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RESEARCH ARTICLE

AYURVEDIC UNDERSTANDING OF ACUTE STAGE OF ATOPIC DERMATITIS

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Abstract

Atopic dermatitis is one of the common dermatoses affecting pediatric population with prevalence ranging from 15 % to 23 %. Gradual increase in the prevalence of AD has been observed recently and it significantly affects the quality of life of children. Children suffering from Atopic dermatitis are affected with symptoms such as sleep loss, irritability, anxiety, lowered self esteem and psychological problems. Many patients suffering from Atopic dermatitis are coming for Ayurvedic treatment. So it is necessary to understand the stage of disease on the basis of thridosha concepts. This conceptual study aims to understand acute stage of Atopic dermatitis as kapha paithika visarpa.

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Introduction:-

Skin is the largest organ present in the human body and constantly exposed to external environment. The skin protects us from microbes, helps to regulate body temperature and permits the sensation of touch, heat and cold. It plays an important role in normal well being of a person. Any ailment in the skin causes great misery to the person because of its visibility^[1]. In worldwide, approximately 5 - 15% of school children suffer from Atopic dermatitis (AD), a kind of dermatitis characterized by inflammatory, relapsing, non contagious and itchy skin disorder. Children develop AD during first year of life itself. Increased sensitization to food and aeroallergens are coexisting with the patients suffering from Atopic dermatitis. Misery of living with AD cannot be overstated for it may have a profoundly negative effect on health related quality of life of children^[2]. There are lot of patients suffering from AD are coming for Ayurvedic treatment. So it is necessary to understand AD on the basis of doshik (3 fundamental principles of Ayurveda) involvement

Review of Literature:-

Clinical features of Atopic dermatitis

Atopic dermatitis (AD) is a chronic, highly pruritic (itchy) inflammatory skin disease, and it is one of the most common skin disorders in children.^[3] Atopic dermatitis is otherwise known as atopic eczema, eczema, neurodermatitis and Besnier's prurigo^[4]. AD is characterised by itching and typical skin lesions depending on age. In the case of infants, eczematous lesions first occur on the cheeks. In early childhood, the lesions are mainly seen on nape of neck, dorsal surfaces of the limbs and the joint flexural areas. After many years, other than active eczematous lesions, lichenified plaques may dominate in the area of joint flexion, head and neck^[5].

Pruritus is the most important feature in Atopic dermatitis. As it is more severe during the night, it results in sleep disorders. Continuous itching leads to scratching of the skin which further causes destruction of the epidermal

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barrier function and induce inflammatory response. Chronic itching leads to secondary changes in the skin like excoriation, infections and thickening, that leads to more itching. Thus, an itch-scratch-itch cycle is established which perpetuates the condition^[6].

Classification of AD-acute, subacute or chronic

Acute AD is having clinical features like pruritic papules or papulovesicles with serous exudates on a background of erythema. Subacute AD is characterized by grouped or scattered scaly, erythematous papules or plaques with a background of erythematous skin. Chronic AD is characterised by features of thickened skin with lichenification (increased skin markings), secondary to Scratching and rubbing^[7].

Atopic dermatitis mainly affects infants and children. Eighty percent of the cases are occurred in children below the age of five. In acute stage papular or vesicular lesions are erythematous in nature and also associated with oozing with crusting. In subacute stage lesions are reddish scaly papules. Chronicity of disease leads to thickened plaques with increased skin markings (lichenification). Excoriations are the secondary lesions which are formed due to continuous itching.^[8]

Visarpa in Ayurveda

In Ayurveda, the diseases which manifest in skin are included under the spectrum of diseases like kushta and visarpa. Relevance of visarpa is clearly evident from Charakasamhitha chikitsasthana. In which Agnivesha questioned about the disease which is very severe (daruna) and spreads like snake venom very quickly (seeprakarinam, aashivishopama).The answer to the question is the disease visarpa^[9]. The rakta, lasika (lymph), tvak, mamsa, and three morbid doshas lika vata, pitha, kapha constitute 7 morbid factors (dushyas) which play an important role in manifestation of visarpa^[10].

