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An Ayurveda Approach for the Management of Fibromyalgia (A Literary Review)

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Abstract:

Fibromyalgia is estimated to affect 2–4% of the population, with a female to male incidence ratio of approximately 9:1. Three percent (3%) of the Indian population suffers from fibromyalgia, only 0.5% are aware of the conditions and the number of doctors who specialize in this in India are less than the numbers one can count on fingers". Fibromyalgia is an anomaly. It is a condition still not fully understood and in some instances not accepted by mainstream medicine, although The American College of Rheumatology recognizes and defines it as a disease. Fibromyalgia is frequently co-morbid with psychiatric conditions such as depression and anxiety and stress-related disorders such as posttraumatic stress disorder. Fibromyalgia, a central nervous system disorder, is described as a "central sensitization syndrome" caused by neurobiological abnormalities which act to produce physiological pain and cognitive impairments as well as neuro-psychological symptomatology. Certain antidepressants such as amitriptyline and duloxetine have been found to be effective treatments as has the anticonvulsant drug pregabalin. Exercise improves fitness and sleep and may reduce pain and fatigue in some people with fibromyalgia.

There is no permanent cure for FM; therefore, adequate symptom control should be goal of treatment. This paper / article reveals the some studies have been performed evaluating the role of herbs or herbal medicine for efficacy on fibromyalgia (FM). Massage therapy have the best evidence for effectiveness with FM. Massage is one of the oldest healing therapy. The massage is a part-n-parcel of the Panchakarma therapy in Ayurveda, which is gaining popularity for the rejuvenation purpose and for the treatment of arthritic disorders, neurological disorders and life style disorders. Using the basic principles and remedies from Ayurveda, may find out the solution for this syndrome. Herbals have a higher rank for the treatment of FMS. Many FMS patients seek relief from herbal remedies for symptomatic problems. Ayurveda approach is well and good, but ultimate relief should be found in combinations of herbals along with other adjunctive recommendations. Panchakarma, Massage therapy, Marma therapy of Ayurveda also can play a vital role in this concern.

Present paper is an attempt with in-depth literary review to explore the possible use of Ayurveda for the management of the Fibromyalgia.

Keywords: Ayurveda, FM, Panchakarma, Marma, Vata, Mans Dhatu.

Introduction: The term "fibromyalgia" derives from new Latin, fibro-, meaning "fibrous tissues", Greek myo-, "muscle", and Greek algos-, "pain"; thus the term literally means "muscle and connective tissue pain". Fibromyalgia is an anomaly. It is a condition still not fully understood and in some instances not accepted by mainstream medicine, although The American College of Rheumatology recognizes and defines it as a disease.

¹ Fibromyalgia seems to be here to stay. Although coined a sanosological entity only some two and a half decades ago, and adorned official American College of Rheumatology (ACR) criteria only in 1990.² "3% of the Indian population suffers from fibromyalgia, only 0.5% are aware of the conditions and the number of doctors who specialize in this in India are less than the numbers one can count on fingers". ³ Fibromyalgia has been recognized as a diagnosable disorder by the US National Institutes of Health and the American College of Rheumatology.⁴(a,b)

Fibromyalgia, a central nervous system disorder, is described as a "central sensitization syndrome" caused by neurobiological abnormalities which act to produce physiological pain and cognitive impairments as well as neuro-psychological symptomatology.⁵ Despite this there is controversy as to the cause and nature of fibromyalgia. Rheumatologists, neurologists, and pain specialists tend to view fibromyalgia as pathology of both biological and neurobiological origin. Psychiatrists often view fibromyalgia as being a type of affective disorder, and specialists in psychosomatic medicine tend to view fibromyalgia as being somatoform disorder. The controversies involve both healthcare specialists as well as patients, who often object to fibromyalgia being described in purely somatic terms.⁶ (a,b)

