

**Review Article** 



# An Overview of *Waja uz Zahr* (Low Back Pain) and its Management in Unani System of Medicine

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**Abstract** There is a comprehensive description of *waja* ul *mafasil* (bone and joint diseases) in classical Unani literature. Almost all ancient Unani Scholars have described *waja uz zahr* under the broad heading of *waja* ul *mafasil* in detail along with its clinical features, etiopathogenesis, complications and management in their treatises. In Unani system of medicine, low back pain (*Waja uz Zahr*) is described as a disease in which pain arises from internal and external muscles, ligaments surrounding the lumbar and lumbosacral region. According to the Ibne Sina and Zakaria Razi the most common causative matter of *waja uz zahr* is *kham balgham* (*ghair tabyee balgham*), which is formed due to defective metabolism of second and third stages of digestion, i.e. *hazme kabidi* and *hazme urooqi*. LBP (low back pain) is the most prevalent musculoskeletal condition and the most common cause of disability in developed nations. Almost everyone has at least one episode of low back pain during their lives. *Waja* (pain) can be alleviated by removing its cause or can be relieved by substances producing cold and analgesia, but the first is the real alleviating factor. Unani system offers a very effective treatment for this disease.

Keywords Low Back Pain; Waja uz Zahr; Pain; Unani Medicine

## 1. Introduction

Pain (*waja*) is a sudden perception of any contrary agent, which is one of the unnatural states of a living body [1]. Pain is a biopsychosocial experience, which is associated with widespread impairment in multiple domains of functioning, ranging from disruption in basic activities of daily living to disruption in psychosocial function and work related activities. Pain is the dominant symptom of rheumatic diseases. It is not only the main cause of suffering; but also the main key to diagnosis [2].

In Unani system of medicine, low back pain (*Waja uz Zahr*) is described as a disease in which pain remains stationary in the lumbar and lumbosacral region and does not radiate downwards. The pain arises from internal and external muscles; ligaments surrounding the lumbar and lumbosacral region due to *fasaad* in *mizaj* (*sue mizaj*). This *fasaad* in *mizaj* is due to surplus *buroodat* and accumulation

of raw phlegm (kham balgham), and may also arise due to accumulation of ghaleez riyah in the lumbar and lumbosacral region [3]. LBP (low back pain) is the most prevalent musculoskeletal condition and the most common cause of disability in developed nations. Almost everyone has at least one episode of low back pain during their lives [4]. It occurs in similar proportions in all cultures, interferes with quality of life and work performance, and is the most common reason for medical consultations. LBP incurs billions of dollars in medical expenditures each year, and this economic burden is of particular concern in poorer nations, where the already restricted health care funds are directed toward epidemics such as HIV and AIDS [5]. Despite the high frequency and enormous cost of low back pain, the medical model of "diagnose, treat, cure" does not easily fit in low back pain, because the nature of low back pain: it is a common, self-limiting disorder with a high rate of recurrence, and also in more than 90% of cases the exact anatomical source of LBP cannot be determined, and the preferred diagnostic label is 'non- specific LBP', thus the causes and effective therapeutic programs remain highly problematic [6]. In this technological era, medical science advanced a lot but still fails to explain the pathophysiology, effective treatment, prevention and rehabilitative measures for pain. Permanent elimination of pain has always been an impossible task. For these purposes, understanding the person and constellation within which the pain occurs is an important first step from which to derive others [7].

## 2. Etiology

Most of the renowned Unani physicians described the causes of *waja uz zahr* under the broad heading of *wajaul mafasil*. Zakaria Razi, an eminent Unani physician described the disease in the eleventh volume of his book Al-Hawi, though his description is not systematically arranged, but covers all possible causes related to disease. According to him, the first and foremost cause of *Wajaul mafasil* lies in the abnormal formation of chyme (*rutubat e mukhatia*) due to *naqs* (defect) in *hazm e kabidi and hazm e urooqi*, as a result the abnormal chyme produces abnormal humours, particularly abnormal phlegm (*ghair tabyee balgham*), which then gets accumulated in the joints of the body, thus causing swelling, tenderness and pain. Thus we can say that the root cause of *waja uz zahr* is the *naqs* in *hazm e kabidi* and *urooqi*, in which abnormal *balgham* gets accumulated in the joint structures either congenitally or due to some other disease, gives the seat to accumulate the abnormal humours in general, or vitiated phlegm in particular [8].

According to Ibne Sina, *Waja uz Zahr* arises from internal and external muscles, ligaments surrounding the lumbar and lumbosacral region due to *fasaad* in *mizaj* (*sue mizaj*). This *fasaad* in *mizaj* is due to surplus *buroodat* and accumulation of raw phlegm (*kham balgham*). He further stated that pain may also arise due to accumulation of *ghaleez riyah* in the lumbar and lumbosacral region [3].

