

Evidence based clinical practices in *Vicharchika* (Eczema) and Ayurvedic treatment modalities – Review

Review Article

Sai Prasad A J V1*, Rinku Tomar², Harbans Singh³, Rajesh Sannd⁴, Sanjiv Kumar⁵

1, 2, 3. Research Officer (Ay); 3, 4. Assistant Director (Ay). Central Ayurveda Research Institute for Respiratory Disorders, Patiala, Punjab.

Abstract

Vicharchika in Ayurveda can be compared to Eczema. Prevalence of eczema has increased three-fold since 1960s, 10-20% of children in industrialized countries and 1-3% of adults, lower prevalence observed in agricultural economies. The main symptom of this disease is pruritus, which impacts health-related quality of life (HRQOL). The evidence based clinical practices and Research trends in Vicharchika have been studied elaborately through evidence based published articles. Clinical and drug research carried out in the field of Ayurveda showed encouraging results and safe and effective eczematous therapy. The etiopathological study of eczema reveals the factors of psychosomatic nature of the disease with associated epidermal barrier dysfunction; genetic determination, allergy, and impaired innate immunity play an important role in pathogenesis of eczema. Various classes of agents for additional treatment are being investigated for atopic dermatitis (AD) of eczema. The therapies include targeted topical, oral, systemic, and biologic agents. Symptomatic treatment with steroids produces serious side effects like osteoporosis, nephropathy, hyperlipidemia and fluid retention, acne, skin lesions etc. Vicharchika treatment in Ayurveda provides better management of eczematous with least side effects. Study of evidence based clinical practices of Vicharchika (eczema) will leads for better management and identification of newer strategies and line of treatment. Clinical and drug research on Vicharchika will provide the answer for the anti eczematous therapy.

Key Words: Eczema, Evidence based clinical practices, Research trends, Vicharchika.

Introduction

According to Ayurveda, eczema can be compared to "Vicharchika". The symptoms of excessive itching, boil or pustule formation, discoloration/hyper pigmentation, profuse oozing and later marked lichenification, pain, and excessive dryness have great parlance with eczema. (1). Eczema, also known as atopic dermatitis, involves inflammation of the skin. The condition is characterized by scaly or crusty patches of skin, often accompanied by redness, blistering, and itching. Atopic dermatitis (AD) affects both children and adults (2). The main symptom of this disease is pruritus, which impacts health-related quality of life (HRQOL) (3). Atopic eczema is an itchy inflammatory skin condition with associated epidermal barrier dysfunction. The prevalence of atopic eczema seems to be rising, but the factors responsible for this rise are not fully understood. The pathophysiology of

eczema involves systemic as well as cutaneous immune and epidermal dysfunction.

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Eczema is a complex trait with significant genetic and environmental factors influences the morbidity of disease (4) (5). Emollients and topical steroids are the mainstay of treatment for mild to moderate eczema; moderate to severe eczema may require the oral drugs and steroidal administration. Skin disease is one of the top 15 groups of medical conditions for which prevalence and health care spending increased the most between 1987 and 2000, with approximately 1 of 3 people in the United States with a skin disease at any given time (6).

Vicharchika

Skin diseases in Ayurveda described under Kusta roga with types as Maha kusta and Ksudra kusta. Vicharchika falls under the category of Ksudra kustha. Vicharchika, According to Ayurveda is Rakta Pradoshaja Vikara having involvement of three Dosha with dominance of Kapha (7). Vicharchika (8) has cardinal symptoms of Kandu (Excessive itching), Pidika (Vesicle/Boil/Pustule), Shyavata (Discoloration), Bahu-srava, (Profuse oozing), Lasikasrava(9), Raji (10) (Marked lining/ Lichenification), Ruja (Pain), Rukshata (Excessive dryness). Vicharchika is Kapha pradhana tridoshaja vyadhi (11) and Rasa (Twak), Rakta, Mamsa and Kleda (Ambu) (12) are Dushya of it. Virruddha

* Corresponding Author:

Sai Prasad AJV

Research Officer (Ay), CARIRD, Patiala Punjab, India. Email id - saiprasad avvaru@yahoo.co.in



