



AYURVEDIC MANAGEMENT IN AUTOIMMUNE MUSCULOSKELETAL DISORDERS WITH SPECIAL REFERENCE TO *VAATRAKTA*– A CASE SERIES.

Ayurveda

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ABSTRACT

An autoimmune disease is a condition arising from an abnormal immune response to a normal body part. There are various types of autoimmune diseases. Ankylosing spondylitis and Rheumatoid arthritis are of musculoskeletal type. Predominant features of Ankylosing spondylitis are inflammatory backache and stiffness of spine and that of Rheumatoid Arthritis is a chronic systemic inflammatory polyarthritis affecting diarthrodial joints of hands and feet in a symmetrical pattern.

Autoimmunity is the presence of self-reactive immune response via blood cells. This in Ayurveda can be related to *Vaatrakta*. As described in *Gambhir Vaatrakta* by *Acharya Charaka*, the symptoms are, swelling(*shotha*), stiffness(*stabdhata*), pain(*arati*), burning sensation(*daha*) etc. Later on, as described in *Madhav Nidan*, these symptoms were similar to that of *Aamvaata*. As per the *samprapti* of *Aamvaata* mentioned in it, the *vidagdhaRasaRakta (aam)* circulates in rest of the *strotasas* via *dhamani* (*'Dhamanipratipadyate'*) causing *Raktadushti*. As per *Aacharya Charak, Virechana* is one of the treatment for *Vaatrakta*.

Virechana Karma, here removes vitiated *doshas* from *Rakta, Maansa, Asthi* and *Majjawa* *Strotasas*, as these are *Madhyammaargatvyadhis* and thus aids in *Raktaprasadana*. Here we present cases of musculoskeletal autoimmune disorders (Ankylosing Spondylitis and Rheumatoid Arthritis), where given *Virechana* showed a significant improvement.

Ayurvedic intervention in such disorders is necessary as these patients have become resistant to DMRADs (Disease modifying antirheumatic drugs) and Steroids, some become dependent upon these and some have irreversible side effects due to chronic use such drugs.

KEYWORDS

Autoimmune diseases, *Vaatrakta*, *Virechana*, Ayurveda

INTRODUCTION:

One of the central features of the immune system is the capacity to mount an inflammatory response to nonself, while avoiding harm to self-tissues. The essential feature of autoimmune disease is that the tissue injury is caused by the immunologic reaction of the organism against its own tissue. Autoimmunity is present in all individuals; however, autoimmune disease represents the end result of the breakdown of one or more of the basic mechanisms regulating immune tolerance.^[1]

Autoimmune Disorders are one of the most important non-communicable diseases and there are more than 80 autoimmune diseases affecting approximately 100 million people worldwide. In India, the field of rheumatology is emerging and data on the different autoimmune disorders is sparse. Epidemiological studies have highlighted autoimmune disorders as an important cause of mortality in developing countries.

Two of the known musculoskeletal autoimmune disorders are Ankylosing spondylitis and Rheumatoid Arthritis. Ankylosing spondylitis is an inflammatory disorder of unknown cause that primarily affects the axial skeleton; peripheral joints and extra articular structures are also frequently involved. The disease usually begins in the second or third decade; male-to-female prevalence is between 2:1 and 3:1.^[2] Prevalence of Ankylosing spondylitis in India is 0.03% as per surveys conducted by Bone and Joint Decade India from 2004 to 2010.^[4] Initially, physical findings mirror the inflammatory process. The most specific findings involve loss of spinal mobility, with limitation of anterior and lateral flexion and extension of the lumbar spine and of chest expansion.^[5] Rheumatoid arthritis is a chronic inflammatory disease of unknown etiology marked by a symmetric, peripheral polyarthritis. It is the most common form of chronic inflammatory arthritis and often results in joint damage and physical disability. The incidence of RA increases between 25 and 55 years of age, after which it plateaus until the age of 75 and then decreases. Patients often complain of early morning joint stiffness lasting more than 1 hour that eases with physical activity. The earliest involved joints are typically the small joints of the hands and feet.^[6]

The prevalence of autoimmune disorders is estimated to be approximately 10% and pharmacotherapeutic success is attained in only few of the autoimmune disorders.^[2] Understanding of molecular biology has led to the invention of various medications against these disorders but achieving prognosis is still arduous.

