Skin diseases in general have a chronic course, characterized by skin eruptions, itching with oozing tendency of exacerbations and recurrence.

Among the primates, only humans have a mostly naked skin, which is the outermost tissue comes with different shades. As a result, people are very aware of, and very sensitive to, the appearance of their skin. Skin diseases in general have a chronic course, tendency of exacerbations and recurrence. Vicarcika is no exception for this decree. It is a chronic illness characterized by skin eruptions, itching with oozing and is one among the Kshudra Kushta. Vicarcika simulates the symptom manifestation of Atopic Dermatitis. The term Atopic Dermatitis refers to distinctive reaction pattern in the skin characterized by itching as a predominant feature. All Kushta are tridoshaja, hence Vicarcika can be explained in similar manner i.e. Kapha is responsible for Kandu, Pitta for Srava and Shyavata indicates the presence of

**ABSTRACT**

**Objectives:** To evaluate therapeutic effect of Khadira rasayana and to measure Health related Quality of life following Khadira rasayana treatment in patients suffering from Vicarcika / Atopic dermatitis. **Study design:** Single group assignment with pre test and post test design. **Study selection:** 27 patients suffering from Vicarcika/ Atopic Dermatitis were selected for the study from SDM Ayurveda Hospital, Udupi. **Intervention:** Koshtha Shodhana on day 1 with oral administration of Erandataila in empty stomach, in a dose of 20 ml in the morning, from day 2 to day 31 oral administration of 5 capsules of Khadira rasayana at early morning in empty stomach, about half an hour before breakfast. **Results:** Khadira rasayana showed moderate improvement in the patients suffering from Vicarcika and best improvement is seen in 4 patients. There was statistically significant improvement in Dermatological Life Quality Index, Severity, Kandu, Pidaka and Srava. **Interpretation and Conclusion:** Khadira rasayana have properties like Kustagna, Kandugna, Vayasthapana, Shothahara and Rasayana, by virtue of these properties of Khadira rasayana the symptoms of Vicarcika got relieved. The improvement was statistically significant without any adverse reactions. So the Khadira rasayana can be used in Vicarcika.

**Keywords:** Vicarcika, Khadira rasayana, Atopic dermatitis.
Vata. Despite Vicarcika being tridoshaja, various acharyas have mentioned different dominances of dosha i.e. Kapha, Pitta, Vata-Pitta, which also suggest specific symptom complexes. As per the symptoms and pathogenesis, Vicarcika has been correlated with Atopic Dermatitis in allied science, i.e. Kandu (excessive itching), Pidaka (papules, vesicles, and pustules), Shyava (erythema with discoloration), Bahusrava (profuse discharge, oozing), Raji (thickening, lichenification of skin), Ruja (pain) and Ruksha (dry lesion). Vicarcika / Atopic Dermatitis affect a sizeable percentage of people. Chronic course of exacerbation as well as remission added with perpetuation and progression demands more effective management and meticulous planning of most effective treatment. As chronic lingering diseases are best treated by rasayana method, this study is planned to establish the beneficial effect of Khadira rasayana in patients suffering from Vicarcika / Atopic dermatitis.

OBJECTIVES:
• To evaluate the therapeutic effect of Khadira rasayana in the management of Vicarcika / Atopic dermatitis.
• To measure the Health Related Quality of Life following Khadira rasayana treatment in patients suffering from Vicarcika / Atopic dermatitis.

METHODS AND MATERIAL:
The study was initiated after obtaining the institute human ethic committees permission (Ref. No. SDMCAU/ACA-49/ECH26/15-16 Date: 23/03/2016)

Source of medicine:
Cap. Khadira rasayana (B.No.170676 Mfg AUG/2017) was obtained from S.D.M Ayurvedic Pharmacy, Udupi.

Source of data:
27 patients fulfilling diagnostic criteria of Vicarcika were taken for study from OPD and IPD of Shri Dharmasthala Manjunatheshwara Ayurveda Hospital, Kuthpady, Udupi. The selection of patient was irrespective of their gender and cast.

