



## OPEN ACCESS

### Key Words

Dermatitis, treatment, follow-up, homeopathy

### Corresponding Author

Puja Singh,  
Jagannath University, Jaipur,  
Rajasthan, India

### Author Designation

<sup>1,4</sup>Assistant Professor

<sup>2</sup>Project Research Scientist

<sup>3</sup>Chief Medical Officer

<sup>5</sup>Voice Principal

**Received:** 10 October 2024

**Accepted:** 26 November 2024

**Published:** 09 December 2024

**Citation:** Puja Singh, Pooja Tiwari, Hirdesh Bharathi, Navdeep Joshi and Navjeet Joshi, 2024. Comparison of Effectiveness of Acupuncture and Homeopathy Treatments Against Patients with Dermatitis. Res. J. Med. Sci., 18: 559-564, doi: 10.36478/makrjms.2024.12.559.564

**Copy Right:** MAK HILL Publications

## Comparison of Effectiveness of Acupuncture and Homeopathy Treatments Against Patients with Dermatitis

<sup>1</sup>Puja Singh, <sup>2</sup>Pooja Tiwari, <sup>3</sup>Hirdesh Bharathi, <sup>4</sup>Navdeep Joshi and <sup>5</sup>Navjeet Joshi

<sup>1</sup>Jagannath University, Jaipur, Rajasthan, India

<sup>2</sup>AIIMS Bathinda, India

<sup>3</sup>Meadow Wellness, Ahmedabad, Gujarat, India

<sup>4</sup>Sri Lal Bahadur Shastri National Sanskrit University, India

<sup>5</sup>Navyog Institute of Yog and Naturopathy, Tanakpur, Uttarakhand, India

### ABSTRACT

Nearly one to three per hundred grownups around the biosphere are exaggerated with atopic dermatitis (AD), which is an enduring persistent seditious skin illness. It is currently impossible to cure atopic dermatitis completely., hence, new treatments need to be created to satisfy the patients' requirements. Thus, the initiative of the learning is to discover whether acupuncture is operative for treating individuals with Atopic dermatitis. As part of the design of a randomized, participant-and assessor-blinded, sham-controlled trial, an intervention period was conducted twice a week for four weeks and a follow-up period was extended for four weeks. The entire participant count was split into two groups, one of which got homeopathy and the other verum acupuncture (VA). The modification in the SCAR Atopic Dermatitis Index (SCORED) score at the start and end of treatment was one of the greatest remarkable consequence indicators. 45 individuals enumerated in the study, ranging in age from 19-38. Forty of those were accounted for in the analyses of intention-to-treat. There was a statistically substantial variance between the two groups in the mean revolution in total SCORED score ended the four weeks that followed randomization. Between the VA and homeopathy clusters, a momentous exactness in the mean SCORED score was professed two weeks later the start of the acupuncture treatment and this advance continued for at minimum four weeks after the termination of the treatment (each P-value <0.0001). It was noted that no significant negative incidents had occurred. In patients with Atopic dermatitis, acupuncture treatment twice a week was valuable in dropping the indications of the disease without triggering any serious adverse events.

