

EXPLORING THE MIASMATIC APPROACH FOR WORK RELATED UPPER LIMB DISORDERS

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Abstract: The clinical study on WRULD of 30 cases was undertaken to explore the miasmatic background [Psora, Sycosis, Syphilis and combinations thereof] based on susceptibility, predisposition and totality of symptoms, to find the efficacy of homoeopathic remedies and to arrive at a group of remedies commonly indicated in WRULD.

Key Words: Work related upper limb disorders [WRULD], Miasm, Totality of symptoms, Psora, Sycosis, Syphilis

INTRODUCTION

Work related upper limb disorders are a common problem among many computer workers. Many epidemiological studies have shown that ergonomic factors, psychosocial, individual and aspects of work organization play an important role in the development of these disorders. Increased use of personal computers has focused our attention on work-related neck and upper limb disorders (WRULD). The direct and indirect costs of chronic disability to the injured workers, his or her family, employers, and society are enormous. Common to all of these injuries is a history of prolonged repetitive use of the upper extremities in an intense, forceful, and often an awkward fashion. The condition is usually associated with either specific soft tissue inflammation, such as tenosynovitis, or a specific nerve entrapment, such as carpal tunnel syndrome. Homoeopathy views disease in a holistic way and evolves a therapeutic plan for its treatment in the same view point. This is achieved by exploring the responsible miasms & through the similar medicine which act in the dynamic plane.

OBJECTIVES:

- To study the details of work related upper limb disorders in computer users,
- To explore the underlying the miasms.
- To assess the effectiveness of homoeopathic remedies evolving after considering totality of symptoms in the treatment of 'Work related upper limb disorders' in computer workers

REVIEW OF LITERATURE:

DEFINITION: WRULDs is a collective term for a group of occupational diseases that comprise musculo-skeletal disorders caused by exposure in the workplace affecting the muscles, tendons, nerves, blood vessels, joints and bursae of the hand, wrist, arm and shoulder. These are syndromes associated with characteristic symptoms and physical signs (e.g. rotator cuff syndrome, epicondylitis at the elbow, tenosynovitis and nerve entrapments such as carpal tunnel syndrome).

It includes various specific and non specific disorders.

INCIDENCE AND PREVALANCE: Work-related musculoskeletal disorders have been investigated and reported for workers from various sectors in India. These include computer operators / keyboard users, goldsmiths, stone carvers and workers from shoe factory and woolen textiles.

AETIOLOGY AND RISK FACTORS, PATHOGENESIS: The main cause is frequent and repetitive movements of a part of the body. For example, typing, using a computer mouse a lot, vibration, lifting etc. Other factors may contribute, such as poor posture whilst doing the movement, using excessive force whilst doing the movement and not having enough breaks from the task. Prolonged duration of exposure, Poor work organization (low level of control over work rate, no breaks, etc.). Psychosocial stress at work and fatigue.

Inflammation, degeneration, Vascular disruption, Ischaemia & repair response are the basic mechanisms in the pathogenesis of WRULD.

TYPES:

NON SPECIFIC DISORDERS

- Cumulative trauma disorders
- Overuse syndrome
- Repetitive strain injury (rsi)

SPECIFIC DISORDERS

- Tendon-related disorders
- Nerve-related disorders
- Bursa-related disorders
- Blood vessel disorders
- Others

Although symptoms will vary according to the type of disorder, common symptoms and signs include the following:

SYMPTOMS: Burning sensation, Fatiguability, Loss of grip strength, Loss of normal sensation Stiffness and cramps, Muscle weakness, Pain, Paraesthesia (tingling), Sensation of cold, Swelling.

SIGNS: Crepitus (crackling sound in subcutaneous tissue), Muscle spasm, Muscle weakness, Reduction of range movement, swelling, Tender trigger points in muscles, Tenderness

It has to be noted that symptoms may not always be accompanied by objective signs.

