



A CASE STUDY: AYURVEDIC MANAGEMENT OF AUTOIMMUNE DISEASE

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ABSTRACT:

Background: Autoimmune diseases occur when the immune system produces antibodies that wrongly attack the body's own cells. Immune system usually protects from infection. It does this by finding and fighting off viruses and bacteria that enter body. Autoimmune inflammatory disease is associated with unknown etiology in which organs and cells undergo damage initially mediated by tissue-binding autoantibodies and immune complex. It is results from interaction among Genetic, Hormonal (sex hormone- mostly in female due to estragon), environmental(UV rays-induce damage DNA), and Immunological factor. Many test are used for diagnosis of the Autoimmune disease. ANA (Anti nuclear antibody) test in likely used to autoimmune diseases. Clinically Coeliac disease, Lupus, Rheumatoid arthritis, Grave's disease, Multiple sclerosis, Type 1diabetes. Here a 39 years old female visited OPD with the complaints of all joints pain, all small joint swelling, morning stiffness, fever, anorexia ,weakness ,difficulty in all activity, difficulty in walking since 1year and she was diagnosed ANA positive. With the help of *Ayurvedic* diagnostic tool like *Dashavidha pariksha* and *Astavidha pariksha*, and Vyadhi-kshmatva Siddhant, we treated patient with *Amavata* line of treatment successfully.

Keyword: Autoimmune disease, *Kshara basti* , *Lavana Sweda*, *Shaman Aushadhi*

INTRODUCTION:

Autoimmunity¹ results from the failure of immunological tolerance, the process by which the immune system recognises and accepts self tissue. There are a number of mechanisms of immune tolerance. Central tolerance occurs during lymphocyte development, when T and B lymphocytes that recognise self antigens are eliminated before

they differentiate into fully immunocompetent cells. This process is most active in fetal life, but continues throughout life as immature lymphocytes are generatedⁱⁱ. Inevitably some autoreactive cells evade deletion and reach the peripheral tissues, where they are controlled by peripheral tolerance mechanisms. These include suppression of autoreactive cells by regulator T cells, generation of functional hypo responsiveness in lymphocytes which encounter antigen in the absence of the co-stimulatory signals that accompany inflammation, and T cell death by apoptosisⁱⁱⁱ. Autoimmune diseases develop when self-reactive lymphocytes escape from these tolerance mechanism and become activated.

The spectrum of autoimmune diseases is broad. They can be classified by organ involvement or by the predominant mechanism responsible for tissue damage^{iv}.

1.Organ-specific immune response directed against localised antigens: Graves' disease, Hashimoto's thyroiditis ,Addison's disease, Pernicious anaemia, Type 1 diabetes, Sympathetic ophthalmoplegia, Multiple sclerosis ,Goodpasture's syndrome ,Pemphigus vulgaris, Bullous pemphigoid, Idiopathic thrombocytopenic purpura, Autoimmune haemolytic anaemia, Myasthenia gravis, Primary antiphospholipid syndrome, Rheumatoid arthritis, Dermatomyositis, Primary biliary cirrhosis, Autoimmune hepatitis, Sjögren's syndrome^v.

2.Multisystem immune response directed to widespread target antigens: Systemic sclerosis, Mixed connective tissue disease, SLE.

The Gell and Coombs classification^{vi} of hypersensitivity is the most widely used, and distinguishes four types of immune response which result in bystander tissue damage.

Type I hypersensitivity	Type II hypersensitivity	Type III hypersensitivity	Type IV hypersensitivity
It is relevant in allergy but is not associated with autoimmune disease.	Injury is localised to a single tissue or organ and is mediated by specific autoantibodies.	-It is a generalised reaction resulting from immune complex deposition - It initiates activation of the classical complement cascade, as well as recruitment and activation of phagocytes and CD4* lymphocytes. - Site of immune complex deposition is determined by the relative amount of antibody, size of the immune complexes, nature of the antigen and local haemodynamic. -Generalised deposition of immune complexes gives rise to systemic diseases such as SLE.	It activated T cells and macrophages mediate phagocytosis and tissue damage

In Ayurveda, Immunity correlate with *Vyadhikshmatva*. *Vyadhikshmatva*^{vii} is body's natural Bala. It is responsible for to avoid production of any disease .It's called *Vyadhibala-virodhitama* and *vyadhyutpadak-pratibandhaka*.