Symptoms: While the primary physical symptom is widespread body pain, other symptoms may accompany the disorder. These include morning stiffness, general fatigue, cold sensitivity, exercise intolerance, poor sleep, dizziness, numbness or tingling of the extremities, headaches, purities, fluid retention, bowel discomfort, irritability, depression, anxiety and mood swings. Aching occurs most commonly in areas around the neck, shoulders, upper and lower back and hip areas. (a, b, c) Fibromyalgia (FM or FMS) is characterized by chronic widespread pain and allodynia (a heightened and painful response to pressure) involving more than three segments of the body, including the presence of at least 11 of 18 specifically designated tender points. The term fibromyalgia actually means pain in fibrous and muscular tissues. It is a disorder involving brain chemicals and in reality, is a collection of symptoms with no measurable cause. Although it has existed since Victorian times and has been known by other names such as neurasthenia, chronic rheumatism and fibrositis, today it is referred to as fibromyalgia syndrome, or simply FMS. (a, b, c, d) Other symptoms include debilitating fatigue, sleep disturbance, and joint stiffness. Some patients also report difficulty with swallowing, bowel and bladder abnormalities, umbness and tingling, and cognitive dysfunction. Fibromyalgia is frequently comorbid with psychiatric conditions such as depression and anxiety and stress-related disorders such as posttraumatic stress disorder. (a,b) Not all fibromyalgia patients experience all associated symptoms. Fibromyalgia is estimated to affect 2–4% of the population, with a female to male incidence ratio of approximately 9:1.

The brains of fibromyalgia patients show functional and structural differences from those of healthy individuals, but it is unclear whether the brain anomalies cause fibromyalgia symptoms or are the product of an unknown underlying common cause. Some research suggests that these brain anomalies may be the result of childhood stress, or prolonged or severe stress. ¹⁹ There is evidence that environmental factors and certain genes increase the risk of developing fibromyalgia – these same genes are also associated with other functional somatic syndromes and major depressive disorder. ²⁰

Differential Diagnosis: There are many similarities between Fibromyalgia Syndrome or FMS and Chronic Fatigue Syndrome, or CFS . Statistically, 70% of patients with FMS also meet the CDC criteria for CFS and 67% of patients with CFS meet The American College of Rheumatology (ACR) criteria for FMS. Similarities include debilitating fatigue, muscle and joint pain, digestive problems, headaches, sleep problems, anxiety, allergy sensitivity, restless leg syndrome, mental confusion and depression. Patients have described CFS as "flu-like" and fibromyalgia as "aching all over". Fever and swollen glands occur in a higher percentage of

CFS patients than in FMS. The most severe complaint for CFS patients tends to be around-the-clock fatigue which does not subside, while in FMS patients it is around-the-clock pain which rarely subsides. Cognitive impairment is more significant among CFS sufferers than in cases of FMS. ²³

Treatment: A wide array of medications is used, including acetaminophen, ibuprofen, aspirin, propoxyphene, codeine, rofecoxib, various other non-steroidal antiinflammatories and tramadol. Most of these, particularly the NSAIDs, are only temporarily effective in blocking FMS pain. Certain antidepressants such as amitriptyline and duloxetine have been found to be effective treatments as has the anticonvulsant drug pregabalin. (a & b) Exercise improves fitness and sleep and may reduce pain and fatigue in some people with fibromyalgia. (a,b) Some of the more commonly prescribed are amitriptyline and nortriptyline and trazodone. While studies show short-term improvement in sleep pattern and tender points, long-term efficacy has not been determined. But it has been observed that the FM patients respond differently to different treatments. It seems to depend on the different pathogenetic mechanisms in the subgroups of FM patients. Principally at least four different phenomena play a role within this: disturbances in the inhibitory system; neuro-endocrine disturbances. (a,b); disturbances in neuropeptides, and a pathologic decreased secretion of the growth hormone. Furthermore, recent findings suggest that cytokines (a,b,c), biogenic amines, microcirculatory changes, nitric oxide, nitric oxide, and prostaglandins.

Role of Ayurveda and Herbal Medicine: Ayurvedic is an ancient Indian Medical system using herbal and mineral compounds to promote health. Dietary regimens, physical therapy and surgery in association with yoga attempt to be establish an harmony within the body. Ayurvedic also uses *Marma* pressure on specific sensitive regions and therapy can be either palliative or purifying with eradication of disease. According to Ayurveda Fibromyalgia can be described as *'Mansa Dhatugat* (muscular tissue based) and *Mansavrut Vata* (muscular tissues effected by *vata* imbalance) 'disorder.