## INTRODUCTION

Extreme itching is a defining feature of atopic dermatitis (AD), a chronic seditious skin disease that bursts up recurrently. While the condition generally affects children, dependent on the region, the pervasiveness of the disease in grownups can assort from 1-3 percent<sup>[1]</sup> to 17.6 percent<sup>[2]</sup>. As of right now, persistent dermatitis cannot be fully cured with conventional therapy. Therefore, the goal of managing this is to reduce symptoms, such as pruritus. If it is persistent that medicine is compulsory, anti-inflammatory therapy (topical corticosteroids and calcineurin inhibitors) and systemic medication (antihistamines, immunosuppressants and corticosteroids) can all be cast-off<sup>[3]</sup>. On the other hand, there are instances in which patients' symptoms may not completely improve and the administration of topical corticosteroids for an extended period frequently results in severe responses<sup>[4,5]</sup>. The use of matching and substitute therapies, reckoning acupuncture, has distended as a result of the boundaries linked with traditional remedies<sup>[6,7]</sup>. Practical magnetic quality imaging check has demonstrated that acupuncture reduces allergen-induced itching in affected with persistent dermatitis. Neither the antihistamine nor the placebo groups experienced this. Concurrently, they invent that the putamen, a region associated to the anti-pruritic belongings of acupuncture<sup>[8]</sup>, was answerable for motivation and habitual behavior, which in turn started the impulse to scratch. The promise between the mid-cingulate lens cortex and the putamen was also additional to the belongings of acupuncture on itching in healthy volunteers when histamine was cast-off to induce itching<sup>[9]</sup>. There isn't a single study in our area<sup>[10,13]</sup>, despite a large body of research<sup>[10-13]</sup> showing the therapeutic viability of acupuncture treatment for persistent dermatitis. Therefore, we conducted a preliminary investigation<sup>[14]</sup> to ascertain the viability of acupuncture treatment for persistent dermatitis. As a consequence, the research study's recommended structure is as follows: the SCORing Atopic Dermatitis Index (SCORAD [total]), a convenient tool for measuring dermatitis severity, was applied to create the primary outcome. Forty people took part in this study.

## MATERIALS AND METHODS

This was a randomized controlled trial conducted in Navyog Gram Naturopathy and Neurotherapy Hospital, Tanakpur, Champawat, Uttarakhand from December 2020 to February 2021. Ethical clearance was obtained before the start of the study. The previously printed study rehearsal conformed with the restrictions set forth by the Consolidated Ethics of Lettering Trials and Standards for Reporting Interventions in Clinical Trials of Acupuncture (STRICIA).

All the data was collected at Navyog Gram Naturopathy and Neuropathy Hospital. The inclusion criteria were men and women aged 19-65 years who were willing to participate in the study., Chronic dermatitis diagnosed as per the Hanifin and Rajka Criteria and score between 30 and 80 points on 1 100 mm visual analog scale (VAS) of pruritic., a score amid 10 and 40 points on the objective SCORAD index., not using prescribed chronic dermatitis for a month., agreed to sign the written informed consent and not participating in any other clinical studies in the last month.

**Exclusion Criteria were Severely Fluctuating Symptoms:** secondary infection of dermatitis lesion., several mental problems., pregnancy, breast feeding women and people with a medical history of patients with KMD deemed inadequate to participate in the trial.

**Randomization and Blinding:** After completing the written informed permission form, 40 eligible individuals were divided into two groups: 20 were randomized to homeopathy and 20 to acupuncture, respectively. The results were assessed and examined while the participants remained unaware of their group assignments. For four weeks, the homeopathy group and the acupuncture handling members got treatments twofold a week. The subjects underwent a final evaluation during the eighth week. The upshot measures were strong-minded using the experimental study as a basis<sup>[14-20]</sup>. The chief deduction was the variation in the SCORED (Total) score previously and all over treatment. To calculate the changes in scores, the SCORED (Total) score at the start of the study was deducted from the SCORED (Total) score at the conclusion of the fourth week. As a result, the fact that the SCORED (Total) score changes had a negative value indicated that the symptoms had begun to get better. The inferior fallouts that were well-known are as follows: (1) Disparities in quality of life (QoL) and signs of Atopic Dermatitis (AD) from the start of the study to week four (2) Disparities in QoL and warning sign of AD from the twitch of the study to weeks two, four and eight and (3) The strictness of dyspeptic indications. Three evaluation markers that fall into four categories are SCORED, the Eczema Area and Severity Index (EASI) and the Patient-Oriented Eczema Measure (POEM): The following factors are taken into consideration: (1) measures of the severity of symptoms associated with atopic dermatitis (2) the Dermatology Life Quality Index (DLQI), which measures the quality of life affected by atopic dermatitis (3) trials of the cruelty of dyspeptic symptoms, such as the Nepean Dyspepsia Index Korean version (NDI-K), VAS for dyspepsia (VAS [Dyspepsia]), Adequate Relief of gastrointestinal (GI) discomfort and abdominal pressure pain threshold

