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Review Article

Majoon Suranjan: A Potent Unani formulation for Arthritis

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ABSTRACT

Unani System of medicine is one among the oldest systems that prevails till date with its efficient drugs derived from animal, plant and mineral resources. Over 2400 years ago the father of medicine, Hippocrates practiced it, however His medicine included a great deal of ancient Egyptian medicine as well as important components of the ancient Mesopotamian traditions. In Unani system of medicine, arthritis is described under a broad term Waja-ul-Mafasil which encompasses entire joint disorders like inflammatory, non-inflammatory, infectious, metabolic and other musculoskeletal disorders. A large number of drugs, single and compound formulations, have been mentioned in the context of the treatment of Waja-ul-Mafasil. Among them, Majoon Suranjan is one of the most reputed poly pharmaceutical preparations of Unani system of Medicine used in Waja-ul-Mafasil. It is attributed to Indrumakhas of Greece (Andromachos, the elder, court physician to King Nero) who formulated it in consultation with several other philosophers of his time. This Unani compound formulation contains twenty one ingredients, which is used as digestive, purgative, anti inflammatory, stomachic, deobstruent, antiarthritic, nervine tonic. It is also indicated for use in phlegmatic diseases.

Keywords: Majoon Suranjan, Ingredients, Arthritis, Unani Medicine.



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INTRODUCTION

Unani System of medicine is one among the oldest systems that prevails till date with its efficient drugs derived from animal, plant and mineral resources. Over 2400 years ago the father of medicine, Hippocrates practiced it, however His medicine included a great deal of ancient Egyptian medicine as well as important components of the ancient Mesopotamian traditions. The methods of treatment according to Unani System of Medicine is divided into four different parts namely dietotherapy (Ilaj-Bil-Ghiza), regimenal therapy (Ilaj-Bil Tadbeer), surgery (Ilaj-Bil-Yad) and pharmacotherapy (Ilaj-Bil-Dawa) 8, 9, 12, 21, 23, 24. Considering pharmacotherapy, both single and compound drugs are being used. Among the polyherbal drugs, Majoon Suranjan (MS) is a formulation that is used in the Unani system of medicine and is being prescribed from centuries with great reputation for treatment of Arthritis and other joint disorders. According to different Unani Qarabadeen's (Pharmacopoeias) this compound formulation is used as digestive, purgative, anti inflammatory, appetizer,

stomachic, deobstruent, antiarthritic, nervine tonic 7, 29, 32. It is also indicated for use in phlegmatic diseases 13, 19, 21, 27.

Prescription

According to some of the Classical Unani Books, the original preparation of Majoon Suranjan contained only seven ingredients viz, Asaroon (Valeriana wallichii), Zanjabeel (Zingiber officinalis), Zeera Siyah (Carum Carvi), Darfilfil (Piper longum), Sana Maki (Cassia angustifolia), Suranjan (Colchicum luteum) and Honey 4, 5, 9, 10, 29, 36. However, there are certain variations regarding the weight and number of ingredients of the compound in different Unani formulations. The formula for preparation of Majoon Suranjan in National Formulary of Unani Medicine (NFUM) contains twenty one ingredients with sugar or honey as a base, whereas in Hamdard Pharmacopoeia of Eastern Medicine, the number of ingredients is same as that of NFUM but differs in dosage 22.

Table 1: Formula of Preparation of *Majoon Suranjan* according to NFUM ^{2, 28, 34, 43}

Barg e Hina khushk (<i>Lawsonia inermis</i>)	15gms
Badiyan (Foeniculum vulgare)	15gms
Asarun (Valeriana wallichii)	20gms
Beekh e Kibr (Caparis spinosa)	20gms
Post halela Zard (Terminalia Chebula)	70gms
Turbud Safaid (Ipomoea Turpethum)	160gms
Tukhm Karafs (Apium graveolens)	15gms
Chita Lakdi (<i>Plumbago zeylanicum</i>)	20gms
Zanjabeel (Zingiber officinalis)	30gms
Saqmunia (Convolvulus scammonia)	30gms
Samundar Jhag (Cuttlefish bone)	15gms
Suranjan Shireen (Colchicum luteum)	60gms
Sana (Cassia angustifolia)	120gms
Satar Farsi (<i>Origanum vulgare</i>)	15gms
Filfil Safaid (<i>Piper album</i>)	15gms
Kishneez Khushk (Coriandrum sativum)	30gms
Gul e Surkh (Rosa damascena)	30gms
Mahi Zehraj (Verbascum thapsus)	20gms
Namak Sambhar (Lake salt)	15gms
Roghan Arandi (Ricinus communis)	120gms
Qiwam Shakar Safaid (White sugar syrup)	2.150 kg