Definition of Visarpa

Visarpa is defined as a disease that spread in different routes and ways in human body. It is also called as parisarpa as it causes extensive spreading (spreads from all around).The term visarpa means is the one which creeps.^[11]

Samprapthi of Visarpa (pathogenesis)

Blood, lymph, skin and muscles serve as the substrata of pathology of visarpa and trimala like vata, pitha, kapha serve as pathological expressions which are triggered by corresponding etiological factors. Thus altogether these seven components constitute pathological materials for the manifestation of visarpa. Visarpa nidhanas are enough to vitiate these dhathus and doshas. Depending upon the severity of doshadhathu involvement it may manifest either externally (bahya), internally (abyanthara) or both the ways (ubhayasritha). Due to the involvement of rakta and lasika it may get transported to different areas of body and leads to formation of visarpa. Rate of spread of visarpa depends upon the degree of doshadhathu involvement. Due to external and internal factors, especially due to the factors which causes vidaha of dosha and dhathus, tridosha along with rakta gets vitiated and gets accumulated between tvak and mamsa from where it spreads outwards causing bahyavisarpa, and inwards causing antharavisarpa^[12]

Samprapthighataka of Visarpa^[13]

Table no 1;- Samprapthi of visarpa.

Dosha	Tridosha, pithapradhana Vata : Vyana, Samana Pitha : Pachaka, Bhrajaka Kapha : Kledaka
Dushya	Tvak, Rakta, Mamsa, Lasika
Agni	Jatagnimandya, Dhatvagnimandya, Amavisha
Srothodusti	Vimargagamana, Sanga
Udbhava	Amashaya
Sanchara	Rasayani, Lasikavahini
Adhistana	Tvak in bahyavisarpa, Marma in abyantharavisarpa
Rogamarga	Bahya, Abyanthara, Tiryakgami

Kardama Visarpa^[14]

Acharya charaka classified visarpa into 7 types. Vatika, Paithika, Kaphaja, Agnivisarpa, Granthivisarpa, Kardamavisarpa and Sannipathika are the 7 types of visarpa. The kapha and pitha aggravates jointly by their respective etiologic factors (nidanas) and spread to localize in weak area and produce collection of fluids in there. It results fever, stiffness, sleepiness, drowsiness, headache, lassitude, feeling of parts of the body getting detached, coating within, anorexia, giddiness, fainting, poor digestive fire, bones felt to have been dissected, thirst, heaviness of sense organs, smearing of ama to channels, spreading from amashaya to various places with dull pain, eruption of pimples (vesicles) with yellow / red / white / black / - dirty – muddy unctuous and heavy oedema. They suppurate with intense temperature and burst to visualize vessels / ligaments which lie beneath the locality. The sloughing of muscles occurs and tends to visualize vascular or ligament network emitting cadaveric odour.

Discussion:-**Dermatology in Ayurveda**

The history of skin diseases dates back to the history of mankind. From the early days of living itself, he might have afflicted with various kinds of irritations upon the skin. Indian mythology considers skin disease as an outcome of curse by God. Vedic literatures mentioned about various 'daivavyapasrayachikitsa' to ease the symptoms. Later on, inquisitive experiments to find out solutions for these diseases may have directed to develop some herbal remedies. The increase in the number and variety of skin ailment must have compelled them to discuss the ideas with each other. Also the contemplation upon this subject against a background of then prevailing philosophy might have encouraged the germination of a health science like Ayurveda.

We get enough descriptions about various skin related disorders and their different treatment methods in Ayurvedic classics. But they are scattered at different areas of narration like, Jwara, Kushta, Visarpa, Kshudraroga, Seethapitha, Udara, Kota, vrana, Vatharaktha, Visha, Swithra and Vidradhi. In addition to these various clinical conditions, other skin manifestations are available in different context also.^[15]

Comparison of Acute AD with Kapha paithika Visarpa

Atopic dermatitis (AD) is a chronic, highly pruritic (itchy) inflammatory skin disease. By looking into the manifestation, symptoms of kaphapaithikavisarpa are similar with the acute stage of Atopic dermatitis. Kaphapithadushti followed by tvak, rakta and lasikadusti leads to genesis of Kaphapaithika visarpa (Kardamavisarpa). Kaphapaithika visarpa is characterised with symptoms such as red, yellow and pale yellow colour eruptions (rakta peeta pandu pidaka), edema (svayathusamyuktha sphota), deep seated suppuration (gambeerapaka), sloughy (seegrakleda), skin and muscle tissue over these eruption are shriveled sticky, suppurated (svinnaklinnaputimamsatvak), when rubbing it gets cracked and when pressed, sticky and putrified muscle tissue comes out (parimristoavadeeryate) which is similar to the acute stage of Atopic dermatitis. Atopic dermatitis in its acute stage is having similar features like red to brownish grey patches, small raised bumps, which may leak fluid and crust over when scratched^[16]. So we can better compare the acute stage of AD with kapha paithika visarpa.