Treatment modalities for autoimmune diseases vary based on the type of disease and its severity. Therapeutic approaches primarily aim to manage symptoms, reduce immune system activity, and maintain the body's ability to fight diseases. Nonsteroidal anti-inflammatory drugs (NSAIDs) and Immunosuppressants are commonly used to reduce inflammation and control the overactive immune response. As patient was not willing to continue with steroids any further, she alternatively opted for Ayurveda treatment. Based on *Dashavidha Pariksha* and *Astavidha Pariksha*, and *Vyadhi-kshmatva* Siddhant and dosha involved in this present condition is similar to that of *Lakshna of Amavata*. So it is a managed with the line of treatment of *Amavata*. She was treated with *Kshara basti* and *Lavana Pottali Sweda*, *Shamana karma*. After Completion of treatment there is much relief in sign and symptoms of the patient, marked improvement found in the pain, swelling, stiffness, fever ,weakness, and gait. The results of the treatment sustained almost for a year without any complication and flare up of symptoms. Here an attempt to discuss this Case paper, a patient had positive ANA test and Autoimmune disease symptoms which was managed successfully by ayurveda treatment was discussed.

CASE REPORT: A 39 years old female patient came at O.P.D. No 5(*PANCHAKARMA*) at Government Akhandanand Ayurveda Hospital on 3rd APRIL 2023 with below enlisted complaints,

- *Sarvang Sandhi Pradesha Shula* (Polyarthrititis) -Since 1 year
- *Adhobhag Dorbalyata*(Weakness in lower body segment)- Since 1 year
- *Asane-Gamne Kasthata*(Difficulty in walking)- Since 1 year

- *Siroshula* (Headache -which increase at night) - Since 1year
- *Sarvang sandhi pradesha shotha kavachita* (joint swelling sometime) - Since 1year
- *Jwara* (Fever)-sometimes
- *Aruchi*(Anorexia)- Since 1year
- *Pratah kale stabdhata*(Morning stiffness)- Since 1year
- *Angamarda*(Malaise)
- Irritability-Since 6 month
- Face rashes(mild)-Since 6 month

The patient was apparently healthy 3 months back later she first developed pain in knee joint and wrist joint. It was sudden in onset and progressive in nature. It was dull aching type of pain. It used to relieve with medication. The pain later progressed to involve the joint of fingers , elbow, ankle and shoulder. She gives a H/O of morning stiffness with sometimes swelling in joints. The patient also complains of weakness in the both lower limbs and low back pain, and also difficulty in walking. There is also complains of anorexia, morning stiffness, dryness of mouth and face rashes.

PAST HISTORY: No DM/HTN/Thyroid disease/any major surgery. There is H/O associated fever of intermittent type which would present in night and relieve by day since 2 months relieved by conservative treatment and The patient gives a H/O chronic dull aching type of headache since 1 year.

FAMILY HISTORY- Not any history .

ALLERGY-Not any allergy.

MENSTRUATION HISTORY: Regular/25-26days interval/ 2-3 day scanty, less flow.

OBSTRETIC HISTORY: G₂P₂L₂A₀ / 2 FTND

Personal history: -

- Occupation – House wife
- Appetite – Decreased
- Addiction – No any addiction
- Allergy – No history of any food or drug allergy
- Gait – Disturbed

Asthavidh pariksha: -

- *Nadi* (pulse)- 74/min
- *Mala* (stool)- *Vibandha* (constipated)
- *Mutra* (urine)- *Prakrut* (natural)
- *Jihwah* (tongue)- *Sama* (coated)
- *Shabda* (voice)- *Prakrut* (natural)
- *Drik* (eyes)- *Prakrut* (normal)
- *Akriti* (built)- *Sthula* (obese)