Method of Preparation

For making *Majoon* or any of its allied preparations, *Qiwam* (base) of different consistencies (tar) is generally made. It depends on the nature of ingredient drugs to be used. The *qiwam* is generally made by adding *Aab* (water), *Araq* (distillate) or *Aab e samar* (fruit juices), etc in any of the bases of purified honey, sugar, candy or jaggery etc and boiled over a low heat till it acquires a required consistency. The bases are generally purified by adding Aab e lemu (lemon juice), Satt e lemu (lemon extract), or Shibb e yamani (Alum) before making *qiwam*. Afterwards the ingredients are mixed in *qiwam* to prepare *Majoon*. *Qiwam* for majoon is of two tar (consistency) ^{11, 26, 27, 30}. *Majoon Suranjan* is made on the same principle while using water with sugar or honey as a base and boiled over low fire till *qiwam* (consistency) of two tar is achieved ^{32, 33}.

All the dry ingredients, after being ground together and sieved through 80-mesh, are made into a *sufoof* (powder). The oil of erandi (*Ricinus communis*) is then added to the *sufoof* (Powder). When the proper *qiwam* (consistency) forms, the medicinal *sufoof* (powder) is gradually added to

it during stirring till both mixes. The *Majoon* is preserved in glass jar 11,26,27,30 .

Dosage and Administration

10 g. with water at bed time 11, 20, 44, 45, 46.

Action and Uses

Muhallil e Waram (Anti-inflammatory) Mulayyan (Laxative) In phlegmatic diseases.

In Waja ul Mafasil (Arthritis), Irq un Nisa (Sciatica), Niqras (Gout) and Qabz (Constipation) 2, 3, 33,44, 45, 46.

Physicochemical Standards of Majoon Suranjan

Various physicochemical standards of Majoon Suranjan are given below $^{\rm 1}$

Table 2: Physicochemical standards of Majoon Suranjan

Appearance	Semi solid
Colour	Moderate Brown
Smell	Agreeable
Taste	Sweet, Astringent
Alcohol soluble matter	55.92%
Water soluble matter	62.75%
Successive extractives	
Pet. Ether (60-80%)	0.50%
Chloroform	0.33%
Ethyl alcohol	10.97%
Distilled water	63.88%
pH of 1% aq soln	5.71
pH of 10% aq soln	5.71
Bulk density at 25°C	1.34
Total ash	1.11%
Water soluble ash	0.23%
Acid insoluble ash	0.11%
Volatile oils	0.28% v/w
Alkaloids	0.27%
Tannins	0.75%
Resins	0.58%
Reducing sugars	52.3%
Crude fibres	2.6%
Total Nitrogen	0.42%
Sodium	18.3mg%
Potassium	333.0 mg%
Calcium	32.3mg%
Phosphates	33.7 mg%

Table 3: Brief Description of Ingredients of Majoon Suranjan

Drug	Parts Used	Botanical name	Dosage	Functions	Uses	Scientific Studies
Barg e Hina khushk	Leaves [19, 31, 50]	Lawsonia inermis [34,43]	5gms ^{[19,} 31, 50]	Resolvent, carminative, digestive, emmenogogue and diuretic [13, 21, 41, 48,50]	In colitis, Renal stones, Oligouria, and arthritis [13,21, 25,26, 30, 41, 48,50]	Antibacterial, antioxidant, antimicrobial, hypoglycaemic, hepatoprotective [14, 23, 51]
Badiyan	Seeds [19, 31, 50]	Foeniculum vulgare ^[34,43]	6gms ^{[19,} 31,50]	carminative, digestive, galactogogue and diuretic [13, 21, 48,50]	In hypertension, glaucoma, to improve eyesight, and in respiratory and gastrointestinal disorders [13,21, 25,26, 30, 41, 48,50]	Antibacterial, antioxidant, anti fungal, antithrombotic, anti-inflammatory, oestorgenic, hypoglycaemic and hepatoprotective activities [15]
Asarun	Roots, Rhizome [19, 31,	Valeriana wallichii ^[34,43]	10gms ^{[19,} 31, 50]	Nervine and brain tonic,	Dementia, hysteria,	Anti inflammatory, antispasmodic,

