

## Research Article

# Incidence of Hanifin And Rajka Diagnostic Criteria for Atopic Dermatitis in Patients Referring to Dermatology Office in Sina Hospital

Hashemi Jam<sup>1</sup><sup>1</sup> Tabriz medicine university, Iran.

**Copyright:** © 2017 Hashemi Jam, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

## Abstract

**Background:** Atopic dermatitis is one of common dermatological disease particularly infants and children. However it is reported in all age groups. Different diagnostics guidelines have been proposed in this regard. The hanifin- rajka major and minor criteria seem to have got a better acceptance.

**Objectives:** This study aimed at evaluating the clinical pattern of atopic dermatitis based on Hanifin-Rajka criteria in dermatology clinic of tabriz Sina hospital.

**Material and Methods:** In an analytical- descriptive cross sectional study 60 patients with atopic dermatitis were recruited in one year in Tabriz. Sina hospital. the patients were selected in three 20 groups. minor and major criteria for atopic dermatitis were evaluated in each group.

**Results:** The major criteria were pruritus 81.7%. Characteristic distribution and morphology 66.7%. Flexural lichenification in adults 25 %. facial and ex-tensor involvement in infants and children 53.3%. chronic and relapsing dermatitis 50%. and personal or family history of atopia/asthma, allergic rhinitis. and allergic dermatitis 46.7%. accordingly the major criteria were positive in 80%. the most common minor criteria were exeroderma 87.3%. eczema perifollicular exacerbation 35%. accentuation of the palralines 31.7%. recurred conjunctivitis 30%. hyper igE 21.7 %. and cheilitis 21.7%. accordingly the minor criteria were present in 83.3%.

**Conclusions:** As there is not any similar reports in Iranian community. the current investigation is the only one reporting fereqncic of major and minor criteria for atopic dermatitis.

**Keywords:** Hanifin- Rajka, Atopic Dermatitis, Age

## Introduction

Atopic eczema is a chronic, itchy skin condition that is very common in children but may occur at any age. It is also known as eczema, atopic dermatitis and neurodermatitis. It is the most common form of dermatitis.

Atopic eczema usually occurs in people who have an 'atopic tendency'. This means they may develop any or all of three closely linked conditions; atopic eczema, asthma and hay fever (allergic rhinitis). Often these conditions run within families with a parent, child or sibling also affected. A family history of asthma, eczema or hay fever is particularly useful in diagnosing atopic eczema in infants.

Atopic eczema arises because of a complex interaction of genetic and environmental factors. These include defects in skin barrier function making the skin more susceptible to irritation by soap and other contact irritants, the weather, temperature and non-specific triggers [1]. Topic eczema affects 15-20% of children but is much less common in adults. It is impossible to predict whether eczema will improve by itself or not in an individual. Sensitive skin persists life-long.

It is unusual for an infant to be affected with atopic eczema before the age of four months but they may suffer from infantile seborrheic dermatitis or other rashes prior to this. The onset of atopic eczema is usually before two years of age although it can manifest itself in older people for the first time.

Atopic eczema is often worst between the ages of two and four but it generally improves after this and may clear altogether by the teens.

Certain occupations such as farming, hairdressing, domestic and industrial cleaning, domestic duties and care-giving expose the skin to various irritants and, sometimes, allergens. This aggravates atopic eczema. It is wise to bear this in mind when considering career options — it is usually easier to choose a more suitable occupation from the outset than to change it later [2-4]. Atopic dermatitis is one of common dermatological disease particularly infants and children.

however it is reported in all age groups. different diagnostics guidelines have been proposed in this regard. The hanifin- rajka major and minor criteria seem to have got a better acceptance. This study aimed at evaluating the clinical pattern of atopic dermatitis based on Hanifin-Rajka criteria in dermatology clinic of tabriz Sina hospital.

## Methods and Materials

In an analytical- descriptive cross sectional study 60 patients with atopic dermatitis were recruited in one year in Tabriz. Sina hospital. the patients were selected in three 20 groups. minor and major criteria for atopic dermatitis were evaluated in each group.

**\*Corresponding author:** Hashemi Jam, personal office, Tabriz medicine university, Iran, Tel: +98 9143959323; Fax: +98 9143959323; E-mail: drshahrzad\_jam@yahoo.com

**Received:** July 19, 2017; **Accepted:** September 20, 2017; **Published:** September 27, 2017

**Major Criteria:** Must have three or more of:

1. Pruritus
2. Typical morphology and distribution
  - Flexural lichenification or linearity in adults
  - Facial and extensor involvement in infants and children
3. Chronic or chronically-relapsing dermatitis [5-7]
4. Personal or family history of atopy (asthma, allergic rhinitis, atopic dermatitis)

**Minor Criteria:** Should have three or more of:

1. Xerosis
2. Ichthyosis, palmar hyperlinearity, or keratosis pilaris
3. Immediate (type 1) skin-test reactivity
4. Raised serum IgE
5. Early age of onset
6. Tendency toward cutaneous infections (especially *S aureus* and herpes simplex) or impaired cell-mediated immunity [8-10]
7. Tendency toward non-specific hand or foot dermatitis
8. Nipple eczema
9. Cheilitis
10. Recurrent conjunctivitis
11. Dennie-Morgan infraorbital fold
12. Keratoconus
13. Anterior subcapsular cataracts
14. Orbital darkening
15. Facial pallor or facial erythema
16. Pityriasis alba
17. Anterior neck folds
18. Itch when sweating
19. Intolerance to wool and lipid solvents
20. Perifollicular accentuation [11,12]
21. Food intolerance
22. Course influenced by environmental or emotional factors
23. White dermographism or delayed blanch

