ORIGINAL RESEARCH PAPER

Unani Medicine

Sū' al-Qinya (ANAEMIA) AND ITS MANAGEMENT IN UNANI MEDICINE

KEY WORDS: Su-ul-qinya; Anaemia; Faqruddam; Fasaduddam; Kuriyat-e-hamra

Dr. Mohd Talib Husain* Program Assistant Pharmacovigilance. *Corresponding Author

Dr. Anwarul Islam Research Officer

Dr. Noman Khan Research Associate Unani

ABSTRACT

Su-ul-qinya is combination of two words 'Su' and 'qinya. Both are Arabic words where "Su" mean defect and 'Qinya' means treasure. By combining both words, it becomes Su-ul-qinya, means defect in the asset of the body respectively since blood is supposed to be the asset of the body; therefore Su-ul-qinya is a disorder in which the blood becomes defected. The terms Faqruddam, qillatu dam and fasaduddam are used as synonymous for Su-ul-qinya. According to Unani literature Su-ul-qinya means defect in the blood. So, keeping the fact in mind want to establish the clinical correlation with anaemia in the light of classical Unani literature as well as modern medicine.

INTRODUCTION

The modern equivalent of Anaemia in Unani Medicine is Sū' *al-Qinya* (an Umbrella term which stands for "lack of vital treasure - blood). In *Sū' al-Qinya* (Anaemia), blood, is not produced normally due to disturbance in the temperament of liver and weakness in hepatic function and because of that the dietary requirement of body is not fulfilled. Persistent *Sū' al-Qinya* (Anaemia) may lead to ascites. It is caused by hepatic impairment, mainly due to *Sū' Mizāj-i-Kabid* and *Zu'f al-Kabid*. However, *Sū' Mizīj-i-Mi'da* and *Zu'f al-Mi'da* may also lead to *Sū' al-Qinya* (Anaemia). Classical literature has revealed that *Sū' al-Qinya* (Anaemia) was well known as a hepatic disorder to the ancient Unani physicians and the various aspects of the disease have been described by Unani authors such as *Masīhī, Ibn Sīnī, Ismī'il Jurjīnī, Samarqandī, Yīsuf Harwī* and *Hakīm A'zam Khīn*. A healthy condition and a specific temperament are necessary for a proper functioning of the body organs. Like any other organ, liver has also a characteristic temperament. Hence, the liver metabolism is affected resulting into disturbed synthesis of proteins helpful in the production of blood. This condition leads to hypoproteinaemia and Anaemia.

According to W.H.O. Anaemia is a condition in which the number of RBC's or their oxygen carrying capacity is insufficient to meet physiological needs, which vary by age, sex, altitude, smoking and pregnancy status.

The WHO defines Anaemia as a haemoglobin level <13 g/dL in men and <12 g/dL in women (Longo *et al*, 2015). However, normal Hb distribution varies not only with sex but also with ethnicity and physiological status. The baseline measure of Hb concentration that categorizes Anaemia is <7.0 g/dL for severe Anaemia, 7.0-9.9 g/dL for moderate Anaemia, and 10.0-11.9 g/dL for mild Anaemia (De Maeyer *et al*, 1989).

Anaemia can be classified based on the size of RBCs and amount of haemoglobin in each cell. If the cells are small, it is microcytic Anaemia (MCV <80), if they are large, it is macrocytic Anaemia (MCV >100) and if they are normal sized, it is normocytic Anaemia (MCV 80-100) (Janz*et al*, 2013; Smith, 2010).