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	50]			Diuretic, emmenogogue [21, 48,50]	Paralysis Facial palsy, Ascites, Amenorrhoea [13,21, 25,26, 30,48,50]	antimicrobial, analgesic, psychotic, radioprotective against radiation injury, hypnotic, anticonvulsant, anthelminthic, cytotoxic, antioxidant. [52]
Beekh e Kibr	Root [19, 31, 50]	Caparis spinosa [34,43]	5 gms ^{[19,} 31, 50]	Nervine tonic, Diuretic, anti inflammatory, detergent [21, 48,50]	Cerebral palsy, Facial palsy, Arthritis, Gout, Ascites, Lymphadenitis, Skin diseases [13,21,25,26,30,41,	Anti inflammatory, anti diabetic, anti obesity, lowers cholesterol, anti hypertensive, anti microbial, antihepatotoxic
Post halela Zard	Covering of the fruit [19, 31, 50]	Terminalia Chebula ^[34,43]	5 gms ^{[19,} 31,50]	Brain tonic, Digestive, gives strength to intestines and stomach [21, 48,50]	Joint diseases, Fevers, Cough, Asthma, Dysentery, Colic, Skin diseases, Eye diseases [13,21,25,26,30,41,	Anticarcinogenic, antidiabetic, anti inflammatory, anti arthritic, antimicrobial, antibacterial, antifungal, antioxidant, antispasmodic, hypolipaedimic [12].
Turbud Safaid	Root and bark [19, 31, 50]	Ipomoea Turpethum ^[34,43]	2-4 gms in powdered form [19,31, 50]	Purgative, Laxative, removes morbid matters of phlegmatic and biliary diseases [21, 48,50]	Ascites, Piles, Arthritis, Gout, Sciatica, Melancholia, Facial palsy, Hysteria and Obesity [13,21,25,26, 30,41,48,50]	Anti inflammatory, Antioxidant, Analgesic, Anti ulcer, Anti diabetic, Anti microbial, Anti diarrhoeal, hepatoprotective ^[8]
Tukhm Karafs	Seeds [19, 31, 50]	Apium graveolens [34,43]	1.2-4 gms [19, 31, 50]	Diuretic, anti inflammatory ^{[21,} 48,50]	Ascites, Piles, Arthritis, Gout, Sciatica [13,21, 25,26, 30, 41, 48,50]	Antiulcerogenic, antimicrobial, anthelminthic, cardiovascular and hypolipaedimic, anti inflammatory ^[54]
Chita Lakdi		Plumbago zeylanicum ^[34,43]	1-1.5g [19, 31, 50]	Digestive, Carminative, Anti helminthic, Laxative, Expectorant	It is used in indigestion and other stomach ailments. [13,21, 25,26, 30,48,50]	antimicrobial, anti inflammatory antiulcerous, anti diabetic, Anticancerous, hypocholestrolemic, wound healing [17,38]
Zanjabeel	Root [19, 31, 50]	Zingiber officinalis [34,43]	1-1.5g [19, 31, 50]	Aphrodisiac, Brain Tonic, Appetizer, Digestive, Carminative, Anti helminthic, Laxative, Expectorant, Detergent, Stimulant. [13,21, 41, 48,50]	It is used in sexual weakness, paralysis, Bell's palsy. It is also used in indigestion and other stomach ailments. [13,21, 25,26, 30,48,50]	Cardio tonic, Powerful Antioxidant, Anti-cancer, Anti coagulant, Anti inflammatory, Anti atherosclerotic, Antacid, Antimicrobial, Antitussive and Immuno -modulatory.
Saqmunia	Gum [19, 31, 50]	Convolvulus scammonia [34,43]	1-1.5g ^{[19,} 31,50]	Purgative, anti inflammatory, anthelminthic [21, 41, 48,50]	Severe constipation, Ascites, Osteoarthritis [13,21, 25,26, 30,48,50]	Cytotoxic effect, Vasorelaxation and anti platelet aggregation, Anticancerous [16]
Samundar Jhag		Cuttlefish bone	1-2 gms [19, 31, 50]	Detergent [21, 48,50]	Eye diseases, Skin diseases [13,21, 25,26, 30,48,50]	Anti microbial, Anti oxidant ^[37]
Suranjan Shireen	Root [19, 31, 50]	Colchicum luteum [34,43]	4 gms ^{[19,} 31, 50]	Purgative, anti inflammatory, analgesic, diuretic [21, 41, 48,50]	Arthritis, Sciatica, Gout ^{[2,} 13,21, 25,26, 30,48,50]	Anti inflammatory, Anti arthritic ^[6, 24]
Sana Makki	Leaves [19, 31, 50]	Cassia angustifolia ^[34,43]	7-10 gms [19, 31, 50]	Purgative [21, 48,50]	Severe constipation [13,21, 25,26, 30,48,50]	Anti microbial, Anti oxidant ^[25]
Satar Farsi		Origanum vulgare [34,43]	5 gms ^{[19,} 31, 50]	Digestive, Carminative, Expectorant [13,	Gastritis, Flatulence, Hiccup,	Anti oxidant, anti inflammatory, anti cancer, anti bacterial [37]