Dashavidha pariksha: -

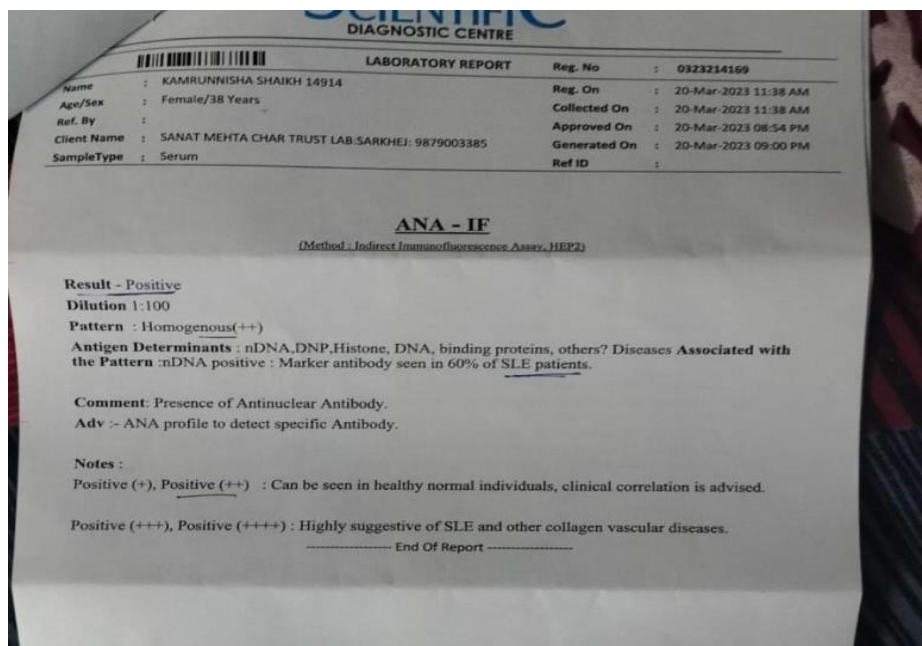
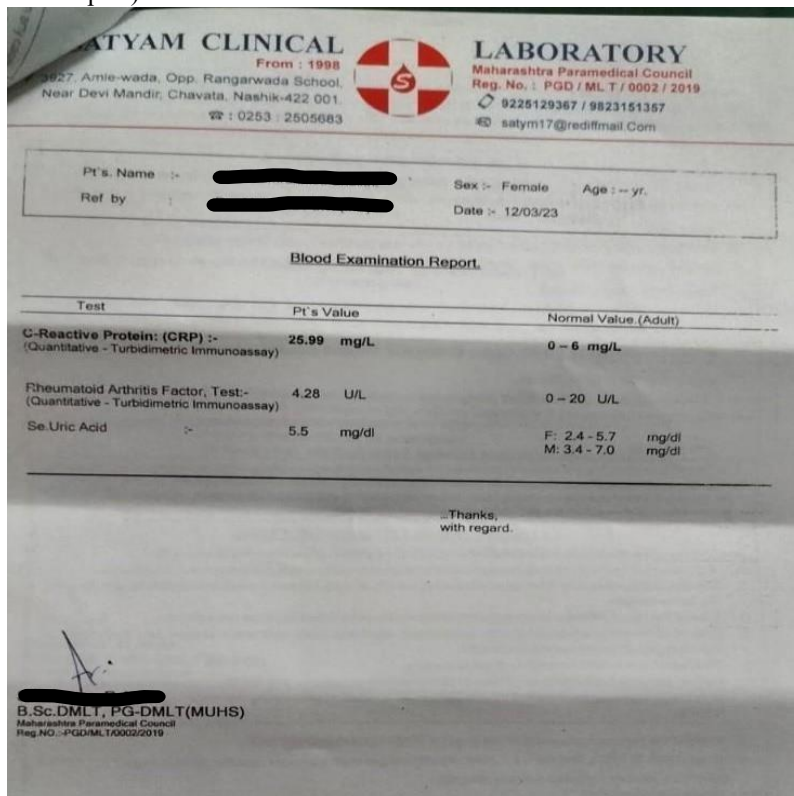
- *Prakriti* (constitution)- Obese(*kapha pradhan vata anubandh*)
- *Vikruti* (morbidities)- *Dosha* (*vata pradhan tridosha*), *dooshya* (*rasa,meda,asthi*)
- *Satwa* (psychic condition)- *Avara*
- *Sara* (excellence of tissue elements)- *Meda sara*
- *Samhanana* (compactness of organs)- *Madhyam*
- *Pramana* (measurement of organs)- *Madhyam*

