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THERAPEUTIC POTENTIAL OF SATVAVAJAYA THERAPY IN THE MANAGEMENT OF AMAVATA.

SANJEEV RASTOGI AND R. H. SINGH**

ABSTRACT

Amavata which is popularly correlated with Rheumatoid disease, is characterised by its eternal course, uncertain progression and unpredictable series of exacerbations and remissions. In Ayurveda the impact of the Amavata over psychological setup of the patient is well recognised. Satvavajaya therapy of Ayurveda may be considered as a kind of patient education in rheumatology but with much broader base and much better applicability

Introduction

Amavata which is popularly correlated with rheumatoid disease[1] is Characterised by its enternal course, uncertain progression and unpredictable series of exacerbations and remissions. In many patients the pain, disability, deformity and reduced quality of life persists inspite of the management made meticulously and vigorously. This state of the art in current therapeutics provides a big space for incoming of newer approaches to enchance the current treatment effectiveness. At the same time, relative failure of the present management to curb the relentless, progression of disease course precipitates various psychological presentations in the patient of which depression is invariably common. It is seen that same patients with severe rheumatoid arthritis (RA) measured radiographically or by other clinical assessments appear not very disabled whe-re as others with seemingly mild disease appear to be severally disabled. This phenomena is now attributed to the problem of under standing the impact of RA on the individual patient[2] and the role of psychological factors as a modifier of the extent of symptom

*Lecturer, Dept. of Kayachikitsa, Ayurvedic Medical College, peth Vadgoan, Kolhapur (M.S.) - 416112.

**Professor & Head, Dept. of Kayachikitsa, Faculty pf Ayurveda, Institute of Medical Science, B.H.U., Varanasi - 221005. (India).

reported, the course of illness and the patients feeling of well being is now considered.[3]

A psychotherapeutic intervention hence appears to be essential as a component of management of RA. Recently a stress has been laid over educating the patients about their disease and its complex management and is assumed as to be beneficial in helping patients to cope and cooperate with their disease.4

Psychological status of a patient in RA

Once patients are diagnosed as having RA they face a range of stress, including the adjustment to medical treatment and uncertainity about the course of the disease. The symptoms of pain and stiffness may well have been present before diagnosis but in the long run these may increase and lead to restricted movements and disfigurements. This in turn may limit the ability to fulfil work and social roles and therefore have an effect on other family members too. Studies have shown that with RA, the combination of pain, stiffness, disability and social restrictions results in significantly increase level of depressed mood5 and probably this depression makes them more restricted and more sensitive to pain. The phenomena of individual variability in treatment responses and feeling of well being largely depends upon the individual psychological setup. Coping mechanism which is some times defined as the cognitive, behavioural and emotional efforts individual exerts to manage specific external or internal demands6, is responsible for individual response variability. Coping responses are considered to result from the patents assessment of the stress that they face and resources available and thus an interaction of patient psychological setup with that of personal environment results in the determination of intensity of symptoms percieved by the patient.

In Ayurveda the impact of the disease Amavata over psychological setup of the patient is well recognised. Alasya (listlessness), Utsaha Hani (lack of pep), and Nidra Viparya (Sleep disturbance), are main features found associated with it.7 Aruchi (lack of interest), is also been a presenting feature and along with lack of interest in food it may also be taken for lack of interest in the environment. It can be seen

that all these characters represent the depressed mood of the patient which often emerges as a consequence of pain and disability associated with the disease.

Individual variability regarding the perception of pain is also discussed in Ayurveda. Three grades of Satva (mental status) have been made according to the degree of relative tolerance of pain and these are named as Pravara (High tolerance), Madhyama (medium tolerance) and Avara (low tolerance). A patient of Avara satva experiences more pain and disability even when there is no clinical evidence of severity of disease. On the contrary Pravara Satva person experiences lower degree of pain even in the presence of severe disease (Ca. Vim. 8/119).

It is a recognised clinical observation that depression is often linked with various somatic presentations and of which pain is often the major one. A directly proportional vicious relationship between the intensity of pain and depression thus can be established resulting in the break down of self esteem and relentless disease progression going hand in hand.

Pain and Depression - the biochemical relationship.