Ayurveda is an ancient science which have described immunity years ago in the form of '*Vyadhikkshamatva*'. It describes immunity i.e. *Vyadhikkshamatva*, the power of the body which incapacitates the power of the attacking disease and strengthens the body's capability to fight against the diseases.^[7] However, the development of *Aamvaata* and *Vaatrakta* is at its roots by the vitiation of the *doshas* and its circulation throughout the body through the *dhamani* and the *strotasas*. The musculoskeletal disorders mentioned above can be correlated to *Vaatrakta (Charakacharya)* and *Aamvaata (Acharya Madhava)*, both consisting of *Raktadushti*. *Vaatrakta* is a *madhyammargatvyadhi*. Considering all the clinical features and pathogenesis of the disease, *Virechana karma* is the best suited *Panchakarma* procedure for its treatment. But along with *Virechana, langhana, deepan, paanchana, rukshswedana, nityavirechana, shaman, bruhana* and *rasayanachikitsa* as should be done. Still *Virechana* plays a vital role in the line of treatment, as it functions at a cellular (molecular) level for removal of toxins and aids in blood purification.

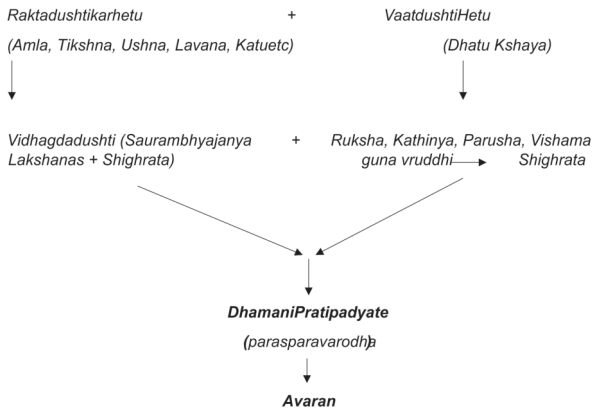
The prevalence of autoimmune disorders is estimated to be approximately 10% and pharmacotherapeutic success is attained in only few of the autoimmune disorders.^[2] Understanding of molecular biology has led to the invention of various medications against these disorders but achieving prognosis is still arduous. The treatment by modern science include DMRADs (Disease modifying antirheumatic drugs), Steroids, NSAIDs, Analgesics, muscle relaxants. Hence here, *Ayurvedic* intervention is a necessity as these patients have become resistant to these drugs and some of the above drugs have serious irreversible side effects.

Pathophysiology:

Vaatrakta, the nomenclature is coined on the basis of the *dosha* and the *dhatu* involved in the disease. As per the name suggests there is the *dushti* in the physiological functions and composition of *Rakta dhatu* with the vitiation *Vaatdosha*. *Kupitadoshas* within the *raktamarga* is the basic pathology. On the contrary, the etiological factors here also contribute to the aggravation of *kaphadosh* thereby leading to *strotomargavrodhi* and hence *strotodushti*. The involvement of deeper *dhatu*s like *asthi, majja* and *sandhi* signifies *Gambhir Vaatrakta* of *kaphaj* type. The symptoms of *Gambhir Vaatrakta* as described by *Acharya Charak* are swelling(*shyavathu*), stiffness(*stabdhata*), pain(*arati*), burning sensation(*daha*), tingling sensation(*sphuran*). Later on, as described in *Madhav Nidan*, the symptoms were similar to that of *Aamvaata*. As per the *samprapti* of *Aamvaata* mentioned in it,

the *vidagdha Rasa-Rakta (aam)* circulates in rest of the *strotasas* via *dhamani ('Dhamanipratipadyate')* causing *Raktadushti*. Due to indulgence in specific etiological factors, there occurs simultaneous vitiation of *vaatdoshaas* well as *kaphadosha* which in turn at first affects the sacral region (*kati*) thereafter gradually stiffening the whole body manifesting *Aamvaata*. The vitiated *vaatdosha* circulates in the whole via *dhamni* and localizes in different *sthanas* of *kapha* causing various joint related symptoms like swelling, pain, stiffness, temperature and tenderness.

Hetusevanlike Viruddhara causes *mandagni* which leads to *aamnirmitti.eshukt, pichil* and *vidhagdha rasa nirmitti*. This *dhamaniamusaarivishadosha* causes various *avasthaof doshas* like, *dhatvanusaari, dhatwashrayi and dhatugata*. This *aam* gets stagnant at various *sandhi* causing *stambh, vedanaand shotha*. As it involves *madhyammarga*, this illness possesses difficulties in the curative approach.



MATERIALS AND METHODS:

1. This study deals with management of **Musculoskeletal Autoimmune** disorders with special reference to **Vaatrakta**.
2. Here we present cases of **Ankylosing Spondylitis** and **Rheumatoid Arthritis** where given **Virechanashowed** significant results.
3. The course of the treatment throughout the hospital stay included **Aampachana, Agnideepan, Langhana, Snehapaan, Shodhana (Virechana), Rukshaswedana, Anuloman, Shaman, Bruhan and Rasayanachikitsa**.
4. **Pathyapathya** was explained to the patient and instructed to follow strictly.