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Ahara, Excessive consumption of foods that are dry, stale, cold, salty, spicy, sour, fermented or fried, late night work schedules, regular late night dinners, excessive physical, mental, and sexual activities; and stress can be responsible for causing eczema(13). Acharyas have described the Samprapti for Kustha in general, is taken as follow Vicharchika also. According to Charak samhita due to various Nidan sevana, Tridosha gets vitiated simultaneously & produce Shaithilya in the Twak, Mamsa, Rakta and Ambu. Then Tridosha gets seated in Shithilya dhatu and vitiating them with Lakshanotpatti of Kustha Roga. The pathogenesis involved in the manifestation of Kusth Roga in general and Vicharchika in particular is vitiation of Tridosha predominantly of Kapha Dosha(14). On doshic predominance Vicharchika classified as 1). Vata doshas type: - When the vitiation of the Vata dosha produces the eczema. It is felt in the dryness of the skin. There is pain and serve itching of the affected region. 2). Pitta dosha: - Pitta dosha's vitiation can cause oozing from the affected part and 3). Kapha dosha:- When there is an imbalance of kapha, it is more observable on the skin. The skin became thick and is accompanied by oozing and itching.

Vicharchika- treatment modalities

The Charak Samhita offers detailed treatment for each Dosha although none specifically for Vicharchika. In cases of Vata predominant Kushtha, ghee is prescribed. For Pitta predominant Kushtha virechena (purgation) followed by Rakta mokshna (bloodletting), and for Kapha predominant Kushtha, Vamana (therapeutic vomiting) is utilized (15). Rakta mokshna with Jalauka show a dramatic improvement of the symptoms of Vicharchika (16). Susruta has emphasised the rakta mokshana on basis of dosha predominant. Jalookavacarana type of rakta mokshana treatment is clearly indicated in pitta pradana kshudra kusta and is useful in vicharchika. (17), According to Charak Virechan can be done by the use of Trivrut, Danti root, Triphala. Use of Avipattikara choorna, Trphala choorna, Pancha sakara choorna and Gandharva hastadi quatham are useful as virecana. Rasayana -drugs like Amalaki, Guduchi, Bhringaraja, Ghrita Bhrishta Haridra, Brahmi, Mandukaparni, Triphala, Khadira, Vidanga, Tuvaraka, Bhallataka, Bakuchi acts as an effective immumo modulator, changes the colour of skin and anti pruritic. Rasayana theraphy prevents the recurrence of Vicharchika episodes (18).

Shaman chikitsa

Argwadhadikwath, kandughana maha kasaya, Patolakaturohinyadi kashya, Guduchiyadi Kwath, Panchnimba churn, Lodra sevyadi choorna, Ekvinshatiguglu, Bilwadi Agada, Punarnavaasava, Kalyanaka Ghritha formulations are used as oral administration. Arogyavardini vati, Ayaskriti, Gandhaka rasayanam, Udaybhaskar ras, Rasmanikaya, Amritankur loha, are useful rasaoushidis in vicharchika treatment. External application of Vishtailam, Durvadhtailam, Marichadi tail, Vicharchkari tail, Nalpamaradi tail, Eladi taila, Adgajadi lepa, Pakvasasharp lepa, Pakkvagrihdhumadi lepa are topical applications acts as emolufiints and also remove the toxins locally as well as systematically. The lipids present in the oil will build up the skin barrier and building up the moisture barriers. Triphala kashaya seka acts as kanduhara, varnya and emolificient. Suddha Ghrita, Pancha tikta guggulu ghritam, sukumara ghtiam are useful sneha pana yogas in vicharchika. Chakrapanidatta in Chakradattha quoted the drugs in vicharchika treatment as Ekvinshatiguglu, Panchnimba churna, Adgajadilepa, Pakvasasharplepa, Pakkvagrihdhumadi lepa(19). Bhishjaya ratnawali mentions the drugs in vicharchika treatment as Aragwadhadi kwatha, Udaybhaskara rasa, Rasmanikaya rasa, Amritankur loha, Marichadi tail and Vicharchkari tail (20). "Satvaavajaya Chikitsa" in Ayurveda texts highlight the close association between body and mind, helps in the management of eczematous episodes. Psychological counselling and psyconeurotropic drugs have a pivotal role in eczema.

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Aims and objectives

The study of elaborative clinical practices and research trends that occur on both wet and dry *Vicharchika* on single drugs, formulations and therapies like *Samana* therapy, *Sodhana* therapy and both *Samana-Sodhana* therapy; *Samana* with *rakamokshana-jalookavacarana*; *Samana* with *abhyanga*; *snena pana* alone; *snehapana* with *virecan* and *samana* with *lepana* will provide evidence based clinical practices and better management in the treatment of *Vicharchika* and anti eczematous therapy.