The intricate relationship between the pain perception and its modulation according to the psychological state is not well understood at the biochemical level, though various experiments and observations made in this direction during recent years have opened some new vistas. A distinct pain modulating neural pathway is found existing in the body with an objective of pain suppression. This envolves endogenous endorphin and serotonin activation following a neurological response to pain stimuli.8 Production of profound analgesia without any clouding of consciousness is demonstrated by the electrical stimulating of the pain modulating system (Dunchan et al, 1991).9 It is proposed that a biochemical relation exists between the descen-ding pain modulating and ascending nociceptive afferent fibres with the help of an interneuron. Descending pain modulating fibres are primarily serotonergic. Serotonin release from these neurons activates interneurons to release enkephelin. This enkephelin depolarises the primary ascending nociceptive afferents resulting in the

reduction of substance P release which is the main neurotransmitter in the nociceptive neurons (causing presynaptic inhibition of the pain transmission). Because of this reduction, the onward transmission of pain impulse through the secondary afferents between the dorsal horns to the thalamus is reduced. This conceptual and experimental development during recent year presented the importance of serotonin as a potent pain modulator. Pharmacological depletion and supplimentation of serotonin is known to cause hyperalgesia and analgesia subsequently (Duthie DJR 1994)10. It is very important to observe here that serotonin and some other neurotransmitters have a very definite role in various mood disorders and a defeciency of serotonin along with the post synaptic increase in 5HT binding sites (Upregulation of 5HT2 receptors) in the serotonergic neurons is found associated with depression (Kempenaers et al, 1992)11. Trycyclic antidepressents inhibit the re-uptake of serotonin by binding to the receptors at the presynaptic sites and this is why these are often used to relieve pain in chronic pain states. Pain reduction due to placebo effect is also found associated with the release of endorphins (Levin et al. 1978)12.

Hence it is clear that negative pain modulation may cause increased pain sensitization in an individual and perceptibility of pain in a person can largely be modified according to the mood status. In depressed mood the serotonin level of pain modulating neurons. May go down and thus leading to uninterrupted pain transmission through the nociceptive afferent neurons resulting in increased pain intensity

Patient Education in RA-a newer concept

Many a time it is argued that the patients do have an inherent right to get information about their disease and its management but this only does not imply that education should be included as a part of management. But in case of RA where the disease usually stays with patients for life long. It is assumed that the patient education may be beneficial in helping patients to cope and cooperate with their disease and its complex management.

Patient education in RA assumes

the acquisition of knowledge, skills and attitudes in order to achieve the voluntary health behaviour changes in patient (Green LW, 1979)13. Various key points have been included under the broader divisions of knowledge, skill and attitude usually based upon the needs and beliefs of those receiving education.

Usual components of the patient education programme in RA are consisting of following parts (Tucker M, Kirhan JR 1991)14.

Tab. 1: Knowledge, skills and attitudes considered essential in patient Education Programmes.

Knowledge of :-

Disease process and medical management
- Drugs
- Nutrition
- Exercise / joint protection
- Quackery/alternative treatments
- Community resources

Skills (To be developed) of :-

- Exercise
- Joint protection/energy conservation/ work simplification
- Relaxation/Stress management
- Drugs
- Sleep
- Communication with doctors and family

Attitudes (to be adopted) of :-

- Coping
- Problem solving/goal setting
- Stress management
- Self efficacy
- Self esteem

Many of the components enlisted in the table have been proved as beneficial to patients in various studies. Exercise is commanly taught and is a routine part of management. A recent study did show a reduction in the number of swollen joints with no adverse effect for patients with moderately active RA undergoing aerobic training.15 Relaxation is another common practice and has been shown to produce significant pain relief in patients with osteoarthritis (Laborde JM 1983)16 but its evidence in RA is inconclusive.

The therapeutic effects of drugs are well reported, but often the non-compliance or non-cooperation with drug regimen is often reported. Information regarding drugs may improve knowledge and compliance of patient (Punchak SS, Kay EA, 1988)17.

Attitudinal objective have recently drawn more attention and regarded as important variables in the out come of disease. Depression, fear and anxiety, Self-awareness, communication skills and stress management are often cited by the patients as topics for inclusion in education programmes (Tucker M 1991)18.

To obtain the expected results from the patient education to follow some standard technique in a view to optimise the results is essential. Various studies with various different techniques have been made in this regard, the commonly employed methods are listed in tab. 2.

Tab. 2 :- **Teaching methods used for patient Education.**

. Small work group
. individual teaching
. computer assisted instruction
. Didactic
. Interactive
. Lay-led groups
. Professional led group
. Home Study
. Passive instruction (booklet, audiovisual programme)
. Reinforced.

Variable results were obtained with these methods in different studies though small work group is found more effective at changing attitudes and behaviour, (Ewles L, Simnett 1, 1987)19.