(APPT) by means of an algometer established at the Korea Association of Oriental Medicine and (4) additional factors, such as credibility tests, blinding tests and assessments of adverse effects. Conferring to SCORAD, the score, strictness and sovereign warning sign of Atopic Dermatitis (AD), precisely pruritus and insomnia, are well-thought-out<sup>[20,21]</sup>. The EASI is a thoughtful device that can be cast-off to regulate the determination of eczema quantitatively<sup>[22]</sup>. POEM is a tool that has been unprotected to be appreciated in evaluating patients' eczema severity<sup>[23]</sup>. The DLQI can be second hand to consider the quality of life of patients with dermatological grievances<sup>[24]</sup>. The inclusion of these reckon able trials of dyspepsia and epigastric distress in this trial was based on the finding of our pilot study<sup>[14]</sup>, which recommended a possible connection between these settings and warning sign of Atopic Dermatitis. While the NDI is a legalized scale for assessing dyspepsia signs and the brilliance of lifetime they are joined with, AR weighs the global heightening in intestinal concern<sup>[25]</sup>. A brand-new algometer shaped at the Korea Institute of Oriental Medicine was castoff to measure APPT<sup>[26]</sup>. The purpose of this was to quantitatively examine issues related to the abdomen. This method has been fully explained in an earlier description<sup>[17]</sup>. The consistency trial was used to appraise the acupuncture therapy's reliability and the potentials that departed along with it<sup>[27]</sup>. In order to measure the grade of extraordinary that had happened, contestants were asked at the termination of the learning to which cluster they belonged (the VA group or the SA group)<sup>[28]</sup>. The applicants finished each questionnaire and an neutral assessor who was not conscious of the cluster task conducted the assessments. Throughout the drive of treatment (starting at baseline and continuing through week 4), broadsheet guesses of the SCORED, EASI, POEM, DLQI and VAS (Dyspepsia) were extra, as well as at the last visit (week 8). The NDI-K was given at the start of the study, in the fourth week and at the end visit, which took place in the eighth week. The APPT was appraised in the first week as well as the second and fourth. At weeks 3, 4 and 8, correspondingly, we unrushed the degree of intestinal distress relief. We conducted the believability test in the first and fourth weeks. The quarter week was devoted to the outstanding test. The patients were requested to report any undesirable side effects they had during any given sitting.

**Statistical Analysis:** All the data was collected and entered in excel. ANOVA was performed to find the significant treatment for atopic dermatitis. P value <0.05 was identified as significant.

## RESULTS AND DISCUSSIONS

There were initially 45 people who signed up to take part in the research. Participants in the study included

a total of 40 individuals, with a mean age of 23.78 years (standard deviation) and 28 women (70 percent).

**Abbreviations:** SCORED Scoring Atopic Dermatitis (range, 0 [clear] to 100 [very severe]), EASI Eczema Area and Severity Index, POEM Patient-Oriented Eczema Measure (range, 0 [clear] to 28 [very severe]), DLQI Dermatology Life Quality Index (range. 0 [no effect of skin disease on quality of life] to 30 [maximum effect on quality of life]).