Materials and methods

In-view of the above, clinical studies conducted on Ayurvedic single and compound formulations have been studied and reviewed for their effectiveness.

Observations

The following observations are identified by reviewing the clinical trials.

- 1. Nimbadi yoga on wet eczema and Abhaya yoga shows better results(21).
- 2. Kustagna activity has been evaluated in vicharchika by Sanjita Das, P. K. Sarkar, A. Sengupta(22)
- 3. In another study of with *Panchatikta Ghrita Gugglu* tablets along with local application of *lepa* containing *Gairika* mixed with *Karanja Tailam* in patients of dry and wet eczema (*Vicharchika*)", formulation shows effective management. (23).



- 4. Formulations made with the plant *Lygodium flexuos um*SW as local application in the cases of *Vicharchi ka* (eczema) with the paste of leaves and oil prepared with roots shown better effect. (24).
- 5. Virecana and Jalukavacaran was carried out randomly followed by Gandhaka Rasayana has provided significant relief in the symptoms of Vicharchika (25).
- 6. In the study of "Effect of *Shirishadi* decoction and *Snuhyadi lepa* on the patients of *Vicharchika* (eczema)" by Mandip Kaur, HM Chandola the results of the study revealed that *Shirishadi* Decoction and *Snuhyadi lepa* provide significant relief in the signs and symptoms. (26).
- 7. Addition of *Rasayana* dugs like *Guduchi*, *Bhringaraja* with *vicharchika* treatment provided complete remission and checked the recurrence of the disease in the patients of *Vicharchika* (27).
- 8. Study was carried out to assess & compare clinical efficacy of *Triphaladi Ghanvati*, *Avalgujadi lepa* & *Triphaladi Ghrita* to evaluate role of *sneha* in the management of *Vicharchika* from *Charaka Samhita* (*Chikitsa sthana* 7/101). Therapies show highly significant results (28).
- 9. Efficacy of Gaumutra bhavita Chakramarda(34), Panchatikta ghrita guggulu and lepa of gairka (29), Laghumanjisthadi kvatha and Siktadi lepa (30), Leech therapy and Maha bhallataka yoga in combined form was found most effective in the treatment of eczema (31). Phalamajja of aragvadha is suggestive of significant immune modulatory activity (32). Virecana with 70 gm of Manibhadraguda proved to be beneficial in tridosa and even can appreciate rasayana and vajikarana effects (33). Ekavishantika Guggulu, Kaishora Guggulu as internal medicine and Ekavinshatika Taila for external application show better results (34)
- 10. *Mulaka beejadi* lepa as external application and *Pruthu nimba panchaka churna vati* was very effective in the management of *Vicharchika*. (35).
- 11. Evaluated the effect of *Jalaukavacharan* and *Nimbatail* application in *Vicharchika* with special reference to *pittapradhan kshudra kustha* described in *Sushruta Samhita* and the therapy was effective (36).

Discussion

Latest clinical trends and evidence based clinical practices of Vicharchika had been studied. Research in Ayurveda gives the evidence based medicine. Ayurvedic formulations, therapeutic procedures, rasayana chikista psychological counseling with satvaapjaya chikitsa validates the Vicharchika treatment and provides significant relief in symptoms and improves the quality of life. Kanduhara kashaya (37) acts as anti inflammatory, anti allegic,