Method of collection of data:
A special proforma was prepared with all points of history taking, physical signs and symptoms as mentioned in Ayurveda as well as Allopathic science. Assessment of the signs and symptoms was corroborated by Criteria of Hannifin and Rajka for the Diagnosis of Atopic Dermatitis and laboratory investigations if any.

Design of the study:
Study Type: Interventional
Allocation: Non-Randomized
Endpoint Classification: Efficacy Study
Intervention Model: Single Group Assignment
Primary Purpose: Treatment
Masking: Open Label

Intervention:
Koshtha Shodhana on day 1: Oral administration of Eranda taila in empty stomach, in a dose of 20 ml in the morning.
Khadira rasayana on day 2 to day 31: Oral administration of 5 (2.5 gms/day) capsules of Khadira rasayana at early morning in empty stomach, about half an hour before breakfast (5-0-0 b/f).

Follow up duration-30 days
Total duration of study - 31 days of intervention followed by 30 days of follow up period.

Diagnostics Criteria:
• Presence of signs and symptoms of Vicarcika that include Kandu, Pidaka, Bahusrava, Ruja, Vaivarnya, Daha and Rukshata.
• Criteria of Hanifin and Rajka for the Diagnosis of Atopic Dermatitis.

Inclusion criteria:
1. Mild, moderate or severe Atopic dermatitis (stage of the illness in a given subject is determined by Grading Score of Rajka and Langeland for Severity of Atopic Dermatitis).
2. Men or women.
3. 16 years of age or older.
4. Written informed consent by the subject or legal guardian.
5. Percentage of overall body surface area of involvement (BSA) must be ≥2% (>5%).
Women of child bearing potential will be allowed to participate in the study, and these subjects will be required to use at least one form of birth control.

**Exclusion criteria:**
1. Subjects with any active skin disease other than Atopic dermatitis.
2. Subjects who have had systemic or topical treatment for Atopic dermatitis within 14 days prior to first application *Khadira rasayana*.
3. Women who are pregnant, attempting to conceive, or nursing an infant.
4. Patients suffering from manifestation like Infective skin lesions.
5. Patients with evidence of malignancy.
6. Patients suffering from other major systemic illness necessitating long term drug treatment.

**OUTCOME MEASURE**

**Primary Outcome Measure**
1. Change in Severity of Atopic Dermatitis (AD) as Measured by a Change in Grading Score of Rajka and Langeland for Severity of Atopic Dermatitis [Time Frame: Baseline and day 31].
2. Change in Dermatology Life Quality Index (DLQI) [Time Frame: Baseline and day 31].

**Secondary Outcome Measures**
1. Change in Itch Intensity (*Kandu*) as Measured by a Change in Visual Analog Scale (VAS) Score [Time Frame: Baseline and day 31].
2. Change in Pain Intensity (*Ruja*) as Measured by a Change in Visual Analog Scale (VAS) Score [Time Frame: Baseline and day 31].
3. Change in Discharge Intensity (*Srava*) as Measured by a Change in Visual Analog Scale (VAS) Score [Time Frame: Baseline and day 31].
4. Change in Eruption Intensity (*Pidaka*) as Measured by a Change in Visual Analog Scale (VAS) Score [Time Frame: Baseline and day 31].
5. Change in Pigmentation Intensity (*Vaivarnya*) as Measured by a Change in Visual Analog Scale (VAS) Score [Time Frame: Baseline and day 31].
6. Change in Burning sensation Intensity (*Daha*) as Measured by a Change in Visual Analog Scale (VAS) Score [Time Frame: Baseline and day 31].
7. Change in Dryness Intensity (*Rukshata*) as Measured by a Change in Visual Analog Scale (VAS) Score [Time Frame: Baseline and day 31].
8. Percentage change in total symptom score [Time Frame: Baseline and day 31].

(The overall improvement of medication in a given subjects is calculated by the percentage reduction in the total score of *Kandu, Ruja, Srava, Pidaka, Vaivarnya, Daha* and *Rukshata*. Further, if the improvement is 100% then it is considered as Complete Remission, 75 – 99% then it is Marked Improvement, 74% - 50% considered as best improvement, 49% - 25% then it is moderate improvement, 24 - 0% is considered as unchanged and worsening of the symptoms.)