Tvak is considered as rasa sara. Any diet and regimen which causes rasadhathu vitiation also causes tvak dhathu dushti and results skin diseases. Bhrajaka pitha is located in the skin. It is also called as bhrajakagni and forms lustre of the skin^[17]. Good skin is due to normal functioning of kaphadosha also. The snigda, slakshna, mridu, sita, prasanna tvak are due to presence of unvitiated kapha. Vitiation of kapha, pitha in body reflects on the skin and causes skin diseases (tvakvikara). Aggravation of kapha vitiates kapha dosha and causes itching in the skin which is the main feature of AD. Hence the vitiation of kapha pitha can be seen in acute stages of AD and it is considered as kaphapitha visarpa in its acute stages.

Kaphapitha affliction mainly affects on kapha sthana(Uras) and pitha sthana(Tvak)^[18]. Hence the atopic march is seen. Atopic march is the allergic march, refers to the natural history or typical progression of allergic diseases that often begin early in life. These include AD, food allergy, allergic rhinitis, and asthma. This is the progression of AD in infants to allergic rhinitis and asthma in children. This is due to degree of vitiation of kapha&pitha. As phuphusa (lungs) is sonitha phena prabhava, vitiation of kapha is manifested in phuphusa. If degree of vitiation of kapha is more than pitha, it afflicts uras which is one among the kapha sthana. Vatagati is impaired gradually, and udana, vyana and prana vata vitiation occurs, and leads to manifestation of asthma (svasa). This can be compared with allergic respiratory infection and asthma in children affected with AD. If pitha vitiation is more than kapha vitiation, it manifest on pithasthana i.e skin (tvak). Due to this doshik variation AD and asthma are seen in children and considered as allergic march or atopic march.

Skin diseases are mentioned as one among the mahavyadhis .8 mahavyadhis are mentioned by Sushruta. Long term dosha vitiation (chirasanchitadoshatvam), successive dhathu involvement(Utharotharadhathuavagahatvam), chronicity (deergakalaanubanditvam), makes these diseases difficult to treat. In AD continues dosha vitiation and rasa, rakta, mamsa dhathu dushti can be seen. This makes the disease difficult to cure and make chronic ^[19].

To understand the disease process properly one should possess a thorough knowledge of its etiology (nidana). According to Sushruta, diseases are caused due to 7 factors and termed as saptavidha dukha. These are Adibalapravritta, Janmabalapravritta, Doshabalapravritta, Sanghatabalapravritta, Kala balapravritta, Daivabalapravritta and Svabhavabalapravrittavyadhis. Adibalapravrittavyadhis are produced due to vitiation of sperm and ovum (sukrasonithadushti). Matrja and pitrja are the type of adibalapravrittavyadhis. Skin diseases of genetic origin are included under adibalapravrittavyadhis^[20]. Vitiation of either sukra or sonitha may leads to manifestation of skin diseases in children. Studies undergoing in this present era also proves this concept. In the case of AD, fillagrin null gene mutations are the most significant known risk factor for AD and genes in the type 2 T helper lymphocyte (Th2) signalling pathways are the second replicated genetic risk factor for AD. It is having autosomal dominant pattern, which means one copy of the altered gene in each cell is sufficient to cause the disorder. As it is having an allergic origin, it tends to run in families. Having a parent with atopic dermatitis, asthma, or hay fever raised the chances to develop AD in children. From this it is clear that it is inherited from parents, either mother or father and vitiation of beeja is considered as most common etiology for developing AD in children ^[21].

Conclusion:-

Atopic dermatitis is a chronic relapsing endogenous eczema, characterized by recurrent symmetric dermatitic lesion associated with itching. Atopic dermatitis is classified as acute AD, subacute AD and chronic AD. Acute AD is characterized by papules, papulovesicles, with serous exudates on the background of erythma. It also spread in the entire body depending upon the age of onset. In Ayurveda AD is included in the spectrum of visarpa, and its acute stage can be compared with the Kapha pitha pradhana visarpa. Doshik involvement lika kapha, pitha are responsible for intense itching, inflammation, relapsing nature of disease. Respiratory symptoms like asthma associating with AD is due to involvement of kapha in puphusa(lungs). So we can understand acute stage of AD as Kapha paitihika visarpa.