immuno modulator, anti pruritic, acts as skin barrier, reduce the lichenification, decreases Ig E production. Rasa oushadies like arogya vardani vati corrects the liver functions and detoxify the allergens, and helps in agnideepana and proper rasa dhatu formation. Katuki helps for elimination of dusta pitta and corrects rakta (38). Bilwadi agada and its ingredients have shown antimicrobial, immunomodulatory and anti inflammatory activity (39). Punarnavaasava has proved for anti inflammatory activity (40) and its ingredient like Guduchi etc. shown to have immunomodulatory, anti oxidant and erythropoietic activity(41) and those of Patolakaturohinyadi kashya takes care of rakthadhatu because of dravyas such as patola, katurohini, and guduchi which have tikta rasa and they are raktashodhak(blood purifactory) and kusthahara. Pippali helps in bio availability of other drugs in formulation (42). Kalyanaka Ghritha (43) acts as varnya and kusthaghna helps in reliving shyaavavarnatha (blackish discoloration) and anti pruritic. The lipids present in the ghrita improve the skin barrier and locking the moisture. The study on Ayaskriti shows antioxidant properties (44). Eladi taila being vata kaphahara, varnya, kandughna and vishaghna plays important role in vata kapha pradhana (45). Kandughanamaha kasaya (46) having the properties of kaphahara, pitta shamana, rakta shodhana, kushthghna, rakta prasadana, lekhana and shothahara actions is an ideal combination in relieving Vicharchika which is kapha and pitta pradana disease (47). Patolakaturohinyadi kashaya acts as raktashodhak and kusthahara(48)(49). Gandhak Rasayana is an effective anti eczematous drug having the properties of agnideepak, pachak, kaphaghna, kledaghna, raktaprasadak, krimighna, kushthaghna, alters the tvak vaivarnya and acts as antibacterial(50) Application of Nalpamaradi tail acts as kustagna, sodhagna and daha syamaka. Latex induced group of drugs present in this formulation which are kashaya rasa pradhana, pitta and kaphahara and tannins present in this oil inhibit bacterial growth (51) (52). Acharya Sushruta says Rakta mokshana the most effective therapy in half of the body ailments. Rakta mokshna performed with Jalauka (leeches) shows the improvement of the symptoms of Vicharchika (53). Nimbadi yoga- acts as anti inflammatory (54)(55), anti bacterial, anti fungal (56) (57)(58)(59) ropana guna and anti eczematous (60)(61), in Vicharchika. Clinical studies with the dried neem leaf extract indicated its effectiveness to cure eczema Lotion derived from neem leaf, a paste prepared with neem and turmeric was found to be effective in the treatment of eczema. The paste was found to cure eczema. Amalki posses anti inflammatory (62), immune modulator (63), anti oxidant (64) and free radical scavenger properties and it improves skin elasticity (65). Aragvadha (Cassia fistula) is having significant effect in ameliorating the skin diseases due to pitta



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origin and is safe drug of choice of purgation therapy (66). The efficacy of the Cassia fistula in skin diseases may be attributed to the presence of anthraquinone derivatives specially chrysopherol. The laxative effect of sun-dried fruit pulp of C. fistula may be due to presence of anthraquinone constituent with predominant action on intestinal NO formation with cholinergic, opioids and PGs playing accessory role. (67, 68) Panchatikta Ghrita Gugglu - Guggulu and tikta pradan drugs acts as anti pruritic, anti eczematousa and these drugs decrease the lichenification. Guduchi mainly having the Beriberin and tinosporin mainly acts as immune potentiating and anti oxidative properties and act as Rasayana properties (69)(70). Bhringaraja posses immune modulator properties (71). Gairika: External application of Gairika is having kanduhara action and therapeutically useful in skin disorders (72). L. flexuosum, Research on lygodinolde has gained a special attention in recent times as several of them have shown promising activities like antifertility, wound healing, eczema and hepatoprotective, it is the rich source of alkaloids, flavonoids, saponins and cumarin (73). The main constitute of the plant is lygodinolide which is mainly used in wound healing (74). Kaisora guggulu has anti-bacterial, anti-inflammatory, antioxidant, anti-microbial property which helps in treating wounds (75). Siktadi lepa is vata shamaka, reduces the rukshata, ruja and makes mrudutwa of the twacha (76). Manibhadra guda is a nitya mridu virecana yoga having trivrut as main ingredient and pacifies pitta. Thus, Ayurvedic management provides significant relief and improves the quality of life of eczema patient.

Conclusion

Better management of eczema will be possible by the knowing the etiological factors, physiology of skin function and defective skin barrier and pathology of eczema and genetic factors involved. Genetic counselling for susceptible persons before marriage also prevents the prevalence of the disease and burden of financial. In dermatology there is no specific medicaments for sure cure of eczema but symptomatic treatments like steroids are used, but they produce serious side effects like nephrotoxicity, osteoporosis, skin cancer etc. Research trends on Vicharchika provide an evidence of management of Vicharchika as compare to the anti eczematous regimes of the allopathic treatment. Ayurveda highlights the management of Vicharchika (eczema) with safe effective therapeutic regimen with least side effects and adverse reactions.

References

1. David R. Bickers, Henry W. Lim, DavidMargolis-Martin A. Weinstock. *Journal of the American Academy of Dermatology*. September 2006; 55(3); 490-500.