Satva Vajaya - the Ayurvedic concept of psychotherepy

Ayurveda approaches towards disease in three different ways namely Yuktivyapasraya Chikitsa or the rational pharmacological approach, Daivvyapasraya Chikitsa or devine therapy and Satvavajaya or the psychotherapy. Diseases in this context are considered as Saririka Vyadhi and Manasika Vyadhi according to the seat of their origion. Two seperate set of Dosas or the pathological factors are also described in this context as Saririka Dosa (Vata, Pitta, Kapha) and Manasika Dosa (Raja and Tama) which are responsible for production of their respective disease.

Satvavajaya literally mean as to control the mind by means of restraining it from un whole some Arthas or objects. Charaka defined it as Satvavajaya-Punah ahitebhyo Arthebhyo Manonigraha (Ca.Su. 11/54). This can be elucidated as development of negative attitude towards disease causing factors but

essentially and simultaneously with a positive attitude towards the means of obtaining health.

Apart from the diseases affecting psychae and some separately a varying amulgumation of these as psychosomatic and somatopsychic is frequently presented. Diseases orginating in the mind may manifest themselves by body functions (Somatization) and Vice Versa. This age old concept of mind and body interdependence and interaction now drew the attention of modern scientists and efforts are under way to delineate their intricate relationship.

Thus Satvavajaya, by means of abstinence of Ahita Panchendriyartha and Manoartha can be helpful in reharmonization of body. Satva is used synonimously for Manas in Ayurveda and to get control over various functions of Manas is the objective of Satvavajaya therapy. This usually is achieved by following means.

1. By regulating the thought process (Chintya)
2. By replacing the ideas (Vichara)
3. By channelizing the presumptions (Uhya).
4. By polishing the objectives (Dhyeya)
5. By proper guidance and advise (Samkalpa) for taking right decisions.

Besides these assurence and replacement of opposite emotions (Viz.Kama for Krodha etc. are also deemed a part of Sattvavajaya (Ca.Ni 9/88).

Discussion

Till very recently Satvavajaya therapy was considered as an approach for various psychic and psychological disorders and was considered of use of a psychiatrist only. But now un inclination of using it as supportive measure in various somatic diseases having a defenite psychological component has grown. Murthy ARV and Singh RH20 (1986) used group Sattvavajaya in the patients of Irritable Bowel syndrome with excellent outcomes. This was an unparraleled clinical study conducted first time in country. Potentiality of Satvavajaya therapy as a major force in the management of stress related disorders was well perceived in this study.

As per the classical descriptions Satvavajaya is often taken only for

the abstinence (refrainment) of unwhole some from the routine of the diseased but interestingly at the same time it should be taken for the addition of whole some ideas, deeds and workmanship in ones life. In more simple words the influx of more positive attitude towards health is also the means as well as the objective of Sattvavajaya therapy.

Psychological component of the Amavata Vis-a-Vis Rheumatoid disease is well identified in Ayurvedic texts and has been observed in various clinical studies. A recent study (Rastogi S, Sing RH 1994)21 have shown certain interesting findings regarding the individual variability in various aspects of Rheumatoid disease and presented a clue for addition of supportive measure in its management. Utsaha Hani was reported as second commonest symptom in the Rheumatoid population taken under the study and it stood only after the Saruja Sandhisotha i.e. painful swelling of the joints. (Saruja Sandhi sotha 100%, Utsaha Hanni 97.5%). This has shown the invariable presence of depressed mood in majority of patients. The depressed mood of the patients was further verified during examination of Sattva in terms of pain intolerance and disease presentation. Only a fraction of patients (5%) has reported with good tolerance (Pravara Satva) where as majority was belonging to either Madhyama (medium) 50% or Avara (poor 45%) tolerance. The presentation of disease was determined by Satva status. Maximum patients ot pravara and madhyama satva presented in Clinically good condition in comparison to Avara Satva where the functional ability of patients was limited or very limited. Treatment response also found influenced according to Satva of the patient. Best responded patients were belonging to the pravara and Madhyama group while Avara Satva patients were poor responders. This clinical assessment of improvement was also shown by the changes of ESR.

This study though not intended to give any conclusive remark, nevertheless has presented an unprecedented idea regarding the management of rheumatoid disease inreierence to the Sattva of patient. It could be stated as if the Sattva of a patient of Rheumatoid disease could be shifted towards higher degrees lotmore can be achieved through the

similar management. Shifting of Satva from lower degree of pain tolerance to higher degree of pain tolerance i.e. from Avara Satva to the pravara Satva could influence the disease presentation as well as the therapeutic responses from any therapeutic modality applied. Here is should be made clear that Satva could be taken in its two form. One is the original temperament of the person i.e. the Satva before the disease taken its origin and other is the Satva presented during the course of disease and which shows the psychological ups and downs during the course of disease. Presumably it is the combination of these two which influence the disease presentation of an individual.