Case report no.1

A patient named ABC, aged 25 years came through OPD at Podar Hospital and was admitted for the treatment of Ankylosing Spondylitis. The patient presented with complaints of back pain with stiffness of spine, lumbar region pain, bilateral hip joint pain, difficulty in movements and walking, morning stiffness resisting up to 2hours, since 2years. The patient was a diagnosed case of Ankylosing spondylitis. He had a history of Pulmonary Koch's and a surgical history of Cholecystectomy three years ago. The patient had an HLAB₂₇, a CRP positive report and a raised ESR level.

Treatment given:

1. **Aampachana** and **agnideepan** for 7 days with **simhanaad guggul**.
2. **Langhana** for 3 days.
3. **Snehapaan- Acchapaan** was given upto 200ml for 5 days upto **illsamyaksnehalakshanas** were seen.
4. Three days **vishraam** was given along with **snehan** and **swedan** followed by **virechanakarma** on third day.
3. **Shodhana (Virechana)** **Virechana** with **Aragwadmajja, Trivrutta** and **Triphalakwatha** was given with a good 15 **vegas** achieved followed by a **sansarjan karma** of 5 days.
5. **Rukshaswedana- Rukshakutiswedan** was given for 25 days there after.
6. **Anuloman** with **Gandharvaharitakichoorna** was a simultaneous therapy.
7. Then the patient was given orally with **Rasarajeshwarrasa** one tablet twice a day with honey until six months.
8. Strict diet was maintained throughout the treatment with a few exercises.

Pre and post complaints and measurements were compared and results were assessed showing a significant improvement.

Observation:

Criteria	Pre treatment	Post treatment
1 Schober's test	Positive with 16.5cm	Positive with 19cm
2 Walking speed	20sec /10 blocks	9sec/ 10 blocks
3 Forward bending	Upto knee	Upto mid of tibial shaft
4 Morning stiffness lasting upto	2hours	½ hour
5 Pain	+3	+1

Case report no.2

A patient named PQR, aged 29 years came through OPD at Podar Hospital and was admitted for the treatment of Ankylosing Spondylitis. The patient presented with complaints stiffness over back, swelling over knee & ankle joint bilaterally, Restricted movements of joints and difficulty in walking with pain since two months. The patient was a diagnosed case of Ankylosing spondylitis. The patient had an HLAB₂₇ positive report. Patient was taking Tab Saaz 500mg BD since one month.

Treatment given:

1. **Aampachana** and **agnideepan** for 7 days with **simhanaad guggul**.
2. **Langhana** for 3 days.
3. **Snehapaan- Acchapaan** was given upto 220ml for 5 days upto **illsamyaksnehalakshanas** were seen.
4. Three days **vishraam** was given along with **snehan** and **swedan** followed by **virechanakarma** on third day.
3. **Shodhana (Virechana)** **Virechana** with **Aragwadmajja, Trivrutta** and **Triphalakwatha** along with 20ml **aeranda tail** was given with a good 13 **vegas** achieved followed by a **sansarjan karma** of 5 days.
5. **Rukshaswedana- vaalukapottali** was continued along.
6. **Anuloman** with **Gandharvaharitakichoorna** was a simultaneous therapy.
7. Then the patient was given orally **Bruhatvaat Chintamani Rasa** two tablet twice a day with honey until six months.
8. Strict diet was maintained throughout the treatment with a few exercises.

Pre and post complaints and measurements were compared and results were assessed showing a significant improvement.

Observation:

Criteria	Pre-Treatment	Post Treatment
1. Schober's Test	Positive with 17.5 cm	Positive with 19cm
2. Support required while walking	Yes (Walker)	None
3. Forward Bending	Upto knee	Upto mid of tibial shaft
4. Stiffness of joints	+3	+2
5. Pain	+3	+1
6. Knee joint swelling	+3	+2

Case report no.3

A patient named XYZ, aged 31 years came through OPD and was admitted in M. A. P. H for the treatment of Rheumatoid Arthritis. The Patient presented with the complaints of stiffness of multiple joints, pain at B/L ankle and knee joints, morning stiffness lasting upto 2hours, difficulty and pain while walking and swelling over multiple joints since 10 months. The patient had a positive CRP report with an raised ESR levels.