Anaemia is a worldwide problem with the highest prevalence in developing countries. It is estimated that about 10% populations of developed countries and as much as 25-50% in developing. It is more in females than males (Vos *et al*, 2012). It is also common among children, during pregnancy and in the elderly (Janz *et al*, 2013). The factors responsible for high incidence of Anaemia in our country include early marriage, teenage pregnancy, multiple pregnancies, less birth spacing, low iron and folic acid intake and high incidence of worm infections in Indian population (Toteja & Singh, 2004)In Unani Literature, it is mentioned that the evaluation of the patient with *Sū' al-Qinya* (Anaemia) requires a careful history and physical examination. The signs and symptoms of *Sū' al-Qinya* (Anaemia) include swelling which may be generalized, but usually it is on dependent parts. Pedal oedema which occurs on standing for long duration (Kabīr al-Dīn), fatigue, ulceration of gums and teeth (Arzīnī, Siddiq), disturbed sleep, and irregular bowel movements. *Bawl* (urine) appears white. *Barīz* (stool) is generally unformed or semisolid and colourless (Kabīr al-Dīn). All symptoms which are mentioned in classical Unani texts are similar to symptoms mentioned in modern medicine like fatigue, loss of stamina breathlessness and tachycardia (particularly with physical exertion).

Nutritional history related to drugs or alcohol intake and family history of Anaemia should always be assessed. Clues to the mechanisms of Anaemia may be provided on physical examination by findings of infection, blood in the stool etc.

Certain groups of individuals, such as pregnant women, benefit from the use of iron pills for prevention (Janz et al, 2013; Bhutta et al, 2013). Dietary supplementation, without determining the specific cause, is not recommended. In asymptomatic cases, blood transfusion is not recommended unless Hb levels are <6-8 g/dL (Janz et al, 2013; Qaseem et al, 2013). Erythropoiesis-stimulating medications are not recommended in those with mild or moderate Anaemia (Qaseem et al, 2013).

Classification

Classification of Soo-ul- Qinya (Anaemia) According to Unani System of Medicines

Following three types of anaemia have been described by Unani scholars

1. Soo-ul- qinya sawiul kurriyatee (Normocytic Anaemia)
2. Soo-ul- qinya Kurria kibriya (Macrocytic Anaemia)
3. Soo-ul- qinya Fauladi (Hypochromic Anaemia)

CAUSES OF Soo-ul- Qinya (Anaemia)

In Unani classical literature following causes of anaemia have been described.

1. Amraz-e- kabid (Liver Disorders)

- Soo-e- mizaj jigar: resulting slow or impure blood formation

2. Amraaz-e- Meda wa Amaá (Gastrointestinal disorders)

- Soo-e-mizaj medi (Distemperament of stomach)
- Zof-e- meda (Weakness of stomach)

- Zarb wa khilfa (Frequent motions/ diarrhoea)
- Deedan-e- Amaá (Intestinal worms)
- Meda ka amal-e- jarrahi (Stomach surgery)
- Qai-ud-dam (Haematemesis)
- Qabz-e- muzmin (Chronic constipation)
- Soo-e- mizaj barid (Abnormal cold temperament)

3. Amraz-e- Kuliya (Renal Diseases)
- Baul-ud- dam (Haematuria)
- Iltehab-e-kuliya muzmin (Chronic nephritis)

4. Hadd/Mutaáddi amraaz (Acute and infectious diseases)
- Diq wa sil (Tuberculosis)
- Humma-e- ejamia (Malaria)

5. Amraz-e- Aaza-e- Tanasul (Genital Disorders)
- Kasrat-e- Jimaa (Excessive Coitus)
- Jalaq (Masturbation)
- Usrut tams (Dysmenorrhoea)
- Kasratut tams (Menorrhagia)
- Hamal (Pregnancy)

6. Amraz-e-Sadr (Cardio-Pulmonary diseases)
- Nafs-ud-dam (Haemoptysis)
- Zof-e- Qalb (Cardiac Weakness)

7. Adwia wa Sammiyat (Drugs and Poisons)
- Para ke murakkabat (Compounds of Mercury)
- Seesa (Lead)
- Kasrat-e- Mai Noshi (Excessive use of alcohol)
- Hawaam Gazeedgi (Insect Bite)