In persons with mild to severe atopic dermatitis, acupuncture treatment twice weekly for a period of four weeks was found to ameliorate symptoms of the disease when compared to other treatments. The VA assembly presented a statistically momentous enhancement in the primary endpoint, which was the mean change in the SCORAD (total) score from the start of the training to the fourth week, as related to the assembly that established homeopathy. For gauging the technical warning sign of Atopic Dermatitis, the greatest beneficial disconnected capacities are SCORAD (Objective), SCORAD (Total), and EASI scores<sup>[29]</sup>. The study's conclusions confirmed that the acupuncture and homeopathic assemblies differed statistically suggestively in each of the three events. These results imply that the objective symptoms of atopic dermatitis may be objectively improved by acupuncture. Given that the lowest clinically significant difference for adult patients with SCORED (Total) is 7.87 points<sup>[30]</sup>, the 12.56 point improvement resulting from acupuncture treatment may indicate that VA is not only a better option than homeopathy, but also has a notable positive clinical impact on Atopic dermatitis patients. Considering that the lowest clinically substantial variance for adult patients with SCORED (Total) is 8.7 points<sup>[30]</sup>, the upgrading of 11.83 points that was created by acupuncture conduct may show that VA is not only higher to homeopathy but also occasioned in significant clinical enhancements in persons with Atopic dermatitis. Two weeks after starting acupuncture therapy, the VA group saw a substantial decrease in the mean scores of SCORED (Total), SCORED (Objective) and EASI. This perfection persisted for at least four weeks after the conduct was ended. On the other hand, the group that used homeopathy saw a significant improvement. It's amazing that acupuncture therapy was able to preserve the objective symptoms of Atopic dermatitis for at least four weeks. It would be important if these results could be sustained for an extended length of time in future studies. Subjective events such the DLQI score, POEM, VAS (Insomnia) and VAS (Pruritus) did not display a important alteration between the homeopathic and acupuncture groups. As for the VA group, there was no discernible change. Though, after treatment, every particular quantity revealed a substantial development

**Table 1: Baseline Characteristics of the Disease**

Characteristic	VA (n=20)	Homeopathy(n=20)	P-value
Gender (Male /Female)	8/12	4/16	0.580
Age(years)	24.52	22.32	0.311
Body mass index (kg/m <sup>2</sup> )	23.02	22.89	1.20
SCORAD (total)	33.24	33.98	0.974
SCORAD (Objective)	23.89	24.42	0.874
VAS (Pruritis)	5.72	6.42	0.341
VAS (Insomnia)	3.74	3.33	0.741
EASI	5.12	5.84	0.92
POEM	11.34	13.87	0.310
DLQI	8.82	11.24	0.451
VAS (Dyspepsia)	4.01	3.31	0.421
NDI-K	19.24	23.05	0.624
Credibility test	19.01	18.22	0.549

**Table 2: A Comparison of Changes in Atopic Dermatitis Symptoms Between Baseline and Week 4 and Periodic Analysis of Atopic Dermatitis Symptoms**

Variables	Acupuncture	Homeopathy	Difference between groups	P-value
<b>Total SCORED</b>				
LS mean (SE)at baseline	33.38	33.90	-	-
LS mean (SE)at week 2	26.25	34.12	7.87	0.0035
LS mean (SE)at week 4	21.55	34.25	12.07	<0.0001
LS mean(SE) after treatment at week 8	20.50	33.06	12.56	0.0005
<b>Objective SCORED</b>				
LS mean (SE)at baseline	23.90	24.53	-	-
LS mean (SE)at week 2	19.21	25.50	6.29	0.0005
LS mean (SE)at week 4	15.90	26.25	10.03	<0.0001
LS mean(SE) after treatment at week 8	14.90	25.06	10.16	<0.0001
<b>EASI<sup>b</sup></b>				
LS mean (SE)at baseline	4.16	4.82	-	-
LS mean (SE)at week 2	4.45	4.97	0.52	0.1745
LS mean (SE)at week 4	2.55	5.49	2.94	0.0080
LS mean(SE) after treatment at week 8	2.29	5.13	2.84	0.0145
<b>POEM</b>				
LS mean (SE)at baseline	11.38	13.17	-	-
LS mean (SE)at week 2	8.45	11.34	2.89	>0.8888
LS mean (SE)at week 4	6.65	10.65	4.00	0.6647
LS mean(SE) after treatment at week 8	6.68	10.75	4.07	0.8321
<b>DLQI</b>				
LS mean (SE)at baseline	7.73	9.90	-	-
LS mean (SE)at week 2	5.25	5.72	0.47	>0.8888
LS mean (SE)at week 4	4.05	4.75	0.07	>0.8888
LS mean(SE) after treatment at week 8	3.71	4.46	0.75	>0.8888