Influence of Satva over degree of pain tolerance of an individual has defenite biochemical reasonings explored during recent years. Pain modulation pathways descen-ding from thallamus to the spine influences the degree of pain intensity perceived by thallamus and transmitted through nocieptive afferent fibre. This pain modulation is serotonin dependent and interestingly reduction in serotonin levels in serotonergic neurons of brain is elected as the main pathology in endogenus depression. Hence a simple relationship between pain and depression can be established as depression often causes increased sensitivity to pain in affected individual. The same can be interpreted as the Avara sattva individual often represents the depressed mood and thus experiences more pain and disability. Proper reasoning for direct relation of disease progression with that of Satva of patient is not clear yet but is certainly has some indirect influence. In depressed mood, the patient used to confine himself in a limited sphere both mentally as well as physically. Lack of physical movements (like in complete bed rest) enhances the degeneration of bones and joints in RA because of calcium and potassium depletion where as active exercise reduces the coexistent osteopenia and osteoporosis byme-ans of proper bone mineralization (kararian L.E. 1969)22.

Interestingly the role of exercise as supportive antidepressent therapy has also become an established fact now23 and even the differential role of different excercises in relation with neurotransmitter metabolic changes in different regions of brain have been documented 24,25.

Now the role of Satvavajaya therapy here may be the motivation of patients toward a more positive attitude of life even in the presence of arthritis and so that they could participate actively in all walks of life and could also practice needfully devised exercises in a regular basis. This will help in down ward modulation of pain by improving serotonin metabolism and also reduce the pathogenic process in the bones by improving remineralization.

In most rheumatology clinics it is generally accepted that a team approach is the most effective way to treat patients with arthritis.26,27. A disease like rheumatoid arthritis makes its ugly imprints not only over the Victim but also over the family members and other intimates. After experiencing the relative incurability of the disease it is this intricate interrelationship between the patient and its intimate environment which decides the force of expected outcomes. Many a times a feeling of worthlessness and social distraction originates from within the family and is much dependent on the dealing of inmates of family with the sufferer.

Satvavajaya therapy here can also be employed to infuse certain behavioural modifications for inmates which may help in reharmonization of emotions in the patient and simultaneously may help to generate a newer insight of positive health even in the presence of arthritis. This is often called as learned dealing which may be defined as a deliberate inter personal behaviour intended to minimise the devastating effects of disease induced stress on patient and family on one hand and to optimise the quality and expectancy of life of patient on the other.28 Though this concept was intially propagated for terminally fat-al conditions like Cancer but it may find its application in relatively incurable and chronic diseases like rheumatoid disease as well.

Conclusion

'How to live with arthritis' has became a field of intense research for the rheumatologists of today. In the present scenario of relative unsuccess in curbing the disease progression and to check its complication it is wise and indespens-ible to search for alternative method to support and to optimise the results obtained by any therapeutic

measure.Patient education is a newerconcept of modern rheumatology, still in its primitive phase though promises for some good advancements in the current mode of RA therapy.

Satvavajaya therapy of Ayurveda may be considered as a kind of patient education in rheumatology but with much broader base and much better applicability. Its use for rheumatoid disease is also abit more versatile and different from its traditionally used form. Exploration of sound Biochemical philosophy behind this seemingly nonpharmacological approach further puts much impetus for its inclusion as a supportive measure in the management of rheumatoid disease.

The inclusion of Satvavajaya therapy for RA, at the moment has only a conceptual ground and yet to be proved on strict scientific parameters but even though its implementation through all who make the ultimate environment of the patient can be recommended as it certainly will provide a new insight and a way to led a meaningful, stress free life even within the narrow ranges of capebilities for ill fated sufferers of Rheumatoid disease.

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सारांश

आमवात चिकित्सा में सत्वावजय औषध की कार्यक्षमता

— संजीव रस्तोगी
—आर. एच. सिंघ

आमवात, जिसकी तुलना सामान्यतया रिह्यूमाटाईड डिज़ीज़ से की जाती है, को उसके नित्य घटना क्रम, अनिश्चित प्रगति —क्रम तथा अननुमेय विकृतियों की श्रंखला एवं समाप्ति से पहचाना जाता है। आयुर्वेद में रोगी की मनोवैज्ञानिक स्थिति पर आमवात के प्रभाव को पूरी तरह स्वीकार कियागया है। आयुर्वेदिक सत्वावजय औषध का कुछ और भी व्यापक बुनियादों पर तथा कुछ और भी अधिक उपयुक्तता के साथ आमवात के रोगी की शिक्षा के रुप में विचार किया जासकता है।