- *Satmya* (homologation)- *Sarva rasa*
- *Aharasakti* (power of intake and digestion of food)- *Avara* (have decreased appetite)
- *Vyayamsakti* (power of performing exercise)- *Avara Vaya* (age)- 39year

Lab investigations:

1. RA Factor- negative
2. **CRP - Positive,**
3. Serum uric acid- within normal range
4. **ANA IF- positive**

(Before report)



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TREATMENT:

In this case, *Kshara Basti*(Table-1) as *Shodhana* is given for 15 days along with *Shamana Aushadhi Yoga*(Table-2) , *Lavana sweada* (2times in day)

Table no.1 : Kshara Basti

Sr no.	Name	Quantity
1	<i>Guda</i> (jaggery)	2 Pala(96gm)
2	<i>Saindhava</i> (salt)	1 Aksha(12gm)
3	<i>Chincha kalka</i>	2 Pala(96gm)
4	<i>Satpuspa kalka</i>	1 Aksha(12gm)
5	<i>Go-mutra</i>	8 Pala(380ml)

Date	Karma	Medicine/ Dose	Duration
04/03/2023 to 18/03/2023	<i>Kshara basti</i>	596 ml	Continued for 15 Days
04/03/2023 to 18/03/2023	<i>Lavana Pottali Sweda</i>		2 times /day (Morning-Evening)

In these 15 days, continuous *Basti* duration, patient did not develop any *Vata-Piita Vruddhi Lakshana*. 3

Time of administration: - *Kshara Basti* is a *Niruhana Basti* that can be given after meal as per *Acharya Chakrapanidatta*^{viii}.

Table No. 2: *Shamana Chikitsa* - continue after *Basti* and *Swedana Karma* last for 3 months.

S.N.	Medicine	Dose	Frequency	Time of administration	Anupana	Duration 03/04/2023to 19/04/2023
1	<i>Yograja Gugglu</i>	250mgx2tab	BD	After food	lukewarm water	3months
2	<i>Ajmodadi Churna</i>	2gm	TDS	Before food	lukewarm water	3months
3	<i>Rasnadi Kwatha</i>	40ml	BD	empty stomach	-	3months
4	<i>Arogyavardhini vati</i>	250mgx2tab	BD	After food	lukewarm water	3months

5	<i>Saneeivani vati</i>	250mx2tab	BD	After food	Lukewarm water	3months
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RESULT:

Table no.3[Result before and after Treatment]

Sr.no.	Symptoms	Before Treatment Date:03/04/2023	After Kala Basti karama Date: 19/04/2023	After 3 months of treatment Date:19/07/2023
1	<i>Sarvanga Sandhi Pradesha Shula</i>	Severe	Mild	Absent
2	<i>Adhobhaga-Dorbalyata</i>	Severe	Absent	Absent
3	<i>Asane-Gamne Kasthata</i>	Moderate	Absent	Absent
4	<i>Siroshula (which increase at night)</i>	Moderate	Absent	Absent
5	<i>Aruchi</i>	Severe	Mild	Absent
6	<i>Angamard</i>	Sever	Mild	Absent
7	<i>Pratah kale Stabdhata</i>	Sever	Absent	Absent
8	<i>Jwara</i>	Moderate	Absent	Absent

DISCUSSION:**SAMPRAPTI GHATAK –**

Dosha- Tridosha mainly Vata-Kapha

Dushya- Rasa, Rakta, Meda, Asthi, Majja

Updhatu - Snayu, kandara

Agni - Vishama

Ama- Sama

Strotas- Annavaha ,Rasavaha,Mamsavaha,Asthivaha

Udhhavasthana- Pakwashaya, Amashaya

Adhistan- Deha

Vyakti Sthana- Sarvanga sarira pradesa,Sandhi

Rogamarga- Madhyama roga marga

Swabhava- Chirkari

Sadhyasadhyata- Kruccha-sadhya

NIDANA-PANCHAK: Following Information about Nidan was found in this patient.