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				21, 48,50]	Bronchial Asthma [13,21, 25,26, 30,48,50]	
Filfil Safaid	Fruit [19, 31, 50]	Piper album linn [34,43]	1-2 gms [19, 31, 50]	Carminative, Anti fertility, Diuretic as well as emmenagogue, Haeminic, Aphrodisiac, Stomachic, Analgesic. [13, 21, 48,50]	It is used in cold and other respiratory disorders, paralysis, Bell's palsy, arthritis, cough, sciatica, gout, night blindness, epilepsy, and asthma [13,21, 25,26, 30,48,50]	Scientific reports are available for Anti stress, Antitumor, Anti diabetic, Antimicrobial, Anti fungal activity, Anti Tubercular activity, Anti inflammatory, Anti arthritic, Antioxidant, Antifertility, Hepatoprotective and Cardioprotective activity. [25]
Kishneez Khushk	Whole plant and fruit [19, 31, 50]	Coriandrum sativum ^[34,43]	10 gms [19, 31, 50]	Analgesic, Anti inflammatory [13, 21, 41, 48,50]	Stomatitis, Burning micturition, quenches thirst, Tonsillitis, Lymphadenitis, vertigo and giddiness [13,21, 25,26, 30,48,50]	Antioxidant, Anti diabetic, Hepato- protective, Antimicrobial, Anti fungal activity, Anticancerous, anthelminthic, anti convulsant, anti mutagenic, diuretic [40]
Gul e Surkh	Petals and rhizomes [19, 31,50]	Rosa damascena [34,43]	10-20 gms [19, 31, 50]	Anti inflammatory, laxative, haemostatic [13, 21, 48,50]	Hepatitis, haemoptisis, Constipation, Conjunctivitis, Palpitation [13,21, 25,26, 30,48,50]	Analgesic, hypnotic, anti convulsant, Anti diabetic, Antimicrobial, Antioxidant, Anti inflammatory, laxative, anti ageing [39]

Various functions of *Majoon Suranjan* is attributed to its various ingredients which possess antioxidant, hematogenic, body building, stomachic, anti inflammatory, aphrodisiac, adipogenous, carminative, tonic for nerves, brain, heart and kidneys, nerve stimulant, cicatrizant, emmenagogue, laxative, expectorant, demulcent, antipyretic, blood purifier, antitussive etc properties.

CONCLUSION

With the above discussion the inference may be drawn that the *Majoon Suranjan* is one of the best Unani formulation with a lot of health benefits. It has proven to be beneficial in treatment of Arthritis. However more scientific studies and clinical trials are needed on this compound formulation to ensure its scientific validation for clinical use in patients in general.

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