Any one symptom or sign on its own is not indicative of WRULDs and some may be common with normal function. Very few sufferers experience all the symptoms. The symptoms do not appear in any particular order. Progression of WRULDs – WRULDs tend to be progressive and the development of the disorder can be divided into three broad stages

STAGE 1: Pain, aching and tiredness of the limb is experienced when working, but these symptoms improve overnight. This stage is most often reversible with rest alone. Sometimes guided exercise and treatment to address muscular problems are required for a cure.

STAGE 2: Recurrent pain, aching and tiredness of the limb occur earlier in the day, persistent night and may disturb sleep. Physical signs of the specific disorder (e.g. swelling) may be visible . These patients should be referred for physiotherapy and work assessment to prevent recurrence.

STAGE 3: Persistent pain, aching, weakness and fatigue of the limb are experienced even if the person had not been working for some time. Sleep is often disturbed. This can be irreversible if not treated appropriately. [Source: London Hazard Centre (1997)]

DIAGNOSIS/CLINICAL EVALUATION: based on history, physical examination, sometimes special investigations like High resolution ultrasound, X-rays, strength testing, range of motion testing, electromyography (EMG) analysis, isokinetic dynamometry.

HOMOEOPATHIC ASPECT:

Homeopathy acts on the Work related Upper Limb Disorders with a gentle touch. This system of healing can be enormous benefits to those suffering from physical symptoms triggered by the stress & emotional disturbances. Exploring the miasm & Consideration of totality of symptoms helps to assess the individuality & to select constitutional remedies. The aim of homeopathy is not only to treat WRULD but to address its underlying cause and individual susceptibility.

He lists the various predisposing conditions to the development of PSEUDOCHONIC DISEASE. It was Hahnemann's teaching that the removal of the cause was the first step in the proper method of cure. This may occasion at times surgical procedure; rectification of diet; the removal of irritating substances; change of environment; anything and everything that may place the patient in the best possible relation for complete cure, which will take place of itself when the cause is removed. But consideration of susceptibility and predisposition, totality of symptoms and miasm strengthens our efficacy in the treatment of WRULD. [Aph 72,78, 153 etc]. Remedies like Rhus Tox, Ruta, Viola O, Calc C, Calc P, Phos, Caust etc are useful.

METHODOLOGY:**Inclusion Criteria:**

Only the known cases of Work related Upper Limb Disorders i.e. Stage/grade 1, 2&3 will be taken. Economically productive age group. {16-45yrs}

Exclusion Criteria:

Cases associated with gross pathological changes.

Cases associated with congenital anomalies.

Old age related degenerative changes.

Diagnostic Criteria: Based on the following symptoms in the neck & region of upper limb.

Pain, Numbness /Tingling, Stiffness, Crepitus, Movements of joints, Weakness

The Materials used for the Study:

The Data has been collected from patients by interviewing them and from clinical examination.

Sample size – 30

All the data were recorded in standardized case record and outpatient department case record in peripheral centers.

A totality of symptoms was erected in each case as per the principles of Homoeopathy. A remedy was selected for each case and a Therapeutic plan was evolved individually for each case as per the protocol. The cases were followed up to a minimum period of 1 month or as per the need and the inferences were drawn by analysis of the outcome.

The method used in the study was a clinical method for confirmation and the results obtained has been scientifically analyzed and evaluated. There were no controls used in the study and all the patients were treated on out-patient basis. Investigations were not done in any of the cases as the clinical history and the examination findings were sufficient to arrive at a proper diagnosis. However, few patients had investigation reports beforehand.

Various potencies ranging from 200 to 1M have been used in this study. Repetition and potency regulation done based on posology guidelines. No concomitant therapy such as allopathic treatment or external applications was used. Subjects, who were on other therapy already, were asked to discontinue the same.

Follow-ups: Same potencies were repeated in some cases, and in some cases potencies were raised to enhance the effectiveness. Majority of the cases was reviewed on regular basis depending upon the need & convenience.

Assessment of effectiveness:

After following up the cases, assessment of the effectiveness of treatment was done based on the following criteria:

Clinical Grading/staging.