**OBSERVATIONS**
Among the 27 patients, maximum number of patients ie,13(48%) belonged to age group 36 – 55, whereas minimum number of patients observed is 1(3.7%) belonged to the age group 76 and more in which 63% are male and 37% were female. 74% belonged to Hindu religion, 11% of patients belonged to Muslim and other religions. 37% were graduates, 15% were illiterates, 22% patients had completed junior college and higher secondary. 55% patients were married and 22% were unmarried. 30% patients were doing business among them 20% patients are exposed to harmful chemicals due to pesticide business as the patients are continuously exposed to the chemicals like Acephate, N-methyl carbamate, Chlorpyrifos, Endosulfan. These chemicals causes skin irritations and it triggers the symptoms in patient. 15% patients are painters, as they regularly exposed to the chemical compounds like pigments, Extenders, binders, solvents, additives. The main organic solvents used in paints are toluene, xylene, aliphatic compounds etc. Among 27 patients,
52% patients belong to middle class, 5% belongs to upper middle class, 15% belongs to lower class 55.5% patient doesn’t had any 11% were alcoholic, 18.5% were smokers, 14.8% were addicted to Tobacco chewing. Present study showed that 66.6% are of mixed diet rest is of Vegetarian diet. 40.7% patients belong to Kapha Pitta prakruti, 37% were Vata Pitta, and 14.8% were Vata Kapha. Analysis of Sara revealed that 62.9% patients belonged to madhyama sara, 37.03% belongs to avara sara. 66.6% are of madhyama samhanana, were 25.9% are of pravara samhanana and only 7.45 were of avara samhanana. 62.96% belongs to madhyama pramana, 7 were of pravara pramana and 3 are of avara pramana analysis of satwa revealed that 62.9% patients belonged to madhyama satwa, 33.33% are of pravara satwa and 29.6% are of avara satwa. 66.6% are of madhyama samthmya, 22.22% were of avara samthmya and 11.1% are of pravara samthmya. majority of patients (66.66%) are of madhyama ahara shakti, 18.5% had avara ahara shakti, were as 14.8% are of pravara ahara shakti. majority of patients (51.8%) had madhyama vyayama shakti, were 25.9% patients are of avara and 22.2% are of pravara vyayama shakti. 44.44% of patients falls in Aharja nidana category, were as 25.9% in viharaja, 11% in manasika nidana, 14.8% in Ahara-viharaja nidana. Analysis of symptoms i.e, Kandu, Srava, Pidaka, Vaivarnya were observed in all the patients (100%), Ruja was seen in 22.2%, 18.5% had Daha, Rukshata was seen in 51.8%, So first four symptoms i.e Kandu, Srava, Pidaka and Vaivarnya are considered as cardinal symptoms. On analysis of Severity of the symptoms among 27 patients 33.33% had Very large effect, 25.9% had extremely large effect, 22.2% had moderate effect, 11.1% small effect and 7.4% had no effect. Vicarcika had a strong impact on Quality of Life in the form of stress and depression as patient use to feel embarrassment in society. Higher the value of index more is the impact on quality of Life as observed in this study. In this study no patients had mild variety, whereas 62.9% had moderate and 37.03% had severe variety of Atopic dermatitis.

RESULTS: (Table no.1)
Statistical analysis before and after the treatment was done using Sigma stat statistics software version 3.5 with the Mean(±SE), Standards deviation and results were analyzed statistically using Wilcoxin signed rank test.
1) Effect of treatment on Severity:
Severity of the disease was assessed by change in Severity of Atopic Dermatitis (AD) as Measured by a Change in Grading Score of Rajka and Langeland for Severity of Atopic Dermatitis. At baseline the mean score of Severity was 7.037(0.189) that came down to 4.481(0.163) following Khadira rasayana thus recording an improvement by 2.556. On analysis with statistical test the improvement was highly significant with test of significance P<0.001.