In addition to the above mentioned causes, Jurjani in Zakheera Khawarzam Shahi and Akbar Arzani in Tibbe Akbar have described low back pain as *Darde pusht* with different causes as: (1) *Kasrate jima*. (2) *Mumtali rag.* (3) *Zoaf wa laghari gurda*. (4) *Musharikate reham*. (5) Excessive physical work [9, 10].

# 3. Pathogenesis

According to the Ibne Sina and Zakaria Razi the most common causative matter of *Waja uz zahr* is *kham balgham* (*ghair tabyee balgham*), which is formed due to defective metabolism of second and third stages of digestion, i.e. *hazme kabidi* and *hazme urooqi*. As the *mizaj* of *balgham* is *barid*, so when this abnormal *balgham* gets accumulated in the joint structures of lumbar region, it leads to *sue* 

*mizaj barid*. The *mizaj* (temperament) of joint structure i.e., muscles, tendons, ligaments, bones and nerves is *barid* and *yabis*, so a little addition of *buroodat* can lead to deviation of temperament in these joint structures, which results in pain, as pain is caused due to sudden and irregular deviation of temperament. *Riyah*, the second most causative matter, causes pain only if there is loss of continuity in the sensitive organs by penetrating between muscle fibers and diffusing under the membranes such as periosteum. So we can say that the basic pathology of *waja uz zahr* lies in the *naqs hazam* particularly in *hazme kabidi and hazme urooqi* [3, 8]. The spine is unique in that it has multiple structures that are innervated by spine fibers, usually present within the spinal ligaments, in the apophyseal joint capsules, in the periosteum at the facial and tendon attachments and in the blood vessels; but only in the outer layers of the intervertebral discs. Thus low back pain can arise from:

- Anterior structures i.e. disc, vertebral bodies, ligaments, muscles;
- Posterior structures i.e. facets, ligaments, sacroiliac joints;
- Midline structures i.e. spinal cord, neural compress, muscles.

Pain is produced by pressure on these structures from disc protrusions, osteophytes or trauma [3, 10, 11, 12].

# 4. Epidemiology

LBP (low back pain) is the most prevalent musculoskeletal condition and the most common cause of disability in developed nations. Almost everyone has at least one episode of low back pain during their lives. It occurs in similar proportions in all cultures, interferes with quality of life and work performance, and is the most common reason for medical consultations. It has been reported that lifetime prevalence of LBP in developed countries is up to 85%, which makes this complaint second only to the common cold. It was studied that 37% of LBP was attributed to occupation, with two fold variation across regions; the attributed proportion was higher for men than women, because of higher participation in the labour force and in occupations with heavy lifting or whole body vibrations. The first episode of LBP is typically highest in the third decade of life and overall prevalence increase with age until the 60-65 year age group and then gradually declines [5, 4].

## 5. Clinical Presentation

Description of clinical features of *Waja uz Zahr* present in the classical text books of Unani medicine are based on causative factors as [9, 10, 13]:

In case of sue mizaj barid sada, the clinical features of waja uz zahr are:

- Feeling of coldness;
- Pain without heaviness;
- Pain relieved by temperamentally hot regimens.

In case of kham madda (balgham kham)

• Pain with heaviness; pain relieved by exercise and massage.

In case of riyah

- Waja mumaddida (pain with tension);
- Pain aggravates by taking those foods which produce flatulence.

In case of azeem rag

• Waja zarbani felt along the course of rag (vertically).

In case of Zoafe gurda wa laghari

- Zoafe bah;
- Darde qutn;
- Bladder symptoms.

# 6. Differential Diagnosis

# 6.1. Lumbosacral Strain

Lumbosacral strain is quiet common among the young adults due to faulty adoption of the back. The nature of pain is spasmodic which increases with activity, tenderness on palpation and limited range of motion [14].

# 6.2. Acute Disc Herniation or Disc Prolapsed

Disc prolapse occurs most commonly in middle age about 30-50 years; but can also occur in adolescence and elderly. It commonly lasts for 2-6 weeks but may continue for longer. It is often associated with neurological symptoms like altered sensation, weakness in the muscles, asymmetric reflexes. The quality of pain is sharp, shooting or burning pain, paraesthesia in leg, decreased with standing, increased with bending or sitting [14, 15].

# 6.3. Spinal Osteoarthritis

This is osteoarthritis of the joints in the spinal column, involving the intervertebral joints, the facet joints or both. It is one of the most common findings on plain spine radiographs of patients with (and without!!) low back pain and is almost universal after the age of 55–60, although to varying degrees [16].

## 6.4. Ankylosing Spondylitis

This is relatively uncommon but can present with painful stiffness of the spine. It is more common in males, age about 15-40 years. It is particularly felt in the early hours of the morning, waking the patient from the bed. Gradually the disease progresses upwards and involves different joints which are in order of frequency sacroiliac, spinal, hip, and shoulder joints [12, 14].

## 6.5. Spinal Stenosis

This may be caused by a combination of bony overgrowth (e.g. Osteophyte formation, Paget's disease), disc protrusion or herniation, or congenital anomalies, such as shortened vertebral pedicles. Neural impingement is worsened by activities such as walking, and claudication like symptoms usually require the patient to slow down or to stop and rest. Forward flexion of the spine may also relieve the pressure, and patients often acquire a forward flexed posture and learn to lean on objects (e.g. shopping carts) for symptom relief [16].