8. Mutafarreqat (Miscellaneous)
- Naqs-e-Taghzia (Malnutrition)
- Faqr wa faqa (Poverty and Starvation)
- Ghair mamooli mehnat wa Riyazat (Extreme exertion and Exercise)
- Shadeed Jiryaan-ud-dam (Severe haemorrhage)
- Tafaqqurat (Anxiety)
- Ghair Sehat Bakhsh Rehaish (Unhygienic living condition)
- Mitti Khane ki Aadat (Clay chewing habit) specially in children
- Faulad ke injezab pe asar hone wale awaamil (Factors affecting the absorption of iron)
- Lahmeen ka naqse taghzia (Protein malnutrition)
- Ghair tabai tehali meekaniyat (Abnormal spleen mechanics)
- Namaloom khalal (Unknown interventions)
- Hayateen A, B12 & C ki kami ya fuqdaan (Deficiency of Vitamin A, B12 & C)
- Quwat-e- muallide dam ki kamzori (Haematopoietic weakness)
- Ghair munazzam ghiza (Improper diet)
- Bad hazmi (Dyspepsia)
- Ghair mamooli harkat (Over activity)
- Nafsiatee awaamil (Psychogenic disorders)

9. Amal-e- inhezam mein khalal (Disturbances in digestive process)

According to Unani concept the food materials pass into four stages after ingestion. Disturbances in any of these four digestive processes may result in faqr-ud-dam (Anaemia), which impairs the normal liver function.

1. Hazm-e-medi (Gastric digestion)
2. Hazm-e- kabidi (Hepatic digestion)
3. Hazm-e- urooqui (Vascular digestion)
4. Hazm-e- uzwi (Cellular digestion)

Clinical Features:

As per Unani classical literature, the commonest signs and symptoms of faqr-ud-dam (Anaemia) are as follows.

1. Face and body looks pale and white
2. Puffiness of face and eyelids specially on the extremities. Sometimes it may be on the whole body.
3. Dysphagia
4. Alternate diarrhoea and constipation
5. Indigestion
6. Flatulence
7. Loss of appetite, sometimes increased appetite
8. Stomatitis
9. Weakness on mild exertion
10. Pyrosis (Heart burn)
11. Glossitis
12. Delayed healing of wounds or ulcers
13. Excessive sweating
14. Polyuria
15. Sleep disturbances
16. Pitting oedema on feet
17. Vertigo and giddiness
18. Cold extremities
19. Syncope (sometimes)
20. Prominent veins on peripheries (at times)
21. Palpitation (at times)
22. Extreme loss of weight (at times)
23. Splenomegaly
24. Hepatomegaly (at times)
25. Spasm and tremors
26. Defective vision (at times)
27. Jaundice and ascites (at times)

Compound Unani Drugs :
- Majoon Khubs-ul- Hadeed
- Sharwat e Faulad
- Habb-e- Khabsulhadeed
- Kushta-e- Faulad
- Kushta-e- Khabsulhadeed
- Majoon Fanjnoos
- Maa-ul- Laham
- Maa-ul- Shae'er

Management/ Treatment

Unani physicians have been treating anaemia successfully from very ancient times. Unani drugs are highly popular in the treatment as they are easily available, cost effective and have least side effects.

As per Unani philosophy the basic principles followed for the management of anaemia are:
- Removal of underlying cause
- Improvement of digestion and appetite
- Correction of hepatic insufficiency
- Supplementation of nutritious diet
- Medication to improve the quality of blood

CONCLUSION:

Ancient Unani physicians have not mentioned any condition specific to iron deficiency or its aetiopathogenesis. Although they have mentioned aetio-pathogenesis of a certain condition where there is deficient blood under the heading of Su-ul-qinya, faqrud-dam, qillatud-dam, fasadud-dam, khizra (chlorosis) etc. But actually, Iron deficiency anaemia is the condition in which there is lack of blood and clear evidence of deficiency of iron in the body. In modern literature iron deficiency anaemia has few specific features related to iron deficiency anaemia but most of the features are common in all types of anaemia.

