

INTERNATIONAL JOURNAL OF UNANI AND INTEGRATIVE MEDICINE



E-ISSN: 2616-4558
P-ISSN: 2616-454X
IJUM 2019; 3(3): 14-17
Received: 06-05-2019
Accepted: 10-06-2019

Dr. Khalid Eqbal
Assistant Professor, Dept. of
Moalajat, Sufiya Unani
Medical College Hospital and
Research Centre, Bara Chakia
East Champaran Bihar, India

Dr. Jawed Eqbal
Medical Officer, MHC
Majhauilya, West Champaran
Bihar, India

Dr. Tabassum Jahan
Director, Majhauilya Health
Care Centre West Champaran
Bihar, India

Correspondence
Dr. Khalid Eqbal
Assistant Professor, Dept. of
Moalajat, Sufiya Unani
Medical College Hospital and
Research Centre, Bara Chakia
East Champaran Bihar, India

Frozen shoulder and evidence based unani medicine: A review

Dr. Khalid Eqbal, Dr. Jawed Eqbal and Dr. Tabassum Jahan

Abstract

Arthritis (Joint pain) is a common problem among geriatric peoples. There are various types of arthritis like osteoarthritis, rheumatic arthritis, gout, psoriatic arthritis, and adhesive capsulitis. Adhesive Capsulitis (Frozen shoulder syndrome), is a condition characterized by limitation of motion of the shoulder joint with pain at the extremes of motion. The incidence of frozen shoulder is approximately 3% in the general population, and peaks between 40 and 70 years of age, 10 to 36% of the individuals with diabetes mellitus are affected with this. In Unani literature the sign and symptoms of Adhesive Capsulitis or frozen shoulder syndrome are under the caption of *Waja ul Mafasil*, infact it is a painful or inflammatory condition affecting joints, their surrounding muscle and ligaments of shoulder which due to the alteration of humours. All such diseases of joints and associated structures are treated with certain regimens like *Takneed* (Fomentation), *Zimad*, *Tila*, *Roghaniyat*, *Dalak*, *Hijamat Bila Shurt*, *Mahjima Nariya*, *Fasad* etc. Pharmacologically it will be treated with single (Suranjan, Bozidan, Muquil, Asgandh) or either compound drugs (Habbe Muquil, Majoon Chobchini, Habbe Suranjan, Habbe Agandh etc).

Keywords: Arthritis, waja ul mafasil, adhesive capsulitis, frozen shoulder, unani medicine

Introduction

Joints pain are more common among elderly peoples ^[1] generally known as arthritis ^[2]. The term arthritis refers to more than 100 diseases and conditions affecting the joints ^[3]. Pain is the most prominent symptom in most people with arthritis ^[4]. Pains are associated with various factors, such as; metabolic disorders (Gout, adhesive capsulitis), immunological (Rheumatoid, psoriatic arthritis), age related (Osteoarthritis), lifestyle (Gout, osteoarthritis, cervical spondylitis), occupational (Sciatica, lower back pain), infectious (Syphilitic, tubercular arthritis) ^[5]. One out of such condition frequently observed among elderly peoples known as adhesive capsulitis ^[6].

Synonyms for frozen shoulder

Presently various term has been used to describe adhesive capsulitis such as; frozen shoulder, pericapsulitis, peri arthritis, adherent bursitis, obliterative bursitis, shoulder peri arthritis, scapulo-humeral peri arthritis, adherent subacromial bursitis, hypomobile syndrome ^[7, 8].

Adhesive capsulitis is the result of a degenerative and inflammatory process affecting the articular capsule and the soft tissues of the shoulder ^[9]. Adhesive Capsulitis (Frozen shoulder syndrome), is a condition characterized by limitation of motion of the shoulder joint with pain at the extremes of motion ^[10, 11].

Periarthritis of the shoulder (Adhesive capsulitis) is a well-defined condition with its phases of severe pain, increasing stiffness and gradual recovery of full movement of the shoulder. These features usually occur over a numbers of months ^[12].

Periarthritis is an inflammation of the area around a joint or it is a chronic, inflammatory disorder of the shoulder and surrounding soft tissues ^[13]. Obliterative bursitis is condition which characterized by progressive painful restriction of shoulder movement especially an external rotation ^[14].

The term 'frozen shoulder' was first used by Codman in 1934 and thereafter Neviasser noted that the pathology of this condition was actually located in the capsule of the shoulder joint and therefore called it 'adhesive capsulitis or Frozen Shoulder Syndrome' ^[15]. A stiff and painful condition of shoulder is frequently casually labeled as a frozen shoulder. This type of generalization should be avoided, as one could miss other more serious conditions that need to be treated urgently because of difficulty in movements. By taking a thorough history and performing a proper examination, the physician will expose certain facts that are typical of a

frozen shoulder. The typical findings are pain and a global restriction of movement, with limited passive external rotation being the most notable [16].