2) Effect of treatment on Dermatological quality life index:
Quality status of Life of the patients suffering from Vicarcika was assessed by adapting the questionnaire of Dermatological Quality of Life Index. If scoring obtained is higher it indicates poor quality of life and vice versa. At baseline the mean score of Quality status of life was 15.11(1.665) that came down to 10.63(1.348) following Khadira rasayana thus recording an improvement by 4.48. On analysis with statistical test the improvement was highly significant with test of significance P<0.001.

3) Effect of treatment on Kandu:
Effect of Khadira rasayana on Kandu was assessed using Visual analogue scale. At base line the mean score was 6.889 (0.126) and after intervention reduced to 2.222(0.299). There was significant improvement on statistical analysis i.e test of significance is P<0.001.

4) Effect of treatment on Ruja:
On assessment of Ruja in 6 patients of Vicarcika using Visual analogue scale, the changes in the mean score of Ruja at base line was 6(0.632) and after intervention reduced to 2.33(0.615). The change that occurred with the treatment is greater than would be expected by
chance; there is a statistically significant difference (P = 0.031).

5) Effect of treatment on Srava: The effect of Khadira rasayana on Srava before and after the treatment in 27 patients is given in table. Statistical analysis revealed that the mean score of Srava which was 5.22(0.308) before treatment was reduced to 3.037(0.269) after treatment and this change that occurred with the treatment is statistically significant (P<0.001).

6) Effect of treatment on Pidaka: The effect of Khadira rasayana on Pidaka was assessed by Visual analogue scale before and after the treatment in 27 patients is given in table. Statistical analysis revealed that the mean score of Pidaka which was 5.4(0.289) before treatment was reduced to 3.85(0.254) after treatment and this change that occurred with the treatment is statistically significant (P<0.001).

7) Effect of treatment on Vaivarnya: Statistical analysis revealed that the mean score of Vaivarnya which was 5.815(0.177) before treatment was reduced to 4.815(0.307) after treatment, and this change that occurred with the treatment is statistically not significant (P=0.005).

8) Effect of treatment on Daha: The effect of Khadira rasayana on Daha before and after the treatment in 6 patients using Visual analogue scale is given in table. Statistical analysis revealed that the mean score of Daha which was 4.50(1.11) before treatment was reduced to 1.833(0.60) after treatment, and this change that occurred with the treatment is statistically not significant (P=0.0.63).

9) Effect of treatment on Rukshata: The effect of Khadira rasayana on Rukshata before and after the treatment in 14 patients is given in table. Statistical analysis revealed that the mean score of Rukshata which was 5.500 before treatment was decreased to 3.714 after treatment, and this change that occurred with the treatment is statistically not significant (P=0.016).

TOTAL EFFECT OF THERAPY (Table no. 2)
After the full course of Khadira rasayana patients were analyzed for their symptoms. The obtained results are described below:

- Complete remission and Marked improvement: this was not seen in any of the patients, it might be because of the limited duration of the study.

- Best improvement: this was observed in only 14.8% of patients. The patients whose severity was mild got best improvement.

- Moderate improvement: among 27 patients, 81.4% falls in this category. This result proves that there was a reduction in symptoms of Vicarcika.

- Unchanged: 3.7% patient had no any changes in their symptoms, because of severe variety of Vicarcika, which needed long duration of medication and Shodhana along with that.

- Worsening: this was not seen in any of the patients.

Table 1: Effect of Khadira Rasayana on the symptoms of Vicarcika

<table>
<thead>
<tr>
<th>Outcome (Score range)</th>
<th>Data</th>
<th>Mean ±SD</th>
<th>±SE</th>
<th>Median</th>
<th>Min</th>
<th>Max</th>
<th>Mean BT-AT</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity (3-9)</td>
<td>BT</td>
<td>7.037</td>
<td>0.98</td>
<td>0.189</td>
<td>7</td>
<td>5</td>
<td>9</td>
<td>2.556</td>
</tr>
<tr>
<td>DLQI (0-30)</td>
<td>AT</td>
<td>4.481</td>
<td>0.84</td>
<td>0.163</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td>4.48</td>
</tr>
<tr>
<td>Kandu (0-10)</td>
<td>BT</td>
<td>15.11</td>
<td>8.65</td>
<td>1.665</td>
<td>15</td>
<td>0</td>
<td>30</td>
<td>4.667</td>
</tr>
<tr>
<td></td>
<td>AT</td>
<td>10.63</td>
<td>7</td>
<td>1.348</td>
<td>10</td>
<td>0</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Ruja (0-10)</td>
<td>BT</td>
<td>6.889</td>
<td>1.12</td>
<td>0.216</td>
<td>7</td>
<td>5</td>
<td>10</td>
<td>4.667</td>
</tr>
<tr>
<td></td>
<td>AT</td>
<td>2.222</td>
<td>1.55</td>
<td>0.299</td>
<td>2</td>
<td>0</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