NIDANA - *Viruddha-ahara ,Ajirnasana, Viruddh-chestha ,Nischalata,*
Physical activity after taking *Snighdha Bhojana.*

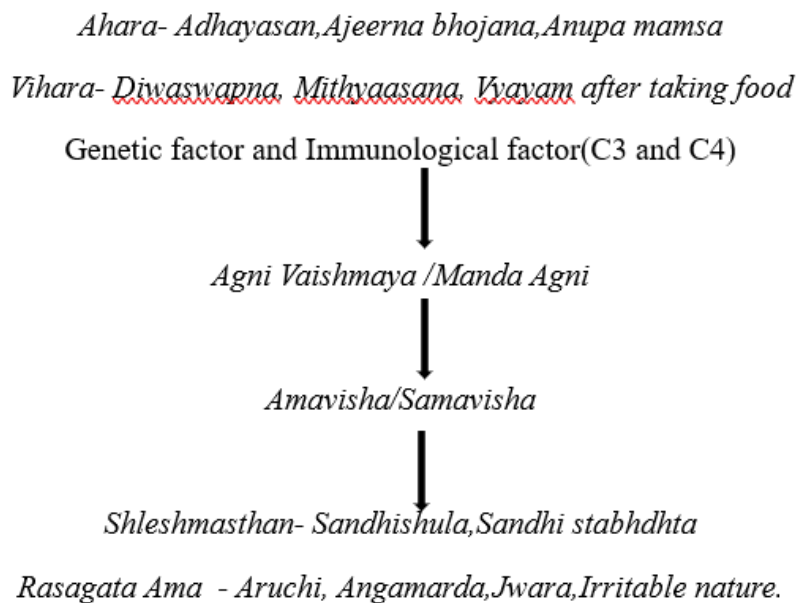
PURVARUPA - *Siroruja ,Gatraruja*

RUPA: *Sarvanga-Sarira pradesha stabhdta ,Sarvanga Sandhi pradesha shula,Angamarda,Trishna,Jwara,*
Gauvaravta

UPASHAYA: *Ushna, Tikta, Katu, Deepana, Laghu Ahara and Ushna Vihara .*

ANUPASHAYA: *Snighdha ahara, manda chestha, adhyasana, ajirnasana ,alasya.*

SAMPRAPTI:



Symptoms of Autoimmune diseases can significantly vary, primarily based on the specific type of the disease and the body part that it affects. Symptoms are often diverse and can be fluctuating from mild to severe, and typically comprise low-grade fever, fatigue, and general malaise. However, some Autoimmune diseases may present with more specific symptoms such as joint pain, skin rashes (e.g., urticaria), or neurological symptoms. Similar symptoms have been explained under the heading of *Amavatanidana*^{ix} in *Madhavanidana*. like *Jwara, Aruchi, Angamarda, Sandhi-shoola, Sandhi-shotha* etc.

Considering the prognosis and limitations in the line of treatment *Kshara Basti Karma* were administered methodically, by the administration of Basti treatment it acts at root levels and does correction of *Dushyas* and elimination of vitiated *Dosha* out of the body. Main treatment is in that case improving *Jatharagni* and

removal of toxin from body is the main aim of treatment. We gave some *Vatahara Aushadhi* to pacify vitiated *Vata* and also some *Deepana-Pachana Aushadhi* to digest the toxin.