2. Bieber T. Atopic dermatitis. *N Engl J Med* 2008 April 3; 358 (14): 1483–1494.

- 3. Lifschitz C. The Impact of Atopic Dermatitis on Quality of Life. . *Ann Nutr Metab* 2015; 66(suppl 1):34–40.
- 4. https://www. worldallergy. org/education-and-programs/education/allergic-disease-resource-center/professionals/eczema-pathophysiology dated. 15-4-2019 time 14. 30 IST
- 5. https://link. springer. com/content/pdf/bfm%3A978-3-540-29856-4%2F1. pdf 05-12-2019 time 10. 30 IST
- 6. Williams HC. Is the prevalence of atopic dermatitis increasing? *Clin Exp Dermatol*. 1992; 17: 385–391.
- 7. Vd. Yadavaji Trikamji Acharya. Agnivesha, CharakaSamhita, revised by Charaka & Dridhabala with Ayurveda deepika commentary of Chakrapanidatta. Varanasi; Chaukhambha Prakashan; 2007. Chikitsa Sthana 7/26, 451p.
- 8. Pt. Hari Sadashiva Shashtri. Vagbhatta, Ashtang Hridaya with Sarvangasundari commentary of Arunadatta& Ayurveda Rasayana of Hemadri. Varanasi; Chaukhambha Surbharati Prakashan; 2007. UttarSthana Chap. 31.
- 9. Vd. Yadavji Trikamji Acharya & Narayan Ram Acharya. Sushruta Samhita of Sushruta, with Nibandha Sangraha commentary of Dalhana and Nyaya Chandrika Panjika of Gayadasa on Nidanasthana. Varanasi; Chaukhambha Orientalia; 2007, NidanaSthana 5/13, 285p.
- Vd. Y. T Acharya. Agnivesha, Charaka Samhita, revised by Charaka & Dridhabala with Ayurveda deepika commentary of Chakrapanidatta. Varanasi; Chaukhambha Prakashan; 2007. Chikitsa Sthana 7/10, 30. 450- 451p.
- 11. Vd. Yadavaji Trikamji Acharya. Agnivesha, Charaka Samhita, revised by Charaka & Dridhabala with Ayurveda deepika commentary of Chakrapanidatta. Varanasi; Chaukhambha Prakashan; 2007. Chikitsa Sthana 7/9. 450p.
- 12. Pandit Kashinath Shastri. Charaksamhita chikitsasthan hindi commentary. Varansi; Chaukhambha publication; 2011. 7/4, 8, 248p.
- 13. Pandit Kashinath Shastri. Charaksamhita Hindi commentary. Varanasi; Chaukhambha publication; 2011. Chikitsasthan 7/9, 10, 250p.
- 14. Pandit Kashinath Shastri. Charaksamhita Hindi commentary. Varansi; Chaukhambha publication; 2011. Chikitsasthan 7/39. 255p.
- 15. Yadava T. Sushruta Samhita of Acharya Sushruta with Nibandhasangraha of dalhanacharya and Nyayachandrika Panchika of Gayadasa. Varanasi; Chaukhambha Surabharati Prakashana; 2004. Shareera Sthana 7. 383. 379p.
- 16. Arya N., Sharma A., Gothecha V. K., Khatik R. K. Ayurvedic Management of Eczema (Vicharchika) -



