

Chronic Stress in Unani Prospective

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Abstract

Unani medicine is a medical prospective based on the humoral theory postulated by Hippocrates 3000 yrs back. Its treatment is a culmination of different regimens. The package it offers to cope with stress includes behavioral approach, art therapy, and hydrotherapy, and massage, music therapy, besides veinesection, sauna, cupping and medication. Stress can be defined as an individual's response to environmental demands or pressures. A certain degree of stress is a normal part of day to day life. Stress related diseases, however, results from excessive and prolonged demands on individuals coping resources. The symptoms of stress can either be physical or psychological. Physically it manifests as irritable bowel syndrome, myocardial infarction and chronic headaches. Psychological problems arise from inability to cope with major life changes such as marriage, parenting, unemployment, etc. The present article deals with the regimens offered by the Unani medicine in details and their role in the management of stress related disorders.

INTRODUCTION

Unani medicine is a treatment modality with a holistic approach towards the patients. Its theory was formulated by Hippocrates and later on modified by Greek, Roman, Egyptian, Babylonian, and Arabic and later on Indian Scholars. The Unani medicine thus became a medical revolution that incorporated in itself all the medical knowledge of that time from all the civilizations. Therefore it bears resemblance to Chinese, Roman, African, Arabic and Indian (Ayurvedic) medicines.

Unani medicine believes that the basic component of the body are atoms, they interact with each other to form molecules these molecules, on further interaction form the four basic fluids (humors) of the body viz phlegm, blood, chole and melanchole. These form the organs and in their appropriate proportion perform the physiology of the body with the help of organs. When this proportion is disturbed it manifests in various pathologies. These pathologies are predisposed by the six essential factors of life i.e. environment; foods and drinks; rest and body functions; emotions and psychological rest; sleep and wakefulness and retention and excretion. When adhered to these factors in their appropriate measures promotes health and when disturbed in their appropriation predispose the body to humoral imbalances.

To aid the body of its ailments Unani medicine proposes a

set of four practices starting with diet therapy followed by regimental therapy, drug therapy and surgery.

Unani scholars define stress as a reaction to loss of an opportunity, substance or life; loss of a much desired substance or circumstances wherein; a person cannot avenge or curb an unfavorable situation. However stress is also defined as an interaction between an individual and his environmental that he perceives as straining or exceeding his adaptive capacities and threatening his well being. The element of perception indicates that human stress responses reflect differences in personality and physical strength which is also described as temperament of that individual.

Temperament is designed by the supervening humor of that individual. Which in turn happens to be decided by two factors i.e. genes and the environment and in today's world any long term medications¹⁻⁹.

Stress is of three types acute, episodic and chronic. Acute stress is most common and refers to the pressures and demands of recent future. It can be thrilling, tiring or exhausting. Frequent bouts of these acute stress are referred to as episodic stress. It causes over arousal, short temper, irritability, anxiety and tension. Chronic stress is from unrelenting demands and pressures for seemingly interminable periods of time. It can prove fatal through suicide, violence, myocardial infarction, cerebrovascular accidents and perhaps even cancer¹⁰. Another type of

chronic stress is post traumatic stress disorder wherein, the stressful episode keeps appearing in memory flashback and nightmares.

CAUSES

A certain degree of stress is a part of daily life and enriches it with aptitude, ambition and inertia. These when extend over a period of time and extend a relentless demand on the coping ability of the individual then manifest the symptoms of stress related disorders¹⁰.

Unani physicians consider disadvantageous interaction with the environment burn any one or all the four physiological humors into pathological melanchole. This forms the basis of psychological and psychiatric disorders. Stress is not a disease per se with the Unani physicians but a cause for chronic disorders like Koch's, mania, fevers, etc¹⁻⁹.

Pituitary responds to stress by increasing the production of adrenocorticotrophic hormone (ACTH), which acts on adrenals to increase production of stress hormones viz cortisol and adrenaline¹⁰.

SYMPTOMS

Stress can have both physical and psychological symptoms. Long term stimulation of the adrenals by the pituitary under chronic stress causes physical symptoms like irritable bowel syndrome, myocardial infarction and chronic headaches. Stress related emotional illness results from inadequate and inappropriate responses to major changes in ones life like completing one's education, becoming a parent, losing a job or retirement. Hence stress related problems can also be toned down as adjustment disorder. High stress levels give a sense of burnout, loss of interest, inability to concentrate, etc.

Damage done to the body due to elevated levels of stress hormone is:

Digestive System: Stomachache or diarrheas are common symptoms of stress. Cortisol delays the release of gastric secretions, stomach emptying and increases peristalsis. It is also responsible for increased appetite and obesity.