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Srava (0-10) | BT 5.22 | 1.6 | 0.308 | 5 | 2 | 9 | 2.183 | <0.001
| AT 3.037 | 1.4 | 0.269 | 3 | 1 | 6 |

Pidaka (0-10) | BT 5.4 | 1.5 | 0.289 | 5 | 0 | 8 | 1.55 | <0.001
| AT 3.85 | 1.3 | 0.254 | 4 | 2 | 8 |

Vaivarnya (0-10) | BT 5.815 | 0.92 | 0.177 | 6 | 4 | 7 | 1 | =0.005
| AT 4.815 | 1.59 | 0.307 | 5 | 2 | 8 |

Daha (0-10) | BT 4.50 | 2.73 | 1.11 | 5 | 0 | 8 | 2.667 | =0.063
| AT 1.833 | 1.47 | 0.60 | 1.5 | 0 | 4 |

Rukshata (0-10) | BT 5.500 | 1.22 | 0.327 | 6 | 3 | 7 | 1.786 | =0.016
| AT 3.714 | 1.20 | 0.322 | 3 | 2 | 6 |

*Wilcoxin signed rank test

Table 2: Overall effect of the treatment

<table>
<thead>
<tr>
<th>OVERALL EFFECT</th>
<th>No. of PATIENTS</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPLETE REMISSION (0%)</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>MARKED IMPROVEMENT (99%-75%)</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>BEST IMPROVEMENT (74%-50%)</td>
<td>4</td>
<td>14.81%</td>
</tr>
<tr>
<td>MODERATE IMPROVEMENT (49%-25%)</td>
<td>22</td>
<td>81.4%</td>
</tr>
<tr>
<td>UNCHANGED (24%-0%)</td>
<td>1</td>
<td>3.7%</td>
</tr>
<tr>
<td>WORSENING</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

Figure 1: Overall effect of treatment

**DISCUSSION**

**Rasayana in Vicarcika**

Vicarcika manifests due to vitiation of Tridosha along with Tvacha, Rakta & Ambu. The understanding regarding causation of Atopic dermatitis is due to antigen antibody reaction and factors mainly involved are sensitized skin or sensitizers. The body immune mechanism fails to rectify this pathology due to less immune power. This can be resolved by "Rasayana Chikitsa", as it revitalizes each & every organ at its cellular level.

We are unaware of the harmful effects of pollution, processed food & over medication on our body. Ayurveda doctrines opine that, the incorporation of Dosha & Dushya leads to formation of disease only when the Vyadhikshamatva is reduced. Rasayana maintains the deterioration and upgrades the Vyadhikshamatva, thereby preventing the disease formation. Drugs having the properties like Kusthaghna, Kandughna, Krimighna, Daha prashamana & Vishaghna guna can be considered as Tvachya Rasayana.
Rasayana is classified as
1. Kuti praveshika and Vatatapika
2. Kamya, Naimittika, Ajasryuka.
3. Samshodana and Samshamana
The one which is given in Vyadhi avasta is known as Vyadhihara rasayana or Naimittika rasayana. Acharya dalhana classifies rasayana as Samshodana rasayana and Samshamana rasayana. Samshodana is achieved with the drugs like – Sasyadi rasayana and Samshamana by Nagabaladi Rasayana. Nagabaladi comprises ten drugs, those are – Bala, Atibala, Chandana, Agaru, Dhava, Tinisha, Khadira, Shimshipa, Asana and Panarnava. Among this Khadira is Agrya in Kusta. In Laghu nigantu the drug Khadira is advised in Vicarcika. As Vicarcika run chronic course of exacerbation Khadira rasayana is advocated for benefit of the patient by effect on particular Srotas and Dhatu. If Dhatu i.e. Dushya are healthy enough to resist the provocation of Dosha, then disease may not come into existence & can be prevented. Rasayana deals with this aspect of building of best Dhatu & ultimately providing Vyadhipkshamatva.