- A Review. International Journal of Ayurveda and Pharma Research. 2016; 4(4):64-70p.
- 17. http://www. ayujournal. org on Friday, April 13, 2018, dated 05-10-2018 time 16, 25.
- 18. P. V. Sharma. Cakradatta, Varanasi; Chaukambha orientalia publication; 2008, 408p.
- Ramanath Dwivedy. Chakrapanidatta, Chakradatta with Vaidhyaprabha commentary of Dr. Indradeva Tripathi. Varanasi; Chaukhambha Sanskrit Pratisthan; 2005. Kushtha Chikitsa Chapter 50/84-88, 287p.
- 20. Siddhi Nandan Mishra. Bhaisajya Ratnavali hindi commentary. Varanasi; chaukhambha sanskritbhartis Prakashana; 2012. 497p.
- 21. Jayasingh B. K, Tewari P. V. Clinical management of Vicharchika with Nimadi yoga. Journal of Research in Ayurveda and Siddha. 2003; 24 (1-2); 33-41.
- 22. Sanjita Das, Sarkar P. K., Sengupta A., Chattopadhyay. A clinical study of Aragvadha (*Cassia fistula* linn) on Vicharchika (eczema). The Journal of Research and Education in Indian Medicine. 2008; 14(2); 27-32.
- 23. Gaikwad Madhavi Dattatray, Deshmukh A, Vinash Madhav. A clinical study on the management of Vicharchika (eczema) by panchatikta ghrita gugglu and lepa of gairika. International journal Of Ayurveda & Alternative Medicine. 2015; 3(1); 21-27.
- 24. Padhi1 M. M., Dash N. C., M. S. Bada panda and Nanda G. C. Study of the effect of two formulations made with the plant *Lygodium flexuosum* sw. as local application in the cases of Vicharchika eczema. Journal of Research in Ayurveda and Siddha. 1998;19 (1-2); 9-21.
- 25. Dass Ranjip Kumar, Nayak Annada Prasad. A clinical study to compare virechana and jalaukavacharana procedures in the management of vicharchika. Global Journal of Research on medicinal Plants & Indigenous Medicine (GJRMI). 2013; 2(1): 30-39.
- 26. Mandip Kaur, HM Chandola. Effect of shirishadi decoction and snuhyadi lepa on the patients of Vicharchika (eczema). AYU 2009; 30 (1); 16-21.
- 27. Mandip Kaur, HM Chandola. Role of Rasayana in cure and prevention of recurrence of Vicharchika (eczema). AYU 2010; 31(1); 33-39.
- 28. Tripathi D. H., Dave A. R, Shukla V. D. The etiopathological study on Vicharchika and its management by Triphaladi ghana and Triphaladi ghrita. Dept of RNVV. Institute for Post Graduate Teaching & Research in Ayurveda, Gujarat Ayurved University, Jamnagar.
- 29. Ankur K Vadi1, PP Sharma, B Ravishankar, BR Patel. A pharmaco-therapeutic study to assess the comparative efficacy of Chakramarda & Gaumutra

bhavita Chakramarda on Vicharchika. AYU 2008; 29(3); 171-175.

- 30. Gaikwad Madhavi Dattatray, Deshmukh Avinash Madhav. A clinical study on the management of vicharchika (eczema) by panchatikta ghrita gugglu and lepa of gairika. International journal Of Ayurveda & Alternative Medicine. 2015; 3(1); 21-27. http://www. ijaam. org/uploads/IJAAM-Jan-Feb-2015/5. pdf. 15.
- 31. Meenakshi Shukla, Bipin Mishra. Efficacy of some Ayurvedic drugs in the management of eczema (Vicharchika) and its impact on liver function. Aryavaidyan. 2009; 22 (3); 184-188, 16.
- 32. Chandrashekhar Kaushik and H. K. Kushwaha. Role of leech therapy in skin diseases with special reference to eczema. Aryavaidyan. 2010; 24 (1); 46-47.17.
- 33. Sanjita Das, P. K. Sarkar, A. Sengupta, and A. Chattopadhyay Immunomodulatory study of aragvadha (cassia fistula linn.) on vicarccika (eczema. Aryavaidyan). 2008; 21(3);148-151.
- 34. Manjunatha, Geetha L., Prabhuraj Baluragi, Baldev Kumar. Virecanakarma with manibhadraguda in the management of vicarcika with special reference to eczema a randamised study. Aryavaidyan. August October 2012; 26(1); 13-16.
- 35. Mandalkar P. S., Bhabad P. R., Gavhane N. A., Wankhade R. T. Efficacy of Ekavinshatika guggulu in the management of Vicharchika. www. ijaar. in. JUL-AUG 2015; II (II); 20p
- 36. Divya V, Ragamala K C. The Effect of Mulaka Beejadi Lepa and Pruthu Nimba Panchaka Churna in the Management of Vicharchika W. S. R. to Eczema. International Journal of Ayurvedic Medicine, 2018; 9(3);185-190
- 37. Shinde V. S., Chawre S. V., and Bhosle. S. V. To Study the Effect of Jalaukavaacharan and Nimbatail in Comparison with Local Application of Nimbatail in Vicharchika w. r. t. Dry Eczema. International Journal of Advanced Ayurveda, Yoga, Unani, Siddha and Homeopathy. 2014; 3(1); 182-188
- 38. Jadavji Trikam ji. Agnivesha Charaka, Dridhbala Charaka Samhita. 5th edition. Varanasi; Chowkhamba Sanskrit Samsthan; Sutrasthana 4/14.
- 39. S i d d h i n a n d a n m i s h r a , Va g b h a t , Rasaratnasamuchchaya with Siddhaprada Hindi Commentary. Ist edition. Varanasi; Chakhambha Orientalia; Chap. 2011; (20):108-114, 466p.
- 40. Deepthi SR. A Comparative Clinical Trial to Evaluate the Efficacy of Three Samples of Bilwadi Gullika Prepared in Different Media in Dushivisha with Signs and Symptoms of Kitibha Kustha. Thiruvananthapuram: Government Ayurvedic Medical College; 2010. p. 60-85.
- 41. Gharate M, Kasture V. Evaluation of Anti-Inflammatory, Analgesic, Anti-Pyretic and Anti-Ulcer Activity of Punarnavasava; An