Since there was not a known standard clinical grading scale to assess the disease intensity available, a simple convenient semi-qualitative scoring technique like Visual Analogue Scale was made for an effective evaluation, assessment, and the disease intensity was graded in every patient based on their presentation observed during case taking. After completion of the study, the post treatment disease scores were compared with the pre-treatment disease intensity scores and statistically evaluated.

Interpretation of VAS score- pain 0/nil- none, 1-3- mild, 4-6- moderate, 7-10- severe pain.

Parameters: The following parameters were fixed according to the type of response obtained after treatment.

The results were categorized into 3 categories based on the below criteria.

RECOVERED: Feeling of mental and physical well-being with complete relief of symptoms. [VAS score-reduced to 0], [Stage 1]

IMPROVED: Feeling of general well beingness along with improvement and reduction in their severity of symptoms during the period of study. [VAS score- severe/moderate reduced to mild i.e. from 8 to <3], [Stage 2/3]

NOT IMPROVED: Initial response to the treatment i.e. slight relief of symptoms but later there was no relief, the suffering continued.[No or slight change in VAS score], [Stage 3 +]

Homoeopathic Remedies Used In This Study:

In Homeopathy the treatment remedies were prescribed in different levels according to Principles of Homoeopathy. Constitutional treatment covering underlying miasm was adopted in all the cases except in cases where they presented with acute presentation. Complementary remedies were prescribed to complete the action acute remedies. Anti-miasmatic remedies (intercurrent) were prescribed in some cases when they did not respond or to complete the course of treatment in certain cases to prevent its recurrence.

DISCUSSION:

77\$: Those diseases are inappropriately named chronic, which persons incur who expose themselves continually to *avoidable* noxious influences, who are in the habit of indulging in injurious liquors or aliments, are addicted to dissipation of many kinds which undermine the health, who undergo prolonged abstinence from things that are necessary for the support of life, who reside in unhealthy localities, especially marshy districts, who are housed in cellars or other confined dwellings, who are deprived of exercise or of open air, who ruin their health by overexertion of body or mind, who live in a constant state of worry, etc. These states of ill-health, which persons bring upon themselves, disappear spontaneously, **provided no chronic miasm lurks in the body**, under an improved mode of living, and they cannot be called chronic diseases.

Strictly speaking, WRULD falls under pseudo chronic/non miasmatic diseases, but it is often seen that it's not possible to change the occupation for practical purposes or sometimes even after making changes in mode of living, the patient will not get relief unless underlying predisposition and miasm is addressed..

RESULTS:

In this study the Psora & Sycosis miasms were seen among 8 cases each (26.6%), Syphilis in 5 cases [16.6%] followed by Psorosycosis, 4 cases [13.3%], Psorosyphilitic in 3 cases [10%], Sycosyphilitic in 2 cases 6.66% The incidence of WRULD was highest in the age group of age groups 31-40 yrs 18 cases (60%) followed by 21-30 yrs 8 cases (26.6%); 41-50 yrs 4 cases (13.3%). In this study, the incidence of WRULD was more in females 16 cases (53.3%) than in males 14 cases (46.6%).

Among all the WRULDs, Cervico-brachial disease/Tension neck syndrome was the most common clinical condition observed in computer workers with 9cases[30%], followed by Wrist tendonitis/tenosynovitis, 5 cases [16.66%], Frozen shoulder 4 cases[13.33%], Carpal tunnel syndrome & Tennis elbow each 3 cases [10%], Nonspecific pain 2 cases each [6.66%], Ganglion & trigger finger 1 case each[3.33%].

Out of 30 cases, 04 cases recovered (13.33%); 17 cases showed improvement (56.6%); and 09 cases did not show any improvement (30%). The patients were treated with remedies like Lachesis in 4 cases [13.3%], Lycopodium in 3 cases (10%), Sulph, Calc phos, Caust, Phos, Acid phos, Chel in 2 cases each (6.66%); Sil,Cimic,Ars,Ruta,Rhus T,Amm C,Puls,Kali B, Nat M,Rhodo,Viola O in 1 case each (3.33%).

Intercurrents used were, Medorrhinum, Syphilinum, Tuberculinum, and Thuja.