REFERENCES

1. Arzānā, Hakām Muhammad Akbar (ypnm). *Tibb-i-Akbar*, IdāraKitāb al Shifā, New Delhi, p. 458.
2. Bennett JC and Plum F (1997). *Cecil—Tratado de MedicinaInterna*, 20th Ed., Guanabara Koogan, Rio de Janeiro, Brazil.
3. Kheiri R, Koohi M K , Hashjin G.S, Nouri H, Khezli N, Hassan M A, Hoomani F, Shams G, Rasouli A, Motaghinejad M. (2017). "Comparison of the Effects of Iron Oxide, as a New Form of Iron Supplement, and Ferrous Sulfate on the Blood Levels of Iron and Total Iron-Binding Globulin in the Rabbit". *Iranian Journal of Medical Sciences.*
4. Bhutta ZA, Das JK, Rizvi A, Gaffey MF, Walker N, Horton S, et al (2013). "Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost?" *Lancet*, 382 (9890): 452-77.

5. Doshi M, Mirza A, Umarji, Balkrishna, Karambelkar R et al (2012). ''Effect of Trigonella Foenum (Fenugreek/Methi) on haemoglobin levels in females in child bearing age,'' *Bio medical Research.*
6. DeMaeyer EM, Dallman P, Gurney JM, Hallberg L, Sood SK, and Srikantia (1989). ''Preventing and controlling iron deficiency Anaemia through primary health care: a guide for health administrators and programme managers,''World Health Organization, Geneva, Switzerland.
7. Ezzati M, Lopus AD, Dogers A, Vander HS, Murray C. Selected major risk factors and global and regional burden of disease, *Lancet*, 2002; 360: 1347-60.
8. Goldman L, Bennett JC (2000). *Cecil Textbook of Medicine*. 21st ed. W.B. Saunders Company, Philadelphia, pp. 623-627.
9. Janz TG, Johnson RL, Rubenstein SD. "Anaemia in the emergency department: evaluation and treatment." *Emergency medicine practice*, 2013; 15 (11): 1-15.
10. Kabār al-Dān, Hakām Muhammad (ypnm). *Sharhal-Asbāb*. Vol. II, Hikmat Book Depot, Hyderabad, p. 669.
11. Kalaivani K. Prevalence & consequences of Anaemia in pregnancy, *Indian J Med Res*, 2009; 130: 627-33.
12. Kaviarasan S, Vijayalakshmi, K, Anuradha C V. Polyphenol- Rich extract of fenugreek seeds protect erythrocytes from oxidative damage. Plant Foods for Human Nutrition 2004; 59: 143-147.
13. Longo DL, Fauci AS, Kasper DL, Hauser SL, Jameson JL, Loscalzo J (2015). Harrison's Principles of Internal Medicine. 19th Ed. Vol. II, McGraw-Hill Companies, USA, pp. 2738-2752.
14. Qaseem A, Humphrey LL, Fitterman N, Starkey M, Shekelle P (2013). "Treatment of Anaemia in patients with heart disease: a clinical practice guideline from the American College of Physicians." *Annals of internal medicine* 159 (11): 770-9.
15. SiddiqTabāb (2003). *Al-Iksār*. Vol. II, I'jāz Publishing House, New Delhi, p. 872.
16. Smith RE. "The clinical and economic burden of Anaemia". *The American journal of managed care*, 2010; 16: S59–66.
17. Srinivasan K. Fenugreek (Trigonella foenum–graecum) A review of health beneficial physiological effects. Food reviews international 2006; 22: 203-224.
18. Thirunavukkarasu V. Anuradha C V, Viswanathan P. "Protective effect of fenugreek (Trigonella foenum graecum) seeds in experimental ethanol toxicity". Phytother Res 2003; 17: 737-743.
19. Toteja GS, Singh P. *Micronutrient profile of Indian population*. New Delhi: Indian Council of Medical Research; 2004.