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- Ayurvedic Formulation of Boerhavia Diffuse. Panchavati, Nasik: MGV's Pharmacy College; 2010. p. 60-85
- 42. Kapil A, Sharma S. Immuno potentiating compounds from *Tinospora cordifolia*. J Ethnopharmacol. 1997;58:89-95p.
- 43. Khushbu C, Roshni S, Anar P, Carol M, Mayuree P. Phytochemical and therapeutic potential of *Piper longum*: A review. Int J Res Ayurveda Pharm 2011; 2:157–61.
- 44. Harishastri Paradkara Vaidya. Vagbhata. Ashtanga Hridaya, Commentary by Arunadatta and Hemadri, Uttara tantra, Balopacharaneeya adhyaya, 6/26-31. Ninth edition. Varanasi: Chowkhamba Sanskrit series office; 2005. p. 791.
- 45. Lenin, Rao MRK, Prabhu K, R Bindu. Arul Amutha Elizabeth, Sruthi Dinakar. The study of antioxidant activities of an Ayurvedic medicine Ayaskriti. Der Pharmacia Lettre, 8 (6), 2016, 203-211.
- 46. Sharma, R. Sahastrayogam, Taila Prakaran Adhyaya, Eladi Tailam. Delhi, Chaukhambha Sanskrit Prathishthan, Reprint 2007, pp:85.
- 47. http://ijaas.org.in/Download/Journals/Vol%201%20No%203%202015/Sapna%20Chaudhary.pdf. Evalution of Kandugna kasaya.dated 02-12-2019 time 16.60 IST.
- 48. Savlagimath MP, Rani J, Patil SF. Ayurvedic management of vicharchika with special reference to eczema: A case report. Indian J Health Sci Biomed Res 2018; 11:92-6.
- 49. https://ijapr. in/index. php/ijapr/article/view/109. patola katukarohinyadi kasaya in 02-12-2019 time 16.60 IST
- 50. Hari Sadashiv Shastri Paradakar. Ashtang Hridayam Sutrasthan 15/15. Varanasi. Chaukhambha Surbharati Prakashan; 2002, p. 235.
- 51. Patil Kavita Sachin, Phartale Vaibhav Dattatray, Patil Sachin Madhav. Role of Gandhak Raasyan in Shushka Vicharchika (Eczema). AYUSHDHARA, 2016; 4(3):1207-1210.)
- 52. Inder Kumar Makhija, Indra Prakash Sharma and Devang Khamar, Phytochemistry and Pharmacological properties of Ficus religiosa: An overview. Annals of Biological Research, 2010; 1 (4):171-180.
- 53. Singh D, Singh B, Goel RK. Traditional uses, phytochemistry and pharmacology of Ficus religiosa: A review. J Ethnopharmacol. 2011; 2: 565-83.
- 54. http://www. ncbi. nlm. nih. gov/ [Pub Med/23049187]. Role of Raktamokshana by Jalaukavacharana and Siravedhana in the management of Vicharchika (Eczema). Raval HN1, Thakar AB.
- 55. Shankaranarayan D. Effect of neem oil and its constituents on cotton pellet inflammation. Mediscope. 1978; 20:273–274. [Google Scholar].