Immune System: Cortisol levels are inversely proportional to immunity. The higher the cortisol level the lower the immunity. Occasionally it causes an overactive immune system predisposing to autoimmune disorders.

Nervous System: Increased adrenaline causes anxiety, a feeling of helplessness and impending doom. Excessive

cortisol can cause sleep disorders, loss of appetite, loss of libido and depression.

Cardiovascular System: High cortisol causes tachycardia, hypertension, hyperlipidemia, myocardial infarction and cerebrovascular accidents.

Other Systems: Stress worsens may cause skin conditions such as psoriasis, eczema, urinary, acne. It can trigger an asthmatic attack. Increased cortisol levels may cause Cushing's syndrome whereas; increased adrenaline predisposes to Addison's disease¹⁰.

MANAGEMENT

The management of this malady involves a three fold strategy.

1. Distracting the mind through adaptive changes and distracting methods,
2. Excretion of pathological melanchole, and
3. Strengthening the heart and mind³⁻⁹.

Adaptive changes must be introduced to make the patient comfortable and happy. Amongst the adaptive changes are living in clean, well lit house, which has provisions for fresh breezes of air, wearing white or pastel shades, ensuring comfort and entrusting with responsibility³⁻⁹.

The mind should be distracted to break the thought series through distracting methods which include:

1. Visiting hill stations, landscapes, parks, etc,
2. Viewing plays, movies, dance and drama,
3. Hearing pleasant music and lyrics as in happy and romantic songs,
4. Being in the company of religious people,
5. Listening to religious sermons,
6. Listening to interesting stories, fairy tales,
7. Reading books,
8. Inculcating hobbies,
9. Participating in mentally challenging games like sudoku, chess, quiz and
10. Participating in competitions like extempore,

debates, etc³⁻⁹.

There are certain prohibitions too that should be adhered to for instance living in small congested houses, dressing in black dresses, exertion, anxiety, worry, starving, being lonely and insomnia as these induce a sense of mourning³⁻⁹.

After the adaptive and distracting methods, comes the second and third line of treatment which involves excretion of the pathological melanchole and strengthening the heart and mind. This is achieved by a combination of regimental therapy (Ilaj bit tabdeer), diet therapy (Ilaj bil ghiza) and drug therapy (Ilaj bid dawa)

Sleep is an important and an integral part of the treatment of such disorders. Oral use of sweet almond oil (roghan badaam shireen), lettuce (kahu) and compound formulations like (Sharbat Khashkhaash) are beneficial in inducing sleep due to their sedative and tranquilizing properties³⁻⁹.

DIET THERAPY ()

Chappaties must be preferred to over rice.

Gourd and cucumber are recommended amongst the vegetables to patients suffering from chronic stress. Both are documented diuretics which aid in the excretion of pathological melanchole. Besides this Lagenaria Siceraria (kaddu) is also beneficial in delirium. Butter milk and curd should be a part of the prescribed diet. Among the fruits, watermelon, pomegranate, sugarcane and grapes are helpful. Citrullus Lanatus (tarbooz) and sugarcane are known for their diuretic properties. Punica Granatum (anar) is a potent antioxidant. Vitis Vinifera (angoor) is effective in degenerative nervous diseases. Clinical trials have proven its efficacy in Alzheimer's. It is also a reported nootropic diet

with known adaptogenic and antioxidant effect

Constipation must be avoided and this can be attained by drinking warm milk sweetened with honey at bedtime or eating figs. Alternately, 2 tsp of drinking sweet almond oil with warm water or milk too is beneficial^{3-9, 11-13, 16-21}.

REGIMENTAL THERAPY ()

The regimens that are prescribed for chronic stress are:

- Veinesection (Fasad): basilic or saphenous veins should be dissected to drain the pathological melanchole circulating with the blood ^{3-9, 14}.
- Sauna (Hamman): cold water or lukewarm water can be used for this purpose²⁷⁻²⁸.
- Massage (Dalak): Light massage with Viola Odorata (banafsha) oil or almond oil is advisable ²⁷.
- Shower (Natool): diluted rose water, Lactula Sativa (kahu) decoction and Viola Odorata (banafsha) are prescribed due to their exhilarant and sedative property²⁷⁻²⁸.
- Seitz bath (Abzan): decoction of Lactula Sativa (kahu) and Viola Odorata (banafsha) are advised²⁷⁻²⁸.
- Cupping (Hijamath): this should be done on the shoulders^{3-9, 14}.