So drug Khadira in the form of rasayana taken for the present study. Khadira rasayana is one of the yoga mentioned by acharya Sushruta in Mahaskushchitiksaadhaya. It basically contains Khadira and Amalaki, and gritam and madhu as anupana. Shodhana is mentioned as a modality, which is considered as a purvakama for Rasayana Chikitsa. In this study sadhya shodhana has been carried out instead of kramataha shodhana because to access the efficacy of Khadira rasayana alone in this study.

As actual procedure was difficult to adopt so a newer method for preparation was thought to bring out. For this Khadira kwatha was taken and made into ghana (aqueous extract) form and mixed with equal amount of Amalaki ghana. For preparation raw drugs was obtained from stock of SDM pharmacy.

This clinical work is established to see the clinical efficacy of the Khadira rasayana in Vicarcika. The attempt of discussion lay out here is a trial to analyze the observations and results post therapeutically for a designed study of Vicarcika.

**Effect of therapy on individual signs and symptoms:**

- **Kandu:** The overall reduction in symptom of Kandu as assessed by VAS score is 67.74%. It was proved that the natural source of polyphone such as Flavanoids, Coumarins and Tannin present in the Khadira interfere with the process of prostaglandins production thus reduces the Kandu.

- **Ruja:** Morbid Vatadosha is responsible for Ruja in Vicarcika. 22.22% patient had Ruja, the reduction by 61.11% in Ruja was observed in this study. This shows significant action of Khadira on Ruja due to flavocoxid (Limbrel) present in the Khadira reduces the pain.

- **Srava:** Ushna and Tishna guna of Pitta is responsible for Srava. Hence treatment aimed at clearing the morbidity of Pitta dosha to rectify the symptom. The reduction by 38% in 27 patients treated with Khadira rasayana confirms the therapeutic benefit by normalizing the Kapha. Ascorbic acid and tannins of low molecular weight, namely emblicanin A and emblicanin B increases the wound contraction and cellular proliferation there by helps in reduction in Srava and wound healing.

- **Pidaka:** 27% relief was found in 27 patients of Vicarcika which is said to be good relief in Pidaka. Pidaka is a result of morbid Kapha dosha afflicting the Mamsa dhatu. Many animal experiments showed Anti inflammatory action of both Khadira and Amalaki. These drugs reduce granuloma formation and fight against phlogistic agents and the acacia causes protein denaturation and thereby reducing the inflammation.

- **Vaivarnya:** Skin color in Vicarcika may be Shyava, Rakta, Shweta as per the dominancy of Vata, Pitta, and Kapah respectively. Vaivarnya is rectified by 17% in 27 patients treated with Khadira rasayana. As Khadira is Kustagna, this clearly indicates the noticeable therapeutic improvement in regards to Vaivarnya in patients of Vicarcika. As the Acacia group of drugs possesses CYP3A4 which

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**Divya et al: A Study Evaluating The Efficacy Of Khadira Rasayana In Subjects With Vicarcika / Atopic Dermatitis**
Drugs in the formulation resulted in 38% reduction in the symptom Srava. In patients suffering from the Eczema because of the rent in the skin there is every possibility for secondary infections and it is proved by different studies that Khadira also have added effects like antifungal and antibacterial which prevents secondary infections. This implies that the Khadira Rasayana is effective in the correction of all the morbidities of Vata, Pitta, Kapha, Rasa, Rakta, Mamsa and Lasika i.e. Sapta dushya of Kusta.