56. SaiRam M, Ilavazhagan G, Sharma SK, Dhanraj SA, Suresh B, Parida MM, et al. Anti-microbial activity of a new vaginal contraceptive NIM-76 from neem oil (*Azadirachta indica*). J Ethnopharmacol. 2000; 71(3):377–382. [PubMed] [Google Scholar]

- 57. Rao DVK, Singh I, Chopra P, Chabra PC, Ramanjulu G. *In vitro* antibacterial activity of neem oil. Indian J Med Res. 1986; 84:314–316. [PubMed] [Google Scholar]
- 58. Khan M, Schneider B, Wassilew SW, Splanemann V. Experimental study of the effect of raw materials of the neem tree and neem extracts on dermatophytes, yeasts and molds. Z Hautkr. 1988; 63(6):499–502. [PubMed] [Google Scholar]
- 59. Simeone V, Baser N, Perrelli D, Cesari G, El Bilali H, Natale P. Residues of rotenone, azadirachtin, pyrethrins and copper used to control *Bactrocera oleae* (Gmel.) in organic olives and oil. Food Addit Contam Part A Chem Anal Control Expo Risk Assess. 2009; 26(4):475–481. [PubMed] [Google Scholar]
- 60. Aditi G., Bhandari B. S., Rai N. Anti microbial Activity of Medicinal Plants *Azadaricta india* A. Juss. *Alium cepa* L and Aloe vera. Int. J. Pharma Tech Res. 2011; 3(2); 1059-1069.
- 61. Pillai NGK, Menon TV, Pilai GB, Raasekharan S, Nair CRR. Ropana guna of nimbatikta in dushta vrana-a case report. Vagbhata. 1983; 1:37–38. [Google Scholar]
- 62. Chatarjee A. and Prakash S. C. The treaties on Indian Medicnal Plants, New Delhi: National Institute of Science Communication (CSIR) 375-78(2010).
- 63. Asmawi MZ, Kankaanranta H, Moilanen E, Vapaataslo H. Anti-inflammatoryactivities of Emblica officinalis Gaertn leaf extracts. Journal of Pharmacy and Pharmacology 1993; 45:581–4.
- 64. Tuteja V: Study of immuno enhancing effect of *Amalaki* compound in infants. M. D. (Ay.) Thesis (1993), IMS, BHU, Varanasi.
- 65. Ghosal S, Tripathi VK, Chauhan S. Active constituents of *Emblica officinalis*: Part 1-the chemistry and antioxidant effects of two hydrolysable tannins, Emblicanin A and B. Indian Journal of Chemistry 1996; 35:941–8.
- 66. Chaudhuri Ratan K, Guttierez Gilles, Serrar Mustafa. Low Molecular-Weight Tannins of *Phyllanthus emblica*: A New Class of Anti-Aging Ingredients. Proceedings Active Ingredients Conference, Paris. 2003.
- 67. Manojkumar V. Chaudhari, Evaluation of purgation activity of cassia fistula in skin diseases due to vitiated *pitta Dosha*. Journal of Ayurveda and Holistic Medicine 2013; 1(4): 1-10.
- 68. https://www. ncbi. nlm. nih. gov > pmc > articles > PMC1728426 > pdf. [cited 2017 Nov 16].



- 69. Meena AK., Singh A., Panda P. *Tinospora cordifolia*: Its bioactivities & evaluation of physicochemical properties. International Journal of Pharmacognosy & Phytochemical Reseach 2010; 2: 50-55.
- 70. Neeraja PV., Margaret E. Amruthavalli: *Tinospora cordifolia*: Multipurpose rejuvenator. International Journal of Pharmaceutical, Chemical & Biological Sciences 2013; 3: 233-41.
- 71. Jayathirthaa MG, Mishraa SH. Preliminary immunomodulatory activities of methanol extracts of *Eclipta alba* and *Centella asiatica*. Phytomedicine. 2004; 11(4): 361-65.
- 72. https:// www. bimbima. com/ayurveda Gairika (Red Ochre):. Anupama 2016- [cited 2017 Nov 16].

73. Esha Yadav, Munesh Mani, Phool Chandra, Neetu Sachan and A. K. Ghosh. A review on therapeutic potential of *Lygodium flexuosum* Linn. Pharmacogn Rev. 2012 Jul-Dec; 6(12): 107–114.

ISSN No: 0976-5921

- 74. Achari B, Basu K, Saha CR, Prakashi SC. A New Triterpene Ester, an Anthraquinone and Other Constituents of the Fern *Lygodium flexuosum*. J Planta Med. 1986; 52:329–30. [PubMed] [Google Scholar]
- 75. Manisha Talekar, Mandal Sisir Kumar. A Case discussion on Vicharchika (Eczema), J of Ayurveda and Hol Med (JAHM). 2015; 3(3):49-52.
- 76. Indradeva Tripathi, Daya Shankar Tripathi. Yogaratnakar with Vaidya prabha hindi commentary. First edition. Varanasi; Krishn das academy, 1998. 699p.