The incidence of frozen shoulder is approximately 3% in the general population, and peaks between 40 and 70 years of age [17], 10 to 36% of the individuals with diabetes mellitus are affected with this [18].

In frozen shoulder, the shoulder capsule thickens and

become tight, stiff bands of tissue-called adhesions-developed. In many cases there is less synovial fluid in the joint which also restrict the movement of shoulder joint [19]. In clinical practice, the tendency is to label any patient with a stiff and painful shoulder as a case of frozen shoulder [20]. Adhesive capsulitis progression is classified as three (Reeves) and four (Neviaser and Neviaser) stages in below:

Table 1: Three stages of classification (Reeves 1975)

The three stages of adhesive capsulitis progression	
Painful stage	Shoulder pain is the hallmark of this stage. It starts gradually and progressively worsens.
Frozen stage	Pain may reduce in this stage, although shoulder stiffness and restriction increase. Shoulder range of motion is dramatically reduced.
Thawing stage	This stage is characterized by spontaneous “thawing.” The motion will gradually increase and the shoulder will be more responsive to stretching exercises and treatment.

Pain from adhesive capsulitis is usually dull or aching in nature. It is typically worse early in the course of the disease when moving the arm or shoulder [21]. It occurs spontaneously without a specific precipitating factor,

usually it is idiopathic, but secondary is due shoulder injury or surgery, or may be associated with another condition such as diabetes, rotator cuff injury, cerebro vascular accident (CVA) or cardiovascular disease [22].

Table 2: Four stages of classification (Neviaser and Neviaser 1987)

Stage I 0-3 months	Pre-adhesive stage. A fibrinous synovial inflammatory reaction is detectable only by arthroscopy. The patients usually present with signs and symptoms of impingement syndrome. The main complaint is pain and minimum deficit in range of motion is detected.
Stage II 4-9 months	Adhesive stage. The acute synovial inflammation is apparent on physical evaluation. Arthroscopic findings demonstrated that the normal spacing between capsular fold, humeral head and biceps tendon, glenoid and humeral head diminish significantly. The patient experiences severe pain and loss of motion. (Neviaser and Neviaser (1987) do not give this stage a name but compared to other classifications it appears to be equivalent to the Adhesive stage).
Stage III 10-15 months	Maturation stage. This stage is evident by the maturation of the inflammatory process. The dependant fold is only half its original size and adhesences between various structures are formed.
Stage IV 16-24 months	Chronic stage. Capsular adhesions are fully mature and markedly restricted. Clinically, the shoulder is „frozen.“

Adhesive capsulitis is an extremely painful and debilitating condition leading to stiffness and disability. It typically occurs in the fifth and sixth decades of life, thus affecting individuals of working age. The disability resulting from this condition has considerable economic impact on affected individuals and society. Frozen shoulder can be either primary (Idiopathic) or secondary. Secondary frozen shoulder is defined as that associated with trauma; rotator cuff disease and impingement; cardiovascular disease; hemiparesis; or diabetes (Although some classify this in diabetics as primary frozen shoulder). The incidence of adhesive capsulitis in people with diabetes is reported to be 10% to 36%, and these tend not to respond as well to treatment as in non-diabetics [23].

The etiology and pathology of adhesive capsulitis remains unclear & understanding of pathogenesis is increasing. The patients typically demonstrate a characteristic history, clinical presentation, and recovery [24, 25]. Psychological factors, such as depression, apathy, and emotional stress, may also be associated with frozen shoulder syndrome [26]. In the modern point of view, the diseases involving the neurological, musculoskeletal, psychosomatic, and gastrointestinal system disorders [27]. Usually, three schools of thought have emerged: An inflammatory process, a fibrotic process and an inflammatory process with subsequent reactive capsular fibrosis [28].

Postoperative adhesive capsulitis is a serious complication

after shoulder surgery, with an incidence of 11%. Four prognostic factors were identified by Koorevaar RC *et al*, for postoperative frozen shoulder: diabetes mellitus, arthroscopic surgery, specialized shoulder physiotherapy and DASH score [29].

