

Management of Linear IgA Through Ayurveda: A Case Study

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Abstract

Linear IgA bullous dermatosis (LABD)/ Chronic bullous disease of childhood (CBDC) is a rare autoimmune blistering disease characterized by the linear deposition of IgA at the dermoepidermal junction. LABD is such a rare disease with diverse clinical manifestations and etiologies. The authors here report a case of 6-year-old child who presented with erythematous vesiculobullous lesions on her perianal region, groins, thighs and in both upper and lower limbs. A biopsy was performed, which was consistent with linear immunoglobulin A bullous dermatosis and later confirmed by direct immunofluorescence studies. The child was under ayurvedic op medication and the recovery was remarkable and worth documenting. The authors present this case to increase awareness of this rare disease, and its symptomatic management that can be done through the ayurvedic system of medicine.

Keywords: Linear IgA, Twak Roga, Autoimmune Disease

Introduction

Skin is one of the Adhithana of Jnanendriyas as described in Ayurveda. Healthy skin plays a great role in physical and mental well being of any individual. Studies show that around 25-30% of the population have various skin problems requiring attention and these skin disorders vary in symptoms and severity. They can be situational or genetic, minor or mortal. Chronic bullous disease of childhood (CBDC) is an acquired autoimmune blistering disorder of childhood and is characterized by linear IgA staining of the basement membrane zone on direct immunofluorescence. It is a rare autoimmune vesiculobullous disease with an incidence of 0.2 to 2.3 per 1000000 million per year. Epidemiologically, there is an unestablished predominance of race or sex. This autoimmune attack on structural proteins, usually proteolytic fragments of collagen XVII, renders the dermal-epidermal junction prone to blistering. Diagnosis is confirmed by characteristic histology and direct immunofluorescence. Here the article deals with a diagnosed case of Linear IgA dermatosis and its relative management through ayurveda. The symptoms of the disease are predominantly Pitta Pradhana tridosha in nature and medicines were given considering this. Recurrence and autoimmune nature of the disease can be correlated to dooshivisha concept in ayurveda classics. Op medicines were given for 6 months and the symptoms were clinically managed and have not relapsed till date.

Materials and Methods

Case History

A 6 year old female child diagnosed case of Linear IgA disease/Childhood Bullous disease of childhood

came to our OPD (26/09/2021) along with her parents complaints of multiple painless fluid filled lesions over both upper and lower limbs since 1 month .Child was a full term baby born through C - section of NC parents,cried soon after birth, sucking was normal and with a birth weight of 3.500 kg . Child had a history of NNJ and was discharged 6 th day from the hospital and had no significant health issues since then.All her milestones were normal.A month back patient started to notice multiple polysized vesicles initially around the knee region of right lower limb which was gradually progressing to more classical diffuse polymorphic erythematous vesiculobullous lesions around perianal region, groins,thighs and in all four extremities.Discrete to confluent crusted plaques with vesicles along margins in generalized distribution (cluster of jewel appearance) and multiple hypopigmented macules were also present.No other systemic symptoms were present.They had consulted an allopathic physician who advised for a skin biopsy.Direct immunofluorescence showed linear staining of basement membrane zone with IgA and taken oral medications for the same .The lesions got slightly resolved but again relapsed once she stopped medication.

Past history: There is no history of any chronic or debilitating or any infectious disease.

Family history: There are 4 members in the family and all are said to be healthy.

Immunization History: Timely vaccinated till date

Personal history

Diet - Mixed

Appetite - Good

Sleep- sound

Bowel - Normal ; once / day

Micturition - Pale yellow,4-5 times/ day

Allergy - Nil

Habit - Nil

Physical examination

Pulse- 82 bpm

Weight- 20 kg

Height- 110 cm

Temperature- 98.6 °F

Respiratory rate -22bpm

Systemic Examination

- A. Respiratory System: Normal vesicular breath sounds heard, no added sounds.
- B. Cardiovascular system: S1,S2 heard , No added sounds
- C. C)Central Nervous System: intact,NAD
- D. Per Abdomen:Soft,non tender
- E. Integumentary system

a) Inspection

- Distribution - Multiple large tense vesiculobullous lesions filled with clear fluid developed on an erythematous urticarial base seen around perianal region, B/L groins, thighs, asymmetrically distributed in both upper and lower limbs
- Shape- Sausage shaped elevated bullae arranged in an annular fashion around a central crust.
- Erythematous plaques with gyrate margins bordered by intact bullae are seen (cluster of jewel appearance).
- No scar marks were seen.
- Pruritus absent

b) Palpation

- No tenderness was elicited
- Temperature - normal
- No associated scaling and edema
- Bullae spread sign = - ve
- Nikolsky sign. = - ve

Investigation

Immunofluorescence report done on 15 October 2021

Direct immunofluorescence- there is linear staining of the basement membrane zone with IgA. This feature is diagnostic of Linear IgA Disease.