- **Kshara basti^x:**

- *Basti* used for all *Tridosha* mainly *Vata* which move all over body. *Basti Dravya* reaches to *Pakwasaya* which is the main seat of *Vata dosha*. From there it reaches to whole body and destroy the *Dosha* accumulated in the whole body. Here, it acts on *Samana* *vayu*, which lies in the near the seat of the *Jatharagni* leads to ignition of *Jatharagni* and also *Anulomana* of *Apana Vayu*.
- *Guda^{xi, xii}*- In *Kshara Basti* instead of *Madhu*, *Guda* is used. Here, *Purana Guda* should be taken and the properties are *Ishat-Kshara*, *Naati-Sheeta*, *Laghu*, *Pathyatama*, *Anabhishtyandi*, *Agnivardhaka*, *Vatakaphahara*. It along with *Saindhava* makes homogenous mixture, to form a solution having properties to permeable the water easily. The retention of the irritative substances may be favoured by making its solution as nearly isotonic as possible by using colloidal fluids. It also helps in carrying the drug up to micro-cellular level.
- *Saindhava Lavana^{xiii}*: *Lavana* is one among *Shadrasa*, having *Sookshma*, *Snigdha*, *Laghu*, *Vishyandi*, *Tikshna*, *Ushna*, *Vataghna* and *Anabhishtyandi* *gunas*, *Sheeta Virya*, *Madhura Vipaka*, acts as *Deepana*, *Paachana*, *Tridoshagna* and promotes the evacuation of bladder and rectum. Owing to the *Sookshma* property it helps the drug to reach in the micro Channels, *Saindhava* mixed with *Madhu* or *Guda* is capable of liquefying the viscid *Kapha* and breaking it into minute particles for their easy elimination. Similarly it may liquefy the morbid *Dosha Sanghata* and breaks it into smaller particles by virtue of its *Ushna* and *Tikshna* property respectively and thus helps their elimination. It regulates acid alkaline balance, absence or less quantity of *Saindhava* is responsible for *Ayoga* and excess quantity produces *Daha* and *Atisara*. The combination of *Guda* and *Saindhava Lavana* represents glucose and electrolytes and prevents dehydration in the patient..
- *Kalka^{xiv}*: It gives potency to the whole combination and serves the function of *Utklesana*, *Dosaharana* or *Samsamana* depending upon its contents and are selected accordingly. It gives required thickness to the *Basti* formulations. It helps to disintegrate *Malas* by increasing osmotic permeability of solution. Less quantity or absence of *Kalka*, makes the *Basti Dravya* thin which comes out immediately after administration. Excess quantity of the *Kalka* makes the *Basti Dravya* thick and difficult for administration and may not come out within the expected time. *Chincha* is used as *Kalka Dravya* in *Kshara Basti*. *Pakwa Chincha* is having *Amla rasa*, *Vata-Kaphashamaka*, *Ruksha*, *Deepana*, *Sara* and *Ushna* properties. These properties make it useful for the disease *Amavata* and *Kapha Rogas*. *Ruksha Guna* and *Ushna Virya* helps in counteracting the *Ama*, hence achieves *Ama Pachana*.
- *Gomutra^{xv, xvi}*: It is the chief content used as *Avapa Dravya*, which owing to its *Katu Rasa*, *Katu Vipaka*, *Ushna Virya*, *Laghu*, *Ruksha*, *Tikshna Guna* pacify the *Kapha*. The *Ruksha Guna* of *Gomutra* is very much helpful in the diseased condition like *Amavata*, *Kapha* and *Medhoja Vyadhies*. It is considered as useful for *Kshara Basti* owing to its *Tridoshahara*, *Agnideepana*, *Ama Pachana*, *Srotovishodhana* and *Vatanulomaka* properties.
- There are several references about *Basti* to explain the mode of action of *Basti*. It is said that when *Basti* is administered it reaches *Nabhipradesh*, *Kati*, *Parshwa*, *Kukshi* and *Veerya^{xvii}* of *Basti* spreads all over body and churns and removes the *Doshas* through the anal route. *Acharya Parashara^{xviii}* says that *Guda* is the *Mula* of all *Siras* in the body, hence the medicines administered through *Guda* reaches up to head and nourishes the whole body. *Ashtanga Sangraha^{xix}* says just like farm gets nourished by water supplied through the channels the medicines administered through the *Guda* first reaches and nourishes *Apana Vayu* followed by *Samana*, *Vyana*, *Udaan* and *Prana Vayu*. By this the *Veerya* of *Basti* is carried and nourishes the body and promotes the health and diseases
- **Ajmodadi Churna^{xx}** contains *Ajamoda*, *Vacha*, *Kutha*, *Amalvetas*, *Saindhava*, *Sarjikshar* etc. All medicines have *Ushna Virya* and having *Deepana Pachana* properties help in ignition of *Jatharagni* and elimination of *Ama Sanchaya* in whole body. Also help in removal of vitiated *Vata dosha* thus help in breakdown of pathogenesis of Disease.
- **Aarogyavardhni Vat^{xxi}** contains *Parada*, *Gandhaka*, *Loha Bhasma*, *Abharak*, *Tamra bhasma*, *Shilajeeta*, *Guggulu*, *Chitakmoola*, *Triphala* and *Kutki*. Its major role is *Srotoshodhak* by which it helps in eliminating excess Toxin from the body. It is best *Deepana Pachana* also. Hence by its ultimate role on *Srotas*, it has best role to play in *Amavata* by breaking its pathogenesis at the foremost step i.e., *Agnimandhya* and *Srotoavarana*.
- **Yograj Guggulu^{xxii}** is well known drug for *Vata Vikara*. Major content of this drug is *Guggulu* and *Triphala*. *Guggulu* has *Vatahara*, *Shodhak*, *Saraka*, *Rochaka* and *Poshtik guna*. so, by its *Gunas* it pacifies the *Vata dosha*, eliminates the accumulated *dosha*. and ignites the *Jatharagni*, hence assist in breaking down the pathogenesis of Disease. The action of *Triphala* is to lessen the *Ushna* and *Tikshana guna* of *guggulu* and to enhance its *Roganik guna*.