The natural history of adhesive capsulitis is considered benign but because of the long period of pain and disability, many interventions have been considered [30]. The rationale for using modalities in patients with adhesive capsulitis includes pain relief and affecting scar tissue (collagen). Though, the use of modalities such as ultrasound, massage, iontophoresis, and phonophoresis has not been proven to be beneficial in adhesive capsulitis [31, 32]. Interestingly, transcutaneous electrical stimulation (TENS) has been shown to significantly increase range of motion more than heat combined with exercise and manipulation [22]. Some research also suggests that low-power laser therapy is more effective than a placebo for treatment of patients with adhesive capsulitis [33]. Recently, deep heating through diathermy combined with stretching was shown to be more effective than superficial heating for treating frozen shoulder patients [34].

Out of some are commonly have been advocated for its management, including rest, analgesia, active and passive mobilization, electrotherapy, physical therapy, acupuncture, physiotherapy, oral and injected corticosteroids, capsular distension, manipulation under anaesthesia and surgical

capsular release, muscle energy technique [23, 35, 36]

In Unani literature the sign and symptoms of Adhesive Capsulitis or frozen shoulder syndrome are under the caption of *Waja ul Mafasil*, infact it is a painful or inflammatory condition affecting joints, their surrounding muscle and ligaments of shoulder which due to the alteration of humours [37, 38] It can affect almost all joints of the body [39, 40] and they named after the joint involved as *Waja ul warik*, *Waja uz zahr*, [41, 42] *Waja ur rakba* [39, 43] *Waja us saaqain*, *Waja ul waqab* [39], *Waja ul khasera*, *Tahajjire Mafasil* [38, 43-45].

Management of frozen shoulder

All such diseases of joints and associated structures are treated with certain regimens like *Takmeed* (Fomentation), *Zimad*, *Tila*, *Roghaniyat*, *Dalak*, *Hijamat Bila Shurt*, *Mahjima Nariya*, *Fasad* etc. Pharmacologically it will be treated with single or either compound drugs such as Suranjan (*Cochicium autumnale*), Bozidan (*Pyrethrum indicum*), Aqerqarha (*Anacyclus pyrethrum*), Sibr (*Aloe vera*), Baboona (*Matricaria chamomilla*), Nakhoona (*Trigonella uncatata*), Muqil (*Commiphora mukul*), Kundur (*Boswellia serrata*), Gule Tesu (*Butea frondosa*), Gule Aakh (*Calotropis junceana*), Zanjabeel (*Zingiber officinale*), Dhatura (*Datura stromonium*), Saqmoonina (*Convolvulus scamonia*), Halela Zard (*Terminalia chebula*), Kunjad (*Sesamum indicum*), Maida Lakadi (*Litsea glutinosa*), Asgandh (*Withania somnifera*), Ushba (*Hemidesmus indicus*), Chobchini (*Smilax china*), Jadwar (*Delphinium denudatum*), Fil Fil Daraz (*Piper longum*), Darchini, (*Cinnamomum zeylanicum*), Khulanjan (*Alpinia galangal*), *Roghane Gul*, *Roghane Baboona*, *Roghane Dhatura*, *Roghane Haft Berg*, *Roghane Chaharberg*, *Roghane Surkh*, *Roghane Chanbeli*, *Roghane Sosan*, *Rogane Shubit*, *Roghane Kuchla*, *Roghane Zaitoon*, *Habbe Muquil*, *Majoon Suranjan*, *Majoon Chobchini*, *Majoon Ushba*, *Majoon Kundur*, *Majoon Azaraqui*, *Majoon Jograj Gugal*, *Habbe Suranjan*, *Sharbat Zanjabeel* etc [46-50].

Conclusion

In Unani System of Medicine arthritis is described under the caption of disease of mafasil. *Waja-ul-Mafasil* is an umbrella term which is applicable for all types of joint pain. The endeavor of treatment for *Waja-ul-Mafasil* is to reduce morbidity and disability. The principle of treatment aims at restoring the normal temperament, and correcting the imbalance in the Khilt (humour) through Imala (Diversion of morbid material) and Istifraagh (Evacuation of morbid material). All such diseases of joints and associated structures are treated with certain regimens like *Takmeed* (Fomentation), *Zimad*, *Tila*, *Roghaniyat*, *Dalak*, *Hijamat Bila Shurt*, *Mahjima Nariya*, *Fasad* etc. Pharmacologically it will be treated with single (Suranjan, Bozidan, Muquil, Asgandh) or either compound drugs (Habbe Muquil, Majoon Chobchini, Habbe Suranjan, Habbe Agandh etc). Aim of this review explore the evidence based Unani Medicine for the management of Frozen Shoulder (Adhesive capsulitis). Such type of review article will be new vistas for the researcher in the field of rheumatology to reduced the burden of such type of disease.