Samprapti Ghataka

Dosha: Pitta Pradhana tridosha

Dushya: Rasa, Rakta, Mamsa, Ambu

Agni : samagni

Srotas: Rasavaha, Raktavaha, Mamsavaha, Ambuvaha Sroto

Dushti: Sanga

Vyakthasthana: Hasta, Padam, uru. payu

Sancharasthana : Sarvasharira

Rogamarga: Bahyam

Rogaswabhava: Chirakari

Sadhya-asadyata: Yaapya/ asadhya

Ashta sthana Pariksha

Nadi: Pittakaphaja, Mandukahamsagathi Mala:

1 time /day, Prakruta

Mutra: Sadaranam

Jihwa: Alipta, sadaranam

Shabda: vyaktham

Sparsha: Anushnasheetam

Druk: Vyaktham

Aakruti: Madhyamakaya

Dashavidha Pariksha

Prakriti: Pittakapha

Vikruti: Pitta pradhanatridosha

Satwa: Heena

Saara: Alpam

Samhanana:Madhyama

Ahara Shakti :

Abhyavaharana Shakti:Madhyama

Jarana Shakti :Madhyama

VyayamaShakti: Madhyama

Satmya: Sarvarasa sathmya

Pramana: Madhyama kaya

Vaya: Bala

Treatment

Patient was treated on an OPD basis with the following medicines.

Table 1.Internal medicines

Sl no	Internal medicines	Method of Kala administration	Anupanam
1	NEELITHULASYADI KASHAYAM	7.5 ml kashayam Twice daily mix with 25 ml before food lukewarm water	Nil
2	DUSHEEVISHARI GULIKA	one tablet; twice daily powdered before food	kashaya
3	GULUCHYADI KASHYAM	As <i>panajalam</i> frequently	Nil

Same medicines were repeated in all follow up op visits for 6 months.

Pathya-Apathya:

- *Ahara-* Avoid *katu amla lavana rasa ahara*,spicy and oily food,citrus fruits,pickle,garlic,curd,horse gram,meat,egg,pappad,chocolates etc.
- *Vihara* - Should take bath in water boiled and cooled with Neem and Turmeric. Following image shows stage wise improvement of Linear IgA Disease.



Fig 1.1, Fig1.2, Fig1.3 Before treatment (26/09/2021)



Fig 2.1, Fig2.2 After treatment (7/12/2021)



Fig 3.1, Fig3.2 Follow up visit (4/01/2022)



Fig 4.1, Fig4.2 Follow up on (28/05/2023)

Discussion

Linear IgA Disease (LABD) is chronic, subepidermal autoimmune blistering disease affecting children and adults with cutaneous and mucosal involvement characterized by IgA basement membrane antibodies. *Twak rogas* are *chirakari* and so recurrent relapse occur easily. Here the patient presents with symptoms that are predominantly *Pittapradhana tridosha* in nature and the involvement of vitiated *rasa rakta dhatus* are also evident here. Presentations like vesiculobullous formation, relapsing nature, redness shows similarities with the *lakshanas* explained in *paithika loota visha* in Ayurveda classics. So the treatment adopted here is mainly *vishahara*, *rakthaprasdhakara*, and *pittahara* without vitiating other doshas. Such a patient should also be given ingredients having mainly *tikta rasa* (bitter taste) and hence *Guluchyadi kashayam*, *Dooshi Vishari gulika*, *Neelithulasyadi kashayam* was given based on this interpretations.

Neelithulasyadi Kashayam is a unique proprietary formulation based on the Neelidaladi Ghrutham, an effective *Ghrutha Yoga* from '*Prayoga Samuchayam Lootha Visha Chikitsa*' and is a favored combination in Keraleeya Ayurveda practice. It is

Kushtagna, vedanasthapana, vishagnam. The '*apaaki*' nature of *ama* or metabolic toxins leads to '*gara visha*' signs and symptoms manifesting in the body like *mandagni*, skin lesions, pallor and this *kashaya* is very good in overcoming this stage of disease. It has potent *vishahara* action and neutralizes internal as well as external toxins. Considering *veerya* (potency) mostly *sheeta* (cold) *veerya* which pacifies the deteriorating nature of *visha* and prevents *pitha prakopa*.

Dusheevishari gulika is a *vishaghna* formulation mentioned in *Ashtangahrudayam Uthara sthanam*, *Vishaprathishedha adhyaya* in the context of *Dooshi Visha*. The ingredients of this preparation are mainly *pittakaphagna*, *vishaghna* and *raktaprasadhakara* in nature and some of the dravyas are *kandughna*, *kushtaghna* which mostly act on *twakroga*. *Dusheevishari gulika* also has a *rasayana* property which has great effect on this autoimmune disease.

Guluchyadi kashayam is an ayurvedic formulation prepared out of drugs mentioned in *Guluchyadi ganam* in *Ashtangahrudayam Sutrasthanam*. It is *deepana* and *pachana* in nature. Drugs in *Guluchyadi kwatham* are mainly *pittahara*. *Guduchi*, *Padmaka*, *Raktachandana* are advised for dosha vitiation associated with *rakta*. *Raktachandana* also possess powerful blood purifying activity. This *kashayam* also increases *agni*, *vidahiharam*, *kandughnam* and *varnyakara*.

Conclusion

This is a successful presentation of an autoimmune disease like Linear IgA through Ayurveda. Here internal medications were given to normalize the vitiated doshas and dhatus in the body and to prevent the recurrence of the disease condition. Patient has shown relief in signs and symptoms and the condition has not relapsed again till date. Recovery in the present case was promising and worth documenting. Thus traditional medicines play crucial role in the treatment of autoimmune diseases and need in depth and intensive researches.

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