Treatment given:

1. **Aampachana** and **agnideepan** for 7 days with **Simhanaad guggul**.
2. **Langhana** for 3 days.
3. **Snehapaan- Acchapaan** was given upto 250 ml for 5 days upto **illsamyaksnehalakshanas** were seen.
4. Three days **vishraam** was given along with **snehan** and **swedan** followed by **virechanakarma** on third day.
3. **Shodhana (Virechana)** **Virechana** with **Aragwadmajja, Trivrutta** and **Triphalakwatha** along with 20ml **aeranda tail** was given with a good 16 **vegas** achieved followed by a **sansarjan karma** of 5 days.
5. **Rukshaswedana- vaalukapottali** was continued along.
6. **Anuloman** with **Gandharvaharitakichoorna** was a simultaneous therapy.

7. Then the patient was given orally *Amrut BhallatakAvaleha*1tsf followed by milk *Rasayankaali*, until six months.
8. Strict diet was maintained throughout the treatment with a few exercises.

Pre and post complaints and measurements were compared and results were assessed showing a significant improvement.

Observation:

	Criteria	Pre-Treatment	Post Treatment
1.	Walking Speed	10 blocks/sec	28 blocks/sec
2.	Swelling	+3	+2
3.	Morning stiffness	+2	+1
4.	Pain	+3	+1

RESULTS:

The line of treatment mentioned above showed a significant improvement in these patients. The walking speed improved, swelling, forward bending, pain, stiffness etc. decreased significantly. The patients were able to do their household chores like they did before and back to their occupation. Here, *Virechana* specifically was the main line therapy.

DISCUSSION:

The *Aamgets* stagnant at various *sandhi* causing *stambh*, *vedana* and *shotha*. As it involves *madhyamarga*, this illness possesses difficulties in the curative approach. The medicines used for *Virechana* (Purgation) have *ushna*, *tikshna*, *vyavayi* and *vikaasi* qualities. *Virechana* due to its *virya* reaches to *Hrudaya* and circulates all over the body due to its *vyavayi* and *vikaasi* qualities via *Dhamani*. Due to its *sukshma*, *ushna* and *tikshnaguna*, drug penetrates into *sthoor* and *sukshma* *strotasas* and melts out the *doshas*.^[8] At molecular level, *Virechana Karma* removes the vitiated *doshas* from *Rasa*, *Rakta*, *Maansa*, *Asthi* and *Majjawa* *Strotasas* and aids in *Raktaprasadana*. *Shnehapaan* given before *Virechana* causes *Chedanbhedan* of *Doshas* in the cell. *Doshoklesha* occurs within the cellular membrane. The cell then becomes tense. The *Virechana* *Dravya* gives stimulation to the cell membrane. The *Doshas* (toxins) then shift from intra cellular to extra cellular fluid and cause excretion of the *Doshas*. *Virechana* helps in excretion of *Doshas* from *Madhyam marg*. *Virechana* with *langhana*, *deepan*, *paanchana*, *rukshwedana*, *nityavirechana*, *shaman*, *bruhana* and *rasayanachikitsa*, achieved a good prognosis in the patients with Autoimmune disorders specifically musculoskeletal type.

RaktaDushti – Vaayu (parspardushti)



Dhaatugatatwa (madhyam Marg) – Doshaleen



Shodhana

CONCLUSION:

Thus, Ayurvedic management given in Autoimmune disorders with special reference to *Vaatrakta* showed significant improvement. This was a case study where *Virechana* was the main line therapy and showed significant results. But, still further study is needed for more evaluation.

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REFERENCES:

- [1] BraunWals, Fauci. Harrison's's principle of Internal Medicine, 18th edition, 2010, p2719
- [2] Prem Kumar B*1, 2014 (Article in Indian journal of pharmacy practice) - Epidemiology of Autoimmune Disorders with Special Reference to Rheumatoid Arthritis from a Tertiary Care Center.
- [3] Braun Wals, Fauci. Harrison's's principle of Internal Medicine, 18th edition, 2010, p2774
- [4] SarvesSarvesh Kumar Singh, KshipraRajoria (Article in the journal of integrative medicine-2016) - Ayurvedic approach for management of ankylosing spondylitis: A case report
- [5] Braun Wals, Fauci. Harrison's's principle of Internal Medicine, 18th edition, 2010, p2774
- [6] Braun Wals, Fauci. Harrison's's principle of Internal Medicine, 18th edition, 2010, p2136
- [7] Commentary by Sri Chakrapnidatta, ChakrapaniTika, sutrasthana, 28th chap, Shlok no7.
- [8] Charaksamhita – a book entitled The 'Charaka Samhita' edited "CharakaChandrika" Hindi commentary along with special deliberation by Dr.Bramhanand Tripathi published by Chaukhambasurbhartiprakashan, Varanasi-2008