in both assembly's comparative to their pre-treatment conditions. As acupuncture has intrinsic non-specific belongings, we undertaking that this might be the origin of the frequency. The properties of acupuncture are a outcome of numerous non-specific things, such as the anticipation, Hawthorne, Pygmalion and placebo effects<sup>[31]</sup>. The effects of acupuncture are known to be impacted by both particular and non-specific effects. In trials evaluating subjective outcomes, the placebo performed better than no therapy., but, in terms of objective outcomes, it was no different from no treatment<sup>[32]</sup>. There have been reports indicating that the placebo's effects differ according on whether the outcome is objective or subjective. This could be the cause of the variations in the importance between the objective and subjective signs of atopic dermatitis that this investigation found. Recent investigate has allied efficient gastrointestinal syndromes such as practical dyspepsia and irritable bowel pattern to atopic diseases<sup>[15]</sup>. Furthermore, compared to individuals in excellent health, those with atopic dermatitis were more likely to get gastroenteritis<sup>[33,34]</sup>. The fallouts of this study indicate that indicators of atopic dermatitis (SCORED) are linked with GI role, counting dyspepsia and gastric distress. Apart from that, the acupuncture treatment improved the objective symptoms of atopic

dermatitis and reduced dyspeptic symptoms. Studies have shown that anomalies in the autonomic nervous system are associated with an immunological and neurophysiological imbalance<sup>[14,35]</sup>. These imbalances may contribute to the dysfunction of the gastrointestinal tract in diseased patients. Previous reports indicate that individuals who underwent acupuncture therapy and experienced stronger parasympathetic activation also experienced a greater reduction in itching<sup>[9]</sup>. Furthermore, studies suggest that acupuncture could reduce systemic inflammation by controlling vagal tone<sup>[36]</sup>. These studies suggest that acupuncture may help lessen the discomfort related to atopic dermatitis and related gastrointestinal disorders. Further research is required to comprehend the relationship between gastrointestinal function and atopic dermatitis, as well as the underlying mechanism of acupuncture treatment that simultaneously addresses both symptoms.

## CONCLUSION

When compared to the homeopathy group, the Acupuncture group experienced a significant improvement in the symptoms of dermatitis after receiving acupuncture therapy twice a week for a period of four weeks. The treatment observed to be

effective from the additional week onwards, and the efficiency was preserved even after the finish of the acupuncture conduct.