## Results

The major criteria were pruritus 81.7%. characteristic distribution and morphology 66.7%. flexural lichenification in adults 25 %. facial and ex-tensor involvement in infants and children 53.3%. chronic and relapsing dermatitis 50%. and personal or family history of atopia/asthma, allergic rhinitis. and allergic dermatitis 46.7%. [13,14]

Accordingly the major criteria were positive in 80%. the most common minor criteria were exeroderma 87.3%. eczema perifollicular exacerbation 35%. accentuation of the palralines 31.7%.

Recurred conjunctivitis 30%. hyper igE 21.7 %. and cheilitis 21.7%.

accordingly the minor criteria were present in 83.3%. [15,16]

## Conclusion

As there are not any similar reports in Iranian community. The current investigation is the only one reporting frequency of major and minor criteria for atopic dermatitis.

## References

1. Nankervis H, Maplethorpe A, Williams HC (2011) Mapping randomized controlled trials of treatments for eczema—the GREAT database (the Global Resource of Eczema Trials: a collection of key data on randomized controlled trials of treatments for eczema from 2000 to 2010). *BMC Dermatol* 11: 10.
2. Hanifin JM, Cooper KD, Ho VC, Kang S, Krafchik BR, et al. (2004) Guidelines of care for atopic dermatitis, developed in accordance with the American Academy of Dermatology (AAD)/American Academy of Dermatology Association “Administrative Regulations for Evidence-Based Clinical Practice Guidelines”. *J Am Acad Dermatol* 50: 391-404. [\[crossref\]](#)
3. Ring J, Alomar A, Bieber T, Deleuran M, Fink-Wagner A, et al. (2012) Guidelines for treatment of atopic eczema (atopic dermatitis) Part II. *J Eur Acad Dermatol Venereol* 26: 1176-1193.
4. Ring J, Alomar A, Bieber T, Deleuran M, Fink-Wagner A, et al. (2012) Guidelines for treatment of atopic eczema (atopic dermatitis) part I. *J Eur Acad Dermatol Venereol* 26: 1045-1060.
5. Schneider L, Tilles S, Lio P, Boguniewicz M, Beck L, et al. (2013) Atopic dermatitis: a practice parameter update 2012. *J Allergy Clin Immunol* 131: 295-299. [\[crossref\]](#)
6. Ebell MH, Siwek J, Weiss BD, Woolf SH, Susman J, et al. (2004) Strength of recommendation taxonomy (SORT): a patient-centered approach to grading evidence in the medical literature. *J Am Board Fam Pract* 17: 59-67.
7. American Academy of Dermatology web site. Administrative regulations. Evidencebased clinical practice guidelines. Accessed November 15, 2011.
8. Kay J, Gawkrödger DJ, Mortimer MJ, Jaron AG (1994) The prevalence of childhood atopic eczema in a general population. *J Am Acad Dermatol* 30: 35-39. [\[crossref\]](#)
9. Perkin MR, Strachan DP, Williams HC, Kennedy CT, Golding J, et al. (2004) Natural history of atopic dermatitis and its relationship to serum total immunoglobulin E in a population-based birth cohort study. *Pediatr Allergy Immunol* 15: 221-229.
10. Ellis CN, Mancini AJ, Paller AS, Simpson EL, Eichenfield LF, et al. (2012) Understanding and managing atopic dermatitis in adult patients. *Semin Cutan Med Surg* 31: S18-22.
11. Rudzki E, Samochocki Z, Rebandel P, Saciuk E, Gał, ecki W, et al. (1994) Frequency and significance of the major and minor features of Hanifin and Rajka among patients with atopic dermatitis. *Dermatology* 189: 41-46. [\[crossref\]](#)
12. Mevorah B, Frenk E, Wietlisbach V, Carrel CF (1988) Minor clinical features of atopic dermatitis. Evaluation of their diagnostic significance. *Dermatologica* 177: 360-364. [\[crossref\]](#)
13. Gu H, Chen XS, Chen K, Yan Y, Jing H, et al. (2001) Evaluation of diagnostic criteria for atopic dermatitis: validity of the criteria of Williams et al. in a hospital-based setting. *Br J Dermatol* 145: 428-433.
14. Haileamlak A, Lewis SA, Britton J, Venn AJ, Woldemariam D, et al. (2005) Validation of the International Study of Asthma and Allergies in Children (ISAAC) and U.K. criteria for atopic eczema in Ethiopian children. *Br J Dermatol* 152: 735-741. [\[crossref\]](#)
15. Lan CC, Lee CH, Lu YW, Lin CL, Chiu HH, et al. (2009) Prevalence of adult atopic dermatitis among nursing staff in a Taiwanese medical center: a pilot study on validation of diagnostic questionnaires. *J Am Acad Dermatol* 61: 806-812.
16. Diepgen TL, Sauerbrei W, Fartasch M (1996) Development and validation of diagnostic scores for atopic dermatitis incorporating criteria of data quality and practical usefulness. *J Clin Epidemiol* 49: 1031-1038. [\[crossref\]](#)