References:-

1. Yousef H, Alhajj M, Sharma S. Anatomy, Skin (Integument), Epidermis.
2. Lifschitz C. The impact of atopic dermatitis on quality of life. *Annals of Nutrition and Metabolism*. 2015;66(Suppl. 1):34-40
3. Sandeep Kapur, Wade Watson, Stuart Carr. Atopic dermatitis. *Official journal of the canadian society of allergy and clinical immunology* 2018; 14(Suppl 2):
4. Mulick AR, Allen V, Williams HC, Grindlay DJ, Pearce N, Abuabara K, Langan SM. Classifying atopic dermatitis:Protocol for a systematic review of subtypes (phenotypes) and associated characteristics. *BMJ Open* 2018 Sep 1;8(9):e023097.
5. Magdalena Oszukowska, Iwonna Michalak, Andrzej Kaszuba. Role of primary and secondary prevention in atopic dermatitis. *Postepydermatolalergol journal* 2015; 32(6): 409-420.
6. Magdalena Oszukowska, Iwonna Michalak, Andrzej Kaszuba. Role of primary and secondary prevention in atopic dermatitis. *Postepydermatolalergol journal* 2015; 32(6): 409-420.
7. K Nagaraju. Allergic disorders in Children. A parthasarathy , MKC Nair, PSN Menon, Ritabrata Kundu (eds). IAP Textbook of Pediatrics, 6th ed. New Delhi: Jaypee Brothers Medical Publishers (P) Ltd; 2016. pp. 1020-1022
8. K Nagaraju. Allergic disorders in Children. A parthasarathy , MKC Nair, PSN Menon, Ritabrata Kundu (eds). IAP Textbook of Pediatrics, 6th ed. New Delhi: Jaypee Brothers Medical Publishers (P) Ltd; 2016. pp. 1020-1022
9. Dr.Bhushan A. Sarmandal. Introduction. (ed). Visarpam Concept and Approach, 2 ed. Kottakkal: Department of Publications; 2016. pp. 22
10. Chakrapanidatta. Charakasamhitha.(Reprint ed.). Varanasi: Chaukambhavidyabhavan; 2008.pp. 559
11. Chakrapanidatta. Charakasamhitha.(Reprint ed.). Varanasi: Chaukambhavidyabhavan; 2008.pp. 559
12. Dr.Bhushan A. Sarmandal. Introduction. (ed). Visarpam Concept and Approach, 2 ed. Kottakkal: Department of Publications; 2016. pp. 25

13. Dr.Bhushan A. Sarmandal. Introduction. (ed). Visarpam Concept and Approach, 2 ed. Kottakkal: Department of Publications; 2016. pp. 28
14. Dr.Ramkaran Sharma, Vaidya bhagwan Dash. Agnivesa'sCarakaSamhitha Text with English Translation & Critical exposition Volume 4.(Reprint ed.). Varanasi: Chaukambhaorientalia; 2012,pp. 272
15. Dr.P.M.Madhu. Consultations in Ayurvedic Dermatology. Thrissur: Kunnath Mana Ayurveda Books; 2015. pp. 19
16. Dr.Ramkaran Sharma, Vaidya bhagwan Dash. Agnivesa'sCarakaSamhitha Text with English Translation & Critical exposition Volume 4.(Reprint ed.). Varanasi: Chaukambhaorientalia; 2012,pp. 277
17. Tess McPherson. Current Understanding in Pathogenesis of Atopic Dermatitis. Indian Journal of Dermatology 2016; 61(6):649-655 .
18. Tess McPherson. Current Understanding in Pathogenesis of Atopic Dermatitis. Indian Journal of Dermatology 2016; 61(6):649-655 .
19. Sushrutha. SusruthaSamhitha Text with English Translation. (4 ed). Varanasi: Chowkamba Sanskrit Series office; 2012. pp 215
20. Sushrutha. SusruthaSamhitha Text with English Translation. (4 ed). Varanasi: Chowkamba Sanskrit Series office; 2012. pp 215
21. Tess McPherson. Current Understanding in Pathogenesis of Atopic Dermatitis. Indian Journal of Dermatology 2016; 61(6):649-655.