Analysis of the results was done by using paired t test.**Table 14: Distribution of the scores before and after treatment**

Sl No	X	Y	Z=X-Y	Z-z	(Z-z) ²
1	7	2	5	1.27	1.60
2	6	0	6	2.27	5.14
3	5	1	4	0.27	0.07
4	7	2	5	1.27	1.60
5	6	6	0	-3.73	13.94
6	5	0	5	1.27	1.60
7	7	7	0	-3.73	13.94
8	5	1	4	0.27	0.07
9	6	1	5	1.27	1.60
10	6	2	4	0.27	0.07
11	5	5	0	-3.73	13.94
12	7	2	5	1.27	1.60
13	6	0	6	2.27	5.14
14	6	1	5	1.27	1.60
15	6	2	4	0.27	0.07
16	6	1	5	1.27	1.60
17	7	6	1	-2.73	7.47

18	5	4	1	-2.73	7.47
19	6	1	5	1.27	1.60
20	7	1	6	2.27	5.14
21	6	1	5	1.27	1.60
22	8	7	1	-2.73	7.47
23	7	1	6	2.27	5.14
24	6	2	4	0.27	0.07
25	6	6	0	-3.73	13.94
26	5	0	5	1.27	1.60
27	5	1	4	0.27	0.07
28	6	1	5	1.27	1.60
29	5	5	0	-3.73	13.94
30	7	1	6	2.27	5.14
Total			Z=Σ112		Σ(Z-z)²=135.87

Research Question & Hypothesis:

A. Question to be answered. Is there any difference between the scores taken before the treatment and scores after the homoeopathic treatment based on miasmatic approach?

B. Null hypothesis: There is no difference between the scores before and after the Homeopathic treatment?

C. Standard error of the mean of difference

n = 30

X = Score before treatment

Y = Score after treatment

Z = Mean difference

Σ Z = 112

$$\begin{aligned} z &= \Sigma Z/n \\ &= 112/30 \\ &= 3.73 \end{aligned}$$

$$\Sigma(Z-z)^2 = 135.87$$

The estimate of population standard deviation is given by

$$\begin{aligned} S_D &= \sqrt{\Sigma (Z-z)^2 / n-1} \\ &= \sqrt{135.87/30-1} \\ &= \sqrt{135.87/29} \\ &= \sqrt{4.68} \\ &= 2.16 \end{aligned}$$

The estimate of standard error of mean – S_D / \sqrt{n}

$$\begin{aligned} &= 2.16 / \sqrt{30} \\ &= 2.16/5.47 \\ &= 0.394 \end{aligned}$$

D. Critical ratio

$$\begin{aligned} t &= z / S_D / \sqrt{n} \\ &= 3.73/0.394 \\ t &= 9.4 \end{aligned}$$

E. Comparison with tabled value:

This critical ratio, t follows a distribution with $n-1$ (29) degrees of freedom. The 5% level is 2.05 and 1% level is 2.76 for 29 degrees of freedom. Since the calculated value 9.4 is greater than tabled value at 5% and 1% level, we reject the null hypothesis.

Inference:

This study provides to say that, there is a significant reduction in the disease intensity scores after Homoeopathic treatment.

Therefore, the Homeopathic treatment is effective in Work related upper limb disorders 16-45 yrs age Group by exploring miasmatic approach.

INTERPRETATION AND CONCLUSION:

From this study it is evident that majority of the cases of “WRULD” can be effectively relieved by homoeopathic treatment based on miasmatic approach. WRULD, though an occupational disease can't be treated with removal of maintaining causes alone & most of the times it is not possible to remove the maintaining cause for practical purposes. Homoeopathy by addressing all aspects of the individual and their complete set of symptoms, offers better treatment for the patients suffering from “WRULD”. A homoeopathic remedy to begin with reduces the frequency of acute exacerbations, reduces the intensity of the symptoms, and also the relapses and chances of recurrence. They reduce dependence over other drugs and also surgery. Necessary ergonomic changes need to be followed for sustained relief.

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