## REFERENCES

- Nutten, S., 2015. Atopic Dermatitis: Global Epidemiology and Risk Factors. *Ann. Nutr. Metab.*, 66: 8-16.
- Sacotte, R., 2018. Epidemiology of adult atopic dermatitis. *Clin. Dermatol.*, 36: 595-605.
- Weidinger, S. and N. Novak, 2016. Atopic dermatitis. *The Lancet*, 387: 1109-1122.
- Schoepe, S., H. Schäcke, E. May and K. Asadullah, 2006. Glucocorticoid therapy-induced skin atrophy. *Exp. Dermatol.*, 15: 406-420.
- Psomadakis, C.E. and G. Han., 2019. New and emerging topical therapies for psoriasis and atopic dermatitis.
- Lee, J.A., J. Choi, T.Y. Choi, J.H. Jun, D. Lee, S.S. Roh and M.S. Lee, 2016. Clinical practice guidelines of Korean medicine on acupuncture and herbal medicine for atopic dermatitis: A GRADE approach. *Eur. J. Integr. Med.*, 8: 854-860.
- Yun, Y., S. Lee, S. Kim and I. Choi, 2013. Inpatient treatment for severe atopic dermatitis in a Traditional Korean Medicine hospital: Introduction and retrospective chart review. *Compl. Ther. Med.*, 21: 200-206.
- Napadow, V., A. Li, M.L. Loggia, J. Kim and P.C. Schallock et al., 2014. The Brain Circuitry Mediating Antipruritic Effects of Acupuncture. *Cerebral Cortex*, 24: 837-882.
- Min, S., K.W. Kim, W.M. Jung, M.J. Lee and Y.K. Kim et al., 2019. Acupuncture for Histamine-Induced Itch: Association With Increased Parasympathetic Tone and Connectivity of Putamen-Midcingulate Cortex. *Front. Neurosci.*, Vol. 13 .10.3389/fnins.2019.00215.
- Tan, H.Y., G.B. Lenon, A.L. Zhang and C.C. Xue, 2015. Efficacy of acupuncture in the management of atopic dermatitis: A systematic review. *Clin. Exp. Dermatol.*, 40: 711-716.
- Yu, C., P. Zhang, Z.T. Lv, J.J. Li and H.P. Li et al., 2015. Efficacy of Acupuncture in Itch: A Systematic Review and Meta-Analysis of Clinical Randomized Controlled Trials. *Evidence-Based Compl. Alt. Med.*, Vol. 2015 .10.1155/2015/208690.
- Han, J.B., C.W. Kim, B. Sun, S.K. Kim, M.G. Lee, D.S. Park and B. Min, 2008. The Antipruritic Effect of Acupuncture on Serotonin-Evoked Itch in Rats. *Acupuncture & Electro-Ther. Res.*, 33: 145-156.
- Jiao, R., Z. Yang, Y. Wang, J. Zhou, Y. Zeng and Z. Liu, 2020. The effectiveness and safety of acupuncture for patients with atopic eczema: A systematic review and meta-analysis. *Acupuncture Med.*, 38: 3-14.
- Kang, S., Y.K. Kim, M. Yeom, H. Lee, H. Jang, H.J. Park and K. Kim, 2018. Acupuncture improves symptoms in patients with mild-to-moderate atopic dermatitis: A randomized, sham-controlled preliminary trial. *Compl. Ther. Med.*, 41: 90-98.
- Koloski, N., M. Jones, M.M. Walker, M. Veysey and A. Zala et al., 2019. Population based study: Atopy and autoimmune diseases are associated with functional dyspepsia and irritable bowel syndrome, independent of psychological distress. *Aliment. Pharmacol. & Ther.*, 49: 546-555.
- Schulz, K.F., D.G. Altman and D. Moher., 2010. CONSORT 2010 statement: updated guidelines for reporting parallel group randomised trials. *BMJ.*, 340: 698-702.
- Park, J.G., H.J. Park, Y. Chae, Y.K. Kim, H. Lee and K. Kim, 2019. Acupuncture Treatment for Symptom Management in Atopic Dermatitis: A Study Protocol for a Randomized, Participant- and Assessor-Blind, Sham-Controlled Trial. *Evidence-Based Compl. Alt. Med.*, Vol. 2019 .10.1155/2019/1907578.
- Eichenfield, L.F., W.L. Tom, S.L. Chamlin, S.R. Feldman and J.M. Hanifin et al., 2014. Guidelines of care for the management of atopic dermatitis. *J. Am. Acad. Dermatol.*, 70: 338-351.
- Takeuchi, S., H. Saeki, S. Tokunaga, M. Sugaya and H. Ohmatsu et al., 2012. A Randomized, Open-Label, Multicenter Trial of Topical Tacrolimus for the Treatment of Pruritis in Patients with Atopic Dermatitis. *Ann. Dermatol.*, 24: 144-150.
- Oranje, A.P., 2011. Practical Issues on Interpretation of Scoring Atopic Dermatitis: SCORAD Index, Objective SCORAD, Patient-Oriented SCORAD and Three-Item Severity Score. *Curr. Probl. Dermatol.*, 41: 149-155.
- MacPherson, H., D.G. Altman, R. Hammerschlag, L. Youping, W. Taixiang and A. White A, et al., 2010. Revised standards for reporting interventions in clinical trials of acupuncture (STRICTA): extending the CONSORT statement. *J. Altern Complement Med.*, 16: 1-14.
- Ricci, G., A. Dondi and A. Patrizi, 2009. Useful Tools for the Management of Atopic Dermatitis. *Am. J. Clin. Dermatol.*, 10: 2876-300.
- Charman, C.R., A.J. Venn and H.C. Williams, 2004. The Patient-Oriented Eczema Measure. *Arch. Dermatol.*, 140: 1513-1519.
- FINLAY, A.Y. and G.K. KHAN, 1994. Dermatology Life Quality Index (DLQI)-a simple practical measure for routine clinical use. *Clin. Exp. Dermatol.*, 19: 210-216.
- Talley, N.J., M. Haque, J.W. Wyeth, S.N.H. tace, G.N. Tytgat and V. Stanghellini, et al., 1999. Development of a new dyspepsia impact scale: the Nepean dyspepsia index. *Aliment Pharmacol Ther.*, 13: 225-235.

