). Usul-e-Tibb. New Delhi: JK offset printers. Pp. 153,154
- 13.Kabiruddin. H., (1935), *Sharah wa Tarjuma Kullīyat-e-Nafisi*, Published by Idara Kitabul Shifa, New Delhi, Pp.165,166
- 14.Chisti, H.G.M., (1991), *The traditional healers handbook: A classical guide to the medicine of Avicenna*, Healing arts press, US, Pp.75
- 15.Parathyroid Hormone, [online], cited at: https://emedicine.medscape.com/article/2089334-overview cited on: 10 July 2020
- 16.Patton, K.T., & Thibodeau, G.A., (2012), Anatomy and Physiology, 8th Edition, Mosby Inc., Pp 576,208
- 17.Acute Myocardial Infarction, [Online], cited at: https://www.healthline.com/health/acute-myocardial-infarction cited on: 3 Aug 2020
- 18. Abscesses [Online], cited at: https://www.msdmanuals.com/professional/infectious-diseases/biology-of-infectious-disease/abscesses cited on: 5 Aug 2020
- 19.Gupta, S., Olloson, M.J., Parsad, D., et.al, (2018), *Vitiligo: Medical and Surgical Management*, Wiley and sons, Pp. 272-274
- 20.Pleural cavity, [Online], cited at: https://www.sciencedirect.com/topics/medicine-and-dentistry/pleural-cavity, cited on: 5 Aug 2020