References

1. Raja R, Dube B, Hensor EMA, Hogg SF, Conaghan PG, Kingsbury SR. The clinical characteristics of older

2. people with chronic multiple-site joint pains and their utilisation of therapeutic interventions: data from a prospective cohort study. *BMC Musculoskeletal Disorders*. 2016; 17:194. DOI 10.1186/s12891-016-1049-0.
3. Covinsky KE, Lindquist K, Yelin E. Effect of arthritis in middle age on older age functioning. *Journal of American geriatric society*. 2008; 56(1):23-28.
4. Keenan AM, Tennant A, Fear J, Emery P, Conaghan PG. Impact of multiple joint problems on daily living tasks in people in the community over age fifty-five. *Arthritis Rheum*. 2006; 55(5):757-64.
5. Woolf AD, Pfleger B. Burden of major musculoskeletal conditions. *Bulletin of the world health organization*. 2003; 81:646-656.
6. Kraal T, Visser C, Sierevelt I, Beimers L. How to treat a frozen shoulder? A survey among shoulder specialists in the Netherlands and Belgium. *Acta Orthop. Belg*. 2016; 82:78-84.
7. Sharma SP, Baerheim A, Nilssen RM, Kvale A. Adhesive capsulitis of the shoulder, treatment with corticosteroid, corticosteroid with distension or treatment-as-usual; A randomised controlled trial in primary care. *BMC Musculoskeletal Disorders*. 2016; 17:232.
8. Maheshwari J, Mhaskar VA. *Essential orthopedics*. 4th edition. Published by Jaypee Brothers. 2014, 295.
9. Tashjiian RZ. The effectiveness of nonoperative treatment for frozen shoulder: a systematic review. *Clin J Sport Med*. 2012; 22(2):168-9.
10. Tukmachi ES. Frozen Shoulder: A comparison of Western and traditional Chinese approaches and a clinical study of its acupuncture treatment. *Acupuncture in Medicine*. 1999; 17(1):9-21.
11. Cleland J, Durall CJ. Physical therapy for adhesive capsulitis: Systematic review. *Physiotherapy*. 2002; 88(8):450-7.
12. Barua SK, Alam Z. Phonophoresis in adhesive capsulitis (Frozen shoulder). *Chattagram maa-o-shishu hospital medical college journal*. 2014; 13(1):60-64.
13. Bridgman JF. Periarthritis of the shoulder and Diabetes Mellitus. 1972; 31:69-71.
14. Anonymous. *Taber's cyclopaedic medical dictionary*. Vol-2. Jaypee Brothers. YNM, 1625.
15. Smith LL, Burnet SP, McNeil JD. Musculoskeletal Manifestation of diabetes mellitus. *Br J Sports Med*. 2003; 37:30-35.
16. Laubscher PH. Frozen shoulder: A review. *Sa orthopaedic journal spring*. 2009, 24-29.
17. Wong PLK, Tan HCA. A review on frozen shoulder. *Singapore Med J*. 2010; 51(9):694-697.
18. Ewald A. Adhesive Capsulitis: Am fam physician. 2011; 83(4):417-422.
19. Maund E *et al*. Management of frozen shoulder: a systemic review and cost effectiveness analysis. 2012; 16(11):2.
20. Hanuman Singh, Goyal M. Physiotherapeutic Management of Adhesive Capsulitis: A Review of Literature. *Int J physiotherapy res*. 2016; 4(6):1719-27.
21. Dias R. Frozen Shoulder. *Clinical Review*. *BMJ*. 2005; 331 Doi: <https://doi.org/10.1136/bmj.331.7530.1453>.
22. <http://orthoinfo.aaos.org/PDFs/A00071.pdf>. Frozen Shoulder. American academy of orthopedic surgeons.