26. Ko, S.J., H. Lee, S.K. Kim, M. Kim, J. Kim, B.J. Lee and J.W. Park, 2015. Development of the Quantitative Indicator of Abdominal Examination for Clinical Application: A Pilot Study. *The J. Alt. Compl. Med.*, 21: 358-363.
27. Schmitt, J., S. Langan, S. Deckert, A. Svensson, L. von Kobyletzki, K. Thomas and P. Spuls, 2013. Assessment of clinical signs of atopic dermatitis: A systematic review and recommendation. *J. Allergy Clin. Immunol.*, 132: 8-11.
28. Qin, Z., Y. Ding, J. Wu, J. Zhou, L. Yang, X. Liu and Z. Liu, 2016. Efficacy of acupuncture for degenerative lumbar spinal stenosis: Protocol for a randomised sham acupuncture-controlled trial. *BMJ Open*, Vol. 6 .10.1136/bmjopen-2016-012821.
29. Schram, M.E., P.I. Spuls, M.M.G. Leeflang, R. Lindeboom, J.D. Bos and J. Schmitt, 2011. EASI, (objective) SCORAD and POEM for atopic eczema: Responsiveness and minimal clinically important difference. *Allergy*, 67: 1337-1347.
30. Gong, Y., H. Chang, J.S. Gao, C.D. Liu, B.W. Han and X.K. Wu., 2019. Progress of researches on non-specific effect of acupuncture. *Zhen ci yan jiu.*, 44: 693-697.
31. Hróbjartsson, A. and P.C. Gøtzsche, 2001. Is the Placebo Powerless? *New Engl. J. Med.*, 344: 1594-1602.
32. Gilaberte, Y., J.B. Pérez-Gilaberte, B. Poblador-Plou, K. Bliet-Bueno, A. Gimeno-Miguel and A. Prados-Torres, 2020. Prevalence and Comorbidity of Atopic Dermatitis in Children: A Large-Scale Population Study Based on Real-World Data. *J. Clin. Med.*, Vol. 9 .10.3390/jcm9061632.
33. Islamoglu, Z.K., M. Unal and A. Küçük, 2019. Atopic dermatitis in adults and irritable bowel syndrome: A cross-sectional study. *Indian J. Dermatol.*, 64: 355-359.
34. Ordovas-Montanes, J., S. Rakoff-Nahoum, S. Huang, L. Riolo-Blanco, O. Barreiro and U.H. von Andrian, 2015. The Regulation of Immunological Processes by Peripheral Neurons in Homeostasis and Disease. *Trends Immunol.*, 36: 578-604.
35. Torres-Rosas, R., G. Yehia, G. Peña, P. Mishra and M.D. Thompson-Bonilla et al., 2014. Dopamine mediates vagal modulation of the immune system by electroacupuncture. *Nat. Med.*, 20: 291-295.