Fibromyalgia is perceived as a *Vata* imbalance. *Vata* is the main imbalance and Aggravated *Vata* destabilizes the nervous system and can create hypersensitivity leading to pain and tenderness. Accumulation of *Ama* (toxins) and *sroto-avarodha* (Body channels Blocking) are also contributory factors. The aggravation of *Vata dosha* and accumulation of *Ama* (toxins) are the primary causes and should be treated mainly. Associated weak digestion, constipation, and effects of chronic stress should also be tackled. The treatment of fibromyalgia, which is primarily a *vatavyadhi* disease, focuses on both *Vata samshamana* (re-balance) and *samshodhana* (purification) which become deranged due to accumulation of *ama* (toxins). Thus the Fibromyalgia includes a combination of Panchakarma therapies, researched internal medicines, strict Diet and Lifestyle modifications. Pre-purification Measures namely *'Snehan'* (Oleation/Massage) and *Swedan* (Sudation) are very useful to balance *'Vata'* and to loosen the toxins. An herbal concoction may be added to the steam to further enhancement of effect. ⁴⁰

Ayurveda Massage Therapy: Massage is one of the oldest healing therapies having been used for thousands of years⁴¹. It is considered a complementary therapy in the United States; it is more popular in Europe. Patients typically rate the experience as satisfying or pleasant, which may be the reason why it is so popular, particularly among those with FM. One article rated massage as the second best alternative therapy for patients with FM. ⁴² (a,b)

Massage is the application of systematic manipulation to the soft tissue of the body for therapeutic purposes. Massage is considered to have both physiological and psychological components, the effects of which are highly interactive. Physiological effect can be either mechanical or reflexive in nature. A study report reveals that patients with FM who pursued alternative medical interventions expressed the most satisfaction with massage therapy when a more-toned down and less rigorous massage was used. 43

Panchakarma therapy has been proved very effective in the treatment of Fibromyalgia. ⁴⁴ The massage featured in three studies ⁴⁵ The massage is a part-n-parcel of the *Panchakarma* therapy, which is now very popular for the rejuvenation, for the treatment of arthritic disorders, neurological disorders and life style disorders and some study ⁴⁶ shows its effects for the management of Fibromyalgia.

Herbs/Herbal Medicines: Herbals have a higher rank for the treatment of FMS. Many FMS patients seek relief from herbal remedies for symptomatic problems. This approach is well and good, but ultimate relief should be found in combinations of herbals along with other adjunctive recommendations. Some Ayurveda herbal entities that have shown effectiveness include:

- 1. *Zingiber officinalae* (Shunthi): In Ayurveda it referred as Antispasmodic and cholagogue, helps settle the GI tract from nausea.⁴⁷
- 2. Boswelia sarata (Shallaki): used in inflammation, pain reliever. 48
- 3. Vitex negundo (Nirgundi): Used for neurological pain, rheumatic pain. 49
- 4. Withania somnifera (Ashwagandha): Referred for insomnia, neuro-tonic, Muscular strengthening.⁵⁰
- 5. Alpina galanga (Kulinjan): Used for arthritic disorders and anti-inflammatory. 51
- 6. Barberis aristata (Daru-haridra):- Used in R. A., Anti-inflammatory. 52
- 7. **Dashamool Quatha** (Combination of 10 plants, and used as decoction) :- used as anti-inflammatory for the joint and muscle disorders. The herbs are included :
 - **a.** Desmodium gangaticum (Shaliparni): used in Vata disorders, inflammation, and Nervine weakness. ⁵³
 - **b.** *Uraria picta* (Prishniparni): used in inflammation, *Vata* disorders. ⁵⁴
 - **c.** Solanum xanthocarpum (Kantkari): used in inflammation, pain.⁵⁵
 - **d.** Tribulus terresteris (Gokshur): used in inflammation, pain and urinary disorders. ⁵⁶
 - e. Fruit pulp of Aegle marmelos (Bilva majja): used in inflammation, pain, nervine disorders. ⁵⁷
 - **f.** (Agnimantha): used in inflammation, pain ⁵⁸
 - **g.** *Oroxylum indicum* (Shyonak): used in inflammation, pain. ⁵⁹
 - **h.** *Gmelina arborea* (Gambhari): used in pain, vata disorders.⁶⁰
 - i. Stereospermum suaveolens (Patla): used in pain⁶¹
- 8. *Curcuma longa* (Haridra): Haridra or turmeric poultices is often applied locally to relieve inflammation and pain. Turmeric acts on the imbalanced processes of digestion, metabolism and nutrition and restores the normal function of the gastro intestinal system. It is also considered to have excellent natural antibiotic and antibacterial actions.⁶²
- 9. *Commiphora mukul* (Guggulu): Guggul is the best among herbs that are used for obesity and *Vata* disorders." Guggul increases body's metabolic rate and it is a good anti-inflammatory herb. ⁶³
- 10. *Glyceriza glabra* (Madhuyashti): May prove beneficial in the treatment of Fibromyalgia as it it's root supports the glandular system and acts in the body like cortisone. ⁶⁴

Marma Therapy: The use of pressure points for massage and acupuncture has become a popular topic in natural healing today. In Ayurveda, these pressure points are called *marmas*, meaning 'vulnerable' or 'sensitive' zones. Such points can be used specifically for the diagnosis and treatment of disease or generally for promoting health and longevity. *Marmas* are integral to all Ayurvedic therapies from simple self-treatments to complex clinical procedures. They form one of the main pillars of Ayurvedic thought and practice. Many different *marma* regions are described in Ayurvedic texts along with their specific effects on both body and mind. *Marmas* range in size from very small to very large, from special points along the hands and feet to significant regions on the trunk of the body like the heart or the navel.