As Vicarcika run a chronic course of exacerbation and it is considered to be bahudoshavastha. The diseases with bahudoshavastha are well tackled with shodhana chikitsa followed by shamana. As this study was designed to focus on efficacy of Khadira rasayana in subjects of Vicarcika, so one day of koshtha shodana was given. This might be the reason for partial improvement seen in this study. To improve overall effect of Khadira rasayana can be increased by additional treatment modalities. Patients are to be administered with sampurna shodhana prior to the rasayana therapy. There are many other treatment protocols that can be adopted either prior or after or along with rasayana administration. Topical treatment plays major role in combating the symptoms so along with Khadira rasayana suitable topical agents can be prescribed for best response. The dosage of rasayana adopted in this study was Madhyama dosage, for better results uttama matra of Khadira rasayana can be tried. This study was carried out for only 30 days. Therefore it may be suggested to increase the duration of treatment until complete remission of the illness. There is also possibility of variation of effectiveness of Khadira rasayana mentioned in classics and the method adopted in this study.

From discussion it can be said that, Khadira rasayana is effectual work in subjects of Vicarcika, but for effective result the pre treatment with Shodhana and longer duration of Shamana with Khadira rasayana ensures best results. More to add the participants of the study had showed some added improvements like in the course of study 74% pa-

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- **Daha**: Daha is a peculiar feature of morbid Pitta dosha involving Rakta dhatu. In present study 59.2% relief was found in 5 patients, which proved the efficacy of Khadira rasayana in symptomatic relief of Daha. But as the sample size is too less to draw a conclusion of effect of Khadira rasayana in Vicarcika.

- **Rukshata**: dryness in different extent is due to loss of moisture in skin. Morbid Vatadosha invariably involving the Rasa dhatu in twak is responsible for this symptom manifestation. In 14 patients 32.4% of relief was encountered. Hence this improvement proves the effect of Khadira rasayana on Rukshata.

Khadira rasayana had effective role on individual samprapti Ghataka in remission of symptoms of Vicarcika. Involved Vata dosha in Vicarcika causes Vaivarnya of twacha. In this study there was 17% improvement in Vaivarnya, this shows that Khadira rasayana have impact over Vicarcika in reducing Vaivarnya by combating Vata dosha. Pitta dosha causing Daha in Vicarcika got relieved by 59% by Khadira rasayana intervention as the sample size was too small to draw a conclusion about action of Khadira rasayana on Daha based on reduction in symptoms present in the patient it can be inferred that it has resentment on Pitta dosha. Kandu is caused by Kapha dosha, the percentage improvement obtained in case of Kandu is 67%, by this it is inferred that the ruksh guna of Khadira conflict the Kandu by reducing Kapha dosha. Rasa dhatu involved in disease formation causes Rukshata which was reduced by the Vayasthapana karma of Amalaki by 32.4%. Rakta in combination with Pitta and Vata causes Daha and Vaivarnya respectively. Pidaka in Vicarcika is formed by morbid Mamsa dhatu by rukshta effect of both Khadira and Amalaki the size of Pidaka was reduced by 27%. Lasika involved in samprapti results excessive oozing ie Srava from lesions. Due to Kustagna and Rukshata property of drugs in the formulation resulted in 38% reduction of Srava. As Khadira rasayana is effective in the correction of all the morbidities of Vata, Pitta, Kapha, Rasa, Rakta, Mamsa and Lasika i.e. Sapta dushya of Kusta.

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- **Lasika**: involvement in disease formation causes Lasika which was reduced by 27%.
patients had improvement in their appetite and in 15 patients, 30% of relief in symptoms occurred by 15 days of treatment. Among 27 patients 4 patients had Padadari there was significant change in symptoms of Padadari. In 5 female patients, reduction in Mukhadooshiaka was observed.

CONCLUSION
Khadira rasayana showed statistically significance in remission of sign and symptoms as well as by improving the quality of life. In this study 81.4% patients had Moderate improvement, 14.81% had best improvement and in only one patient the symptoms was unchanged. This is pointing towards efficacy of Guduchi Rasayana in overall symptomatology of Vicarcika as evidenced by primary and secondary outcome measures.

REFERENCES

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