

[www.jmscr.igmpublication.org](http://www.jmscr.igmpublication.org)

Impact Factor-1.1147  
ISSN (e)-2347-176x



Journal Of Medical Science And Clinical Research

IGM Publication

An Official Publication Of IGM Publication

## Alopecia Areata and Lichen Scleroses Et Atropicus - A Rare Co Association

Authors

**Muktamani Gurumayum<sup>1</sup>, Rajashekar T.S<sup>2</sup>, Jisha Pillai<sup>3</sup>, Harish Prasad<sup>4</sup>**

Department of Dermatology, Venereology and Leprosy  
Sri Devraj URS Medical College, Kolar District, Karnataka  
India

Correspondence Author

**Dr. Muktamani Gurumayum,**

Post Graduate

Department of Dermatology, Venereology and Leprosy  
R.L.Jalappa Hospital & Research Centre  
Tamaka, Kolar, Karnataka-59075  
India

E-mail:[dolly123sharma@yahoo.com](mailto:dolly123sharma@yahoo.com)

### Abstract

*Alopecia areata (AA) frequently occurs in association with other autoimmune diseases such as thyroid disorders, anemias and other skin disorders. It is thought that some possible triggers like viruses, infection, medicines, sunlight, or other environmental factors prompt the immune system to attack the body's own tissues. It may be that the same environmental trigger activates more than one form of autoimmune disease. We report a case of alopecia areata with lichen scleroses et atrophicus a rare association among the autoimmune diseases.*

*Key Words: Alopecia areata, Lichen scleroses et atrophicus, Autoimmunity.*

### INTRODUCTION

Alopecia areata (AA) is a non-inflammatory, self-limited disorder characterized by patchy, non-scarring alopecia. Children and young adults are more frequently affected though disease may occur at any age. Among the various factors

suggested for its etiology the autoimmunity is most plausible one.<sup>1</sup>

Lichen sclerosis is a chronic inflammatory skin disease that causes substantial discomfort and morbidity commonly in adult women and occurs

most commonly in anogenital area though any skin site may be affected which can lead to destructive scarring. Underlying cause is unknown, but there are various studies supporting genetic susceptibility and autoimmune mechanisms.<sup>2</sup> Hereby we report a rare association of two autoimmune Dermatological conditions - alopecia areata and Lichen sclerosus et atrophicus.

### CASE REPORT

A 25 year old male patient presented with multiple patches of hair loss over the scalp, eyebrows and eyelashes of one year duration (Fig1). He also complains of multiple well defined asymptomatic hypopigmented patches with central wrinkling over the back of four months duration. (Fig3). Routine investigations, autoimmune panel, Thyroid stimulating hormones were within normal limits. Skin biopsy of the hypopigmented patches over the back were suggestive of Lichen sclerosus et atrophicus showing thinning of epidermis, flattening of rete ridges with perivascular infiltration of lymphocytes seen in dermis (Fig2).



Fig: 1

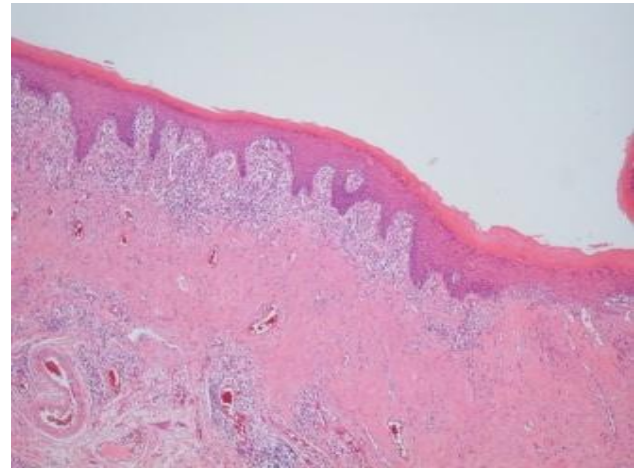


Fig: 2



Fig 3

### DISCUSSION

Alopecia areata (AA) is a common cause of non-cicatricial alopecia that occurs as a patchy, confluent or diffuse pattern. It may occur as a single self-limiting episode, or may recur at varying intervals over many years. It may affect any hairy area of the body and is usually reversible.<sup>3</sup>

Etiology of alopecia areata is not known with certainty, the autoimmune theory appears most promising. Other suspected etiologic factors are

hereditary ,emotional stress,atopy, infective, neurologic and endocrine mechanism.<sup>4</sup>

Lichen sclerosus which is also an inflammatory condition which can affect all age groups. Extragenital LS is more commonly seen over the shoulder and back and is usually asymptomatic similar to our case.<sup>5</sup>The association between lichen sclerosus and other autoimmune disorders has been shown in several studies. Alopecia areata, vitiligo, thyroid diseases and cicatricial pemphigoid are few autoimmune disorders that are associated with Lichen sclerosus.<sup>6</sup>

Association of alopecia areata with other multiple autoimmune syndromes can be classified into 3 groups according to the prevalence of their associations with one another.Type1 comprised myasthenia gravis, thymoma, polymyositis and giant cell myocarditis. Type 2 includes Sjögren's syndrome, rheumatoid arthritis, primary biliary cirrhosis, scleroderma and autoimmune thyroid disease. Type3 groups together autoimmune thyroid disease, myasthenia and/ or thymoma, Sjogren's syndrome, pernicious anemia, idiopathic thrombocytopenic purpura, Addison's disease, insulin dependent diabetes, vitiligo, Lichen sclerosus et atrophicus, autoimmune hemolytic anemia, systemic lupus erythematosus and dermatitis herpetiformis .<sup>7</sup>

It has been estimated that only 3% to 5% of patients of alopecia areata have any other autoimmune or endocrine diseases, in which

association of alopecia areata and lichen sclerosus et atrophicus is very rare and till now only one case is reported in the literature.<sup>8,9</sup> Hereby we report a rare case of association between alopecia areata and lichen sclerosus et atrophicus, the two autoimmune disorders in the same patient.

## REFERENCES

- 1)Alkhalifal A, Alsantali A, Wary E. Alopecia Areata. J Am Acad Dermatol 2010;62:177-88.
- 2)Meffert JJ, Davis BM, Grimwood RE.Lichen Sclerosus. J Am Acad Dermatol 1995;32:393-416.
- 3)Madani S, Shapiro J. Alopecia areata update. J Am Acad Dermatol 2000; 42 : 549-66.
- 4)Vijayakumar M, Thappa DM.Dexamethasone pulse therapy for extensive alopecia areata: To use or not to use. Indian J Dermatol Venereol Leprol 2002; 68: 52-3.
- 5)Powell J, Wojnarowska. Lichen Sclerosus. The lancet 1999; Vol 353:p1777-83.
- 6)Grandolfo M, Biscazzi AM, Pipoli M. Alopecia areata and autoimmunity. Ital Dermatol Venereol. 2008; 143: 277-81.
- 7)Mohan MP, Ramesh TC. Multiple autoimmune syndrome. Indian J Dermatol Venereol Leprol 2003;69:298-9.
- 8)Grandolfo M, Biscazzi AM, Pipoli M. Alopecia areata and autoimmunity. G Ital Dermatol Venereol. 2008; 143:277-81.
- 9)Faergemann J. Lichen Sclerosus et atrophicus generalisata, alopecia areata and polymyalgia rheumatica found in the same patient. Cutis 1979; Vol 23:757-8.