According to Ayurveda texts, there are 107 primary vital points (*marma*), which translate into 51 various *marma* regions; variance occurs because some *marmas* are either anatomically bilateral, or contained within others. Many Ayurveda teachers, including Sushruta, recognize extra vital points, additional to the classic 107. Some consider the skin as the 108 marma point, which serves as cohesion for all the *marmas*; this idea suggests the possibility that a vital point could virtually be anywhere. Also, the joints and internal organs have *marma* points; and depending on the individual's unique shape, posture, and age, *marma* location may vary. 66

Marma points are classified according to the predominating anatomical innervated tissue, in accordance with *Sushruta* (except for nerve category). Vessel points include subcategories of *tri-dosha* and blood vessels.

- Muscle points (*mamsa marmas*): related to muscle tissue structures (eg.facia, serous membranes sheaths)
- Vessel points (*sira marmas*): includes vessels carrying blood, lymph, and other fluid; the *tri-doshic* vessels (Sushruta) are more energetic than physiological; according to Sushruta, all vessels simultaneously carry the *tri-doshas*.
- □ Vata carrying vessel points (*vatavaha sira marmas*): dark color; *Vagbhatta* compares this vessel to nerves.
 □ *Pitta* carrying vessel points (*pittavaha sira marmas*): yellow color; relating with heat, color, bile, lymph, and other enzyme humors.
- □ *Kapha*-- carrying vessel points (*kaphavaha sira marmas*): white color; relates with lymphatic vessels, mucus, and plasma channels.
- ☐ Bbod- carrying vessel points (raktavaha sira marmas): blood vessels; deep seated
- Ligament points (*snayu marmas*): related to tissues that bind muscles to bones; 4 types: ligaments proper, tendons, sphincter muscles, and aponeuroses.
- Bone points (asthi marmas): related to bone tissue; 4 types: bones proper, cartilage, teeth, and nails.
- Joint points (*sandhi marmas*): related to the joints [sim.TCM 5 transporting points]; interrelate with *prana* and *tri-doshas*; classified as mobile, partially mobile, or fixed; complex or larger *marmas* ⁶⁷

Thus, it can be said the scope and canvas of the use of the *Marma* therapy is vast and covers all sectors of body system, so *Marma* therapy may be used for the treatment of Fibromyalgia.

Discussion: Due to the broad etio-pathology of FMS and the many options for managements, it is appropriate to outline a basic management to get patients to begin the healing process. Much of the initial management involves rebuilding the digestive process, alleviating pain, making better dietary choices and improving mood and outlook for better health. Attention to diet and exercise is highly valuable in providing quicker and lasting

outcomes. Using the massage and herbs can be a very effective for the FMS patient. Total care of the FMS patient must be individualized. Each patient will progress at different rates and reach certain plateaus over time.

Conclusion: FMS (Fibromyalgia Syndrome) is a complex disease with many influencing factors. It is no wonder that no two FMS patients exhibit the same symptoms or follow the same pathway. With this in mind, it is perfectly clear that no two patients can be treated successfully with a magic bullet or a "one size fits all" approach. Successful alleviation of FMS requires a thorough "peeled onion" approach to therapy. Ayurveda believes in the individual treatment theory. According to Ayurveda, one patient is considered one unit. Hence, Ayurveda approach may prove beneficial for the management / treatment of Fibromyalgia.

It also should keep in mind that FMS has significant psychological effects that can inhibit improvements and compliance. All therapies may be incorporate patient support as a stimulus. FMS can be beaten with an open mind, a long range nutritional approach, removal of negative influences (both mental and physical), and hope for a pain- and fatigue-free future. Ayurveda approach may help to overcome the many barriers of this syndrome / a complex disease, the FMS. Ayurveda massage therapy, *marma* therapy, Panchakarma and herbal treatment may play a vital role for the treatment of FMS.

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