DRUG THERAPY ()

Certain most common drugs that are beneficial in the treatment of chronic stress are:

Figure 1

Herb	Properties	Evidence of Efficacy
Matricaria recutita/ Officinalis (Babuna) 10-12, 15-20, 26	<ul style="list-style-type: none"> Anxiolytic Sedative Anti convulsant Used in delirium Insomnia 	<p>Evidence</p> <ul style="list-style-type: none"> Controlled trial demonstrate efficacy as sedative Flavonoids can cause sleep by inhibiting the binding of flunitrazepam, depressing CNS activity Controlled clinical trials show improvement in cognitive functions Crude aq extract delays onset of convulsions.
Withania Somniferous (Ashwani) 10-12, 14-20	<ul style="list-style-type: none"> Adaptogenic Nervine tonic Hypnotic Sedative Used in memory loss Anxiety neurosis 	<p>Evidence</p> <ul style="list-style-type: none"> Works on HPA axis and neuroendocrine system. Visamine-hypothermic, nictotinsolytic and prolonged sleeping time in mice Withanine (main constituent)-sedative, hypnotic, given in anxiety neurosis Withanolide free aq factor from roots- anti stress activity in a dose dependent manner in mice. Total alkaloids produce a taming and sedative effect on CNS of several experimental animals.
Celastrus Punctuatus (Maitrangini) 10-12, 14-20	<ul style="list-style-type: none"> Sharpens memory. Exhilarant. Brain tonic Brain stimulant Tranquilization Sedation Anti convulsant Used in paralysis 	<p>Evidence</p> <ul style="list-style-type: none"> Increased capacity of learning process in mice Crude drug was tested to be adaptogenic on mice. Exhibits significant CNS depressant effect with clear synergism with pentobarbital Improved cognitive defects in prenatal under nutrition, post natal environmental improvement and sodium nitrite hypoxia in rats Hastens the process of learning and memorizing in experimental animals.
Ruwalia Serpentina (Asra) 10-12, 15-22	<ul style="list-style-type: none"> Tranquilizer Hypotensive Used in mania Insomnia and Emotional hypersensitivity 	<p>Evidence</p> <ul style="list-style-type: none"> Resperaine- sedative and given in mild anxiety to chronic psychosis. Depression of central Nervous mechanism Depletes the brain and peripheral vessels of serotonin and catechol amines. Resperpine – hypotensive and tranquilizer. Deserpidine – Hypotensive and sedation
Melissa Officinalis (Badari/baya) 10-12, 15-20, 24	<ul style="list-style-type: none"> Sedative Calmning agent Reduces stress Used in Insomnia Brain tonic 	<p>Evidence</p> <ul style="list-style-type: none"> Strong evidence in reducing stress High affinity for GABA receptors Controlled clinical trials show improvement in cognitive functions
Cinommum Camphora (Kafoor) 10-12, 14-20	<ul style="list-style-type: none"> Nervous stimulant Carminative Reflex expectorant Used for hysteria Epilepsy Chorea Convulsions Sedative 	<p>Evidence</p> <ul style="list-style-type: none"> Nervous depressant
Lavendula Officinalis/ stoechas (Ustokhuddus) 10-12, 15-20	<ul style="list-style-type: none"> Brain tonic Anti depressant Sedative Anti convulsant Used for amnesia Nervous headaches Neuralgia pain Mental exhaustion 	<p>Evidence</p> <ul style="list-style-type: none"> Limited controlled clinical trials for sedative and anxiolytic effect
Emblca Officinalis (Amli) 10-12, 15-20	<ul style="list-style-type: none"> Anti oxidant Brain tonic 	<p>Evidence</p> <ul style="list-style-type: none"> Potentiates action of adrenaline and hypnotic action of nembutol Culture yields phyllembin which is CNS depressant
Cinammom Zeylanicum (Darchini) 10-12, 14-20	<ul style="list-style-type: none"> Expectorant Carminative Stimulant Used for Paralysis Neuralgia and Toothache 	<p>Evidence</p> <ul style="list-style-type: none"> Cinnamaldehyde – Potent CNS stimulant
Lactuca Sativa(Kaha) 10-12, 14-20	<ul style="list-style-type: none"> High nutritive value Anti depressant Cooling Counterbalance Used in treatment of insomnia 	<p>Evidence</p> <ul style="list-style-type: none"> Hypnotic Digestive and Antacid
Prunus Amygdalus (Badam) 10-12, 15-20	<ul style="list-style-type: none"> Stimulant Nervine tonic Used in insomnia Diuretic 	

CONCLUSION

Modern life is full of stressful situations which has turned the hitherto, normal feature of life into a causative factor for disease. Hippocrates had described constipation to be the mother of all disorders, but in the present scenario stress can be conveniently and without any opposition be attributed to as the mother of all diseases.

The principles of treatment offered by the Unani physicians still form the core of management of this which has been testified by modern medicine for its efficacy and usefulness.

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