- Cited on 06-02-2017.
22. Page P, labbe A. Adhesive capsulitis; use the evidence to integrate your intervention N Am J sports phy, Ther. 2010; 5(4): 266-2.
 23. Rangan A, Carr A. current treatment for frozen shoulder: Shoulder elbow. 2010; 2(4)23.
 24. Kelley MJ, Shaffer MA, Khund JE, Michener LA, Seitz A, Uhl TL *et al.* Shoulder Pain and Mobility Deficits: Adhesive Capsulitis. Journal of orthopaedic & sports physical therapy. 2013; 43(5):A1-A31.
 25. Tamayi K, Akutsu M, Yano Y. Primary frozen shoulder: brief review of pathology and imaging abnormalities. J Orthop Sci. 2014; 19(1):1-5.
 26. Crubbs N. Frozen Shoulder Syndrome: A Review of Literature. JOSPT. 1993; 18(3):479-487.
 27. Banamali Das, Ravi M, Ganesh PK, Mishra, Gurucharan Bhuyan. A study on *Apabahuka* (Frozen shoulder) and its management by *Laghumasha taila nasya*. Ayu. 2010; 31(4):488-494.
 28. Bunker TD, Reilly J, Baird K, Hamblen D. Expression of growth factor, cytokines and matrix metalloproteinases in frozen shoulder. Journal of bone and joint surgery. 2001; 82:768-73.
 29. Koorevaar RC, Van't Riet E, Ipskamp M, Bulstra SK. Incidence and prognostic factors for postoperative frozen shoulder after shoulder surgery: a prospective cohort study. Arch Orthop Trauma Surg, 2017. Doi: 10.1007/s00402-016-2589-3.
 30. <https://www.shoulderdoc.co.uk/news/view/629>. Physiotherapy and Drugs in frozen shoulder- What is really helping? Cited on 07-02-2017.
 31. Dogru H, Basaran S, Sarpel T. Effectiveness of therapeutic ultrasound in adhesive capsulitis. Joint Bone Spine. 2008; 75:445-450.
 32. Zappia M, Di Pietto F, Aliprandi A *et al.* Multi-modal imaging of adhesive capsulitis of the shoulder. Insights into imaging. 2016; 7(3):365-371.
 33. Stergioulas A. Low-power laser treatment in patients with frozen shoulder: preliminary results. Photomed laser surg. 2008; 26:99-105.
 34. Leung MS, Cheing GL. Effects of deep and superficial heating in the management of frozen shoulder. J Rehabil Med. 2008; 40:145-150.
 35. Sharma N, Chauhan SK, Kumar A. Effect of yogic asana on Adhesive capsulitis (Frozen shoulder) to increasing the internal rotation. International Journal of Physical Education, Sports and Health. 2016; 3(5):192-195.
 36. Contractor ES, Agnihotri DS, Patel RM. Effect of Muscle Energy Technique on Range Of Motion in Cases of Patients with Adhesive Capsulitis. Int J Health Sci Res. 2016; 6(9):252-256.
 37. Arzani A. Tibbe Akbar (Urdu translation by Hk M hussain). Deoband: Faisal Publication; YNM: 90-92,617-618,626-627.
 38. Ahmad KR. Tarjuma Sharahe Asbab ma'a Hashiyae Sharif Khan wa Mamoolate Matab. New Delhi: CCRUM, Ministry of Health and Family Welfare, Govt. of India. 2010; 3:395-399.
 39. Khan MA, Akseere Azam. (Al Akseer) (Urdu translation by HK mohd kabeeruddin), Idara Kitabus shifa; New Delhi; 2011; 206:836-837.
 40. Baghdadi IH. Al Mukhtar Fit Part-4th. New Delhi: CCRUM, Ministry of health and family welfare. Govt of India; 2007, 79.
 41. Majoosi Ahaam. Kaamilus Sana'ah. (Urdu translation by GH Kantoori). New Delhi: Idarae Kitabus Shifa; 2010; 1:228-232, 465-468, 543-545.
 42. Sina I. Alqanoon Fit Tib. (Urdu translation By GH Kantoori). New Delhi: Idarae Kitabus Shifa; YNM: Vol 3:600-601,1119-1120,1129.
 43. Razi Abmbz, Kitabul Hawi. th. New Delhi: CCRUM, Ministry of Health and Family Welfare, Govt of India; 2004; 11:75-76.
 44. Khan MA, Akseere Azam. (Al Akseer) (Urdu Translation by Hk Mohd Kabeeruddin), Idara Kitabus shifa; New Delhi; 2011; 206:836-837.
 45. Tabri Ahabsr. Firdausul Hikmat (Urdu translation by Hakeem MA Shah). New Delhi: Idara Kiatabus Shifa; 2010; 291-292, 305.
 46. Kabiruddin Hkm, Biyaze Kabeer. Aejez Publishing Housing. 1(2):229-238, 44, 130, 135.
 47. Kabiruddin Hkm. Al-Qarabadin CCRUM New Delhi. 2006; 41-40, 441-480, 1210-1116.
 48. Zohar Amami. Kitabut Taisir Fil Madawa wat Tadbir. New Delhi: Ministry of Health and Family Welfare, Govt of India; 1986, 78-85.
 49. Ghani N. Khazainul Advia. Idara Kitab Us Shifa. YNM: 308, 701, 814, 861, 12352-54.
 50. Baitar I, Al Jameul Mufradat Al-Advia wa Al Aghzia. Part-3. New Delhi. Ccrum. 1999, 51-54.