# 6.6. Infection

Infectious etiology of acute low back pain include osteomyelitis, septic discitis, and paraspinal or epidural abscess, whereas infectious etiologies of chronic low back pain include fungal or tuberculosis infections. Patients typically first report fever and sharp focal pain in the lumbar spine. Physical examination reveals tenderness to percussion [17].

# 7. Principles of Treatment (Usool Illaj)

The principle underlying the management is to remove the *maddi asbab* (causative matter) and correction of *sue mizaj* (ill temperament) which usually manifests in two ways; i.e. *sue mizaj maddi* and *sue mizaj sada* and restoration of these is called *tadeel* (normalization), which can be achieved by two main procedures *tangiya mawad* and *tadeel mizaj* [10, 12].

*Waja* (pain) can be alleviated by removing its cause or can be relieved by substances producing cold and analgesia, as all the narcotics do; but the first is the real alleviating factor. As the root cause of *waja uz zahr* is *naqse hazam* (defective digestion) which leads to the production of *ghair tabyee balgham* (*kham balgham*) in the lumbosacral region; so the management should be with suitable modification (*tasaruf*) in the *asbab-e-sitte zarooriya* viz [18].

- a. Atmospheric air
- b. Food and drink
- c. Rest and physical activity
- d. Psychological activity
- e. Sleep and wakefulness
- f. Evacuation and retention

In case of *sue mizaj maddi*, the first line of treatment, to remove the morbid matter from the body is *nuzij wa istifraghe akhlat-e-ghair tabayiah* (concoction and expulsion of abnormal humor) especially *balgham (phlegm)* with [9, 16].

- *a. Munzij*: This procedure matures the *kham balgham* from the structures of lumbar region; so that they can be easily expelled out.
- b. Mus'hil: This expels the matured matter via intestines.
- c. Qai (emesis)

In case of *sue mizaj sada* and after *istifragh*, in case of *sue mizaj maddi*, the line of treatment, to restore and normalize the deranged temperament (*mizaj*) - which is the main cause of pain, is achieved by the intervention of *tadabeer* (regiminal therapies) like [19, 3, 10].

- Zimad (liniment)
- Natool (irrigation)
- *Takmeed* (hot fomentation)
- Fasd: Usually done in case of *imtilai rag* on rage Basleeq or Mabaz.
- *Hammam*: Used in case of deep seated *madda* (morbid matter). It disperses the matter towards periphery and thus helps in relaxing the lumbosacral muscles.
- Riyazat (exerscise)
- *Dalk* (massage): Done with *har mizaji* (hot temperamental) medicinal oils like *raughan shibitt, raughan baboona* etc.

## 8. Treatment (Illaj)

According to Zakaria Razi, *waja uz zahr* is a type of *wajaul mafasil*; its treatment is same as that of *wajaul mafasil barid*. So the treatment of *waja uz zahr* should be done with *habbe munten*, *habbe sheetraj* as *mushil balgham*. Raughan arandi, as *muqi* (emetic), *raughan biskhapra* as massage, *musakhin zimad, itrifal kabeer* and *garm murabah*. He has mentioned in Al-Hawi that, two drugs namely *dafli* and *haliyoon* have a unique property to benefit in chronic *waja uz zahr* and in *waja uz zahr barid* respectively.

The ingredients of *habbe sheetraj*, which was composed by Yahya bin Masiwya, are:

suranjan, bozidan, mahi zahrah, turbud, iyaraj feeqra, shahm hanzal, kateera, harmal, zanjabeel, waj, satar, filfil safeed, tukhme karafs, nankhowa, anisoon, sikbeej and muqil [8, 19, 20].

Jurjani in Zakhira Khawarzam Shahi has recommended almost the same treatment as above with more emphasis on the use of *habbe sikbeej* and *tiryaq arbah* as *mushil. raughan firfiyoon, raughan qust, raughan sosan* and *raughan sudab* as massage. *Jograj gogul, ashq, jowsheer, sikbeej, jundbeedastar* and *farfiyoon* as *zimad* [20].

For tanqiya badan, the following drugs are best to use:

As mushil balgham: like habbe munten, habbe sikhbeej, iyarij feeqra, tiryaq arbah.

As muqi (emetic): raughan arand [10].

#### 9. Conclusion

Thus, it can be concluded that *waja uz zahr* is a disease with multifactorial causes, main cause is the accumulation of abnormal *Balgham* in the joint structures of lumbosacral region, which leads to sue *mizaj* (ill temperament), thus giving rise to the pain and tenderness in these joints. Every prevailing pain relieving regimen that is adopted in present days is only short term and is exerting obvious and tremendous side effects. But the Unani way to handle the pain keeps the hope alive through holistic approach of *munzij wa mushil* therapy along with some specific *tadabeers* (regimens).

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