- **Dashmool Kwatha**^{xxiii} contains *Panchang of Choti and Badi Kateri, Shalparni and Prishnaparni panchang, Bilwa, Gambhari, Sonapatha, Arni and Gokshura*. This drug mainly act in *Vata* and *Vata-kapha* disease. It is anti-inflammatory as its content *Dashmoola* is *Shothhara* in properties. It is basically used as *Anupana* in *Vata Vikara*.
- **Sanjivani Vati**^{xxiv} contains *Vayvidang, Pippali, Patha, triphala, Vacha, Giloya, Shuddha, Bhilava, Shuddha Vatsanabha*. It helps in digestion of *Ama* and *dosha* and breaks the cycle of *dosha Sanchaya*. It also acts by removing or eliminating the accumulated *Dosha* through urine and sweat. *Vatsanabha* having property of *Ushna*(hotness), *Swedana*(sweating), *Mutral*(diuretic) properties help in proper digestion of *Ama* thus help in breakdown of Pathogenesis of Disease.
- **Lavana pottali swdeda** in *Ruksha* type of *Sweda*. With the help of *lavana pottali sweda*, the temperature will increase to more than 2 to 3 c in all areas of the body and vasodilatation will happen. As a result of vasodilatation an increased of blood passes to the area so that necessary oxygen and nutrition materials are supplied and waste products are removed. Also metabolism will increase and stimulation of neural receptors take place that is how localized inflammation can be managed and pain reduced and also induce muscle relaxation.
- Throughout the procedure, the patient was advised to follow strict diet restrictions. *Nidana Parivarjana* was aimed to prevent further increase *Dosha*. The outcome was combined effect of both *Basti* and *Shamana Chikitsa* along with *Pathya Ahara-Vihara Sevan*.

CONCLUSION:

In Ayurveda both *Doshapartyanika* and *Vyadhipartyanik* Chikitsa are popular. In stead of corelating modern disease exactly with *Ayurveda Vyadhi*, an attempt should be made to do the diagnosis of the disease according to *Ayurveda Siddhant*. Here in this case *Yuktipurana Yojana* of *Panchakarma and Shamana Chikitsa* gave excellent result in the patient.

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- ⁱⁱ Davidson's Principles and practice of Medicine, 22th Edition, Chap 4-Immunological factors in disease-page no 86.
- ⁱⁱⁱ Davidson's Principles and practice of Medicine, 22th Edition, Chap 4-Immunological factors in disease-page no 86.
- ^{iv} Davidson's Principles and practice of Medicine, 22th Edition, Chap 4-Immunological factors in disease-page no 87.
- ^v Davidson's Principles and practice of Medicine, 22th Edition, Chap 4-Immunological factors in disease-page no 87.
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^{xxiii} Bhaisajaya Ratnavali, Kasarogadhikar 13-14

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