



“Review article on shwitra -vitiligo an autoimmune disorder...”

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Abstract:A disease that causes the loss of skin colour in blotches .vitiligo occurs when melanin pigment producing cells die or stop functioning.The condition can affect the skin on any part of the body .It can also affect hair and the inside of the mouth.Vitiligo affects people of all skin types,but it may be more noticeable in people with brown or black skin.The condition is not life threatening or contagious.It can be stressful or make you feel bad about yourself.The exact etiology of vitiligo is poorly understood and is often considered as a multifactorial disease with a complex pathogenesis encompassing several postulations implicating autoimmune,cytotoxic,biochemical,oxidant antioxidant,viral,and neural mechanisms for destruction of melanocyte function in genetically predisposed.Ayurveda states that causes of shwitra may be chardivegadharan,Atisevan of amla,katu,ushna,lavan,Madhur aaharsevan,viruddhahar and atimatra bhojan along with navann sevan and dahisevan.These hetu leads to vitiate Tridosha specially aggravation of pitta Dosha which symbolizes heat as fire and is manifested in the skin ,mamsa,udak ,rakta.Ayurveda quotes Shwitra as Deergha Roga so should be treated immediately with purification & pacification remedies with psoralea corylifolia with oil application,exposure to sun rays.

Introduction:

Partial or complete loss of skin pigmentation giving rise to white patch on any part of the body is called as leukoderma or vitiligo and in ayurveda it is called as Shwitra.Shwitra is a chronic illness ,the lesions of shwitra being dry and also non infectious thus differs from the kushtha in general .It has been described along with kushtha in the classic.It is whitish discolouration of skin starting from child to old,rich to poor ,irrespective of sex ,religion,status,age.It has unknown etiology even today .Worldwide prevalence of vitiligo observed as 1% of world population .The highest incidence has been recorded in India and Mexico.Based on dermatologic out patient's record ,it is estimated between 3-4% in India .Although an incident as high as 8.8% has also been reported irrespective of races specially to dark skin people.Many times common causes are observed as severe emotional stress. The prevalence rate of shwitra in our area is 2 % .Though it is not very common disease but as explained in Ayurveda it is difficult to cure (kashtasadhya vyadhi).The exact cause is unknown ,but it may be due to autoimmune disorder .Faulty dietary habits,Kulaj itihasa,excessive mental stress, general low immunity are the precipitating factors of shwitra.Ayurveda states that basically it is due to the aggravation of pitta dosha which leads to cause of accumulation of Aam in deep layers of skin .Main part of treatment depends upon whether the disease is spreading or it is stable or

unstable. If it is unstable i.e. spreading, first step should be to stop the disease. Good news about it is that it doesn't spread from touching, saliva, inhalation, blood, sexual intercourse or sharing of personal items like bottles, towels, etc.

Aim:

To study the pathophysiology of shwitra (vitiligo) with ayurvedic as well as modern aspect and its management through Ayurveda.

Objectives :

To understand pathophysiology of Shwitra (vitiligo) with Ayurvedic as well as modern aspect.

To review Ayurvedic management of Shwitra.

Review Of literature :

Ayurvedic aspect of shwitra :

Ayurvedic science considers shwitra as a group of skin disorders. Though Shwitra has to be treated immediately, most of the time patient comes with chronic condition. In Kashyap Samhita Shwitra means Shweta Bhava Micchanti. According to Acharya Sushruta, it means reflection of white colour. He called this disease as Kila instead of Shwitra. According to Atharvaveda this disease is caused due to deficiency of pitta dosha in skin and vitiation of maamsa, meda and asthi dhatu. In the first kaanda of Atharvaveda, two types of shvetakushtha are described as Kilaasa and Palita. Dry red patches characterize kilaasa and white patches all over body characterize palita. In the vivaha Vidhana chapter of manusmriti marriage is prohibited from 10 wrong doing girls. In these 10, the marriage is prohibited to the shvitri girl. Kilaasa is stated to be rakta, maamsa and medadhatughat, tridoshaja skin disease by Charaka Samhita. Location of the kilaasa is considered fourth layer (Tamra) of twacha. In Rigveda switra is described as kilaasa. In Amarakosha it is mentioned that Padasphota, tvakapushpi, Kilaasa and Sidhmali are synonyms of shwitra.

Classification of Shwitra :

According to aetiology considering the aetiological factors, the shwitra can be divided into two groups according to Vagbhat.

A) Agnidagdhaja B) Anagnidagdhaja.

Acharya Bhoja has divided the etiology into two groups and thus the disease may be of two types :

A) Doshaja - Atmajaja { related with doshas }, Parajaja { predisposition of the contact factors }

B) Vranajaja - { caused by improperly healing of wounds }

According to origin Disease –

Acharya Charaka while dealing with the Ashtanindita Purusha described about Atigoura as one among these eight can be considered as congenital Shwitra.

According to Acharya Vagbhata faulty dietetics of the mother or insufficient fulfillment of the desire of pregnant mother can lead to congenital Shwitra in the body.

Thus, keeping these references into consideration shwitra can be divided into two types : 1) Shahaja (genetically transmitted)

2) Jattotar (acquired)

According to pathogenesis

A .In consideration of the vitiated doshas

a) Vataja : Reddish white in colour and causes horriification of hairs of the lesions.

b) Pittaja : patches are white, smooth and thick with itching.

B. In consideration to the affection of doshas with Dosha dushya Sammurchhana

Shwitra because of affection of doshas with twak, mamsa and meda and rakta separately and combine also.

Shwitra is known as Kilasa when it affects rakta and as daruna when affects mamsa.

C. According to clinical features

On observation of colour changes:

- a) Aruna varna : when vata involves the rakta dhatu
- b) Tamra varna : when pitta involves the mamsa dhatu
- c) Shweta varna: when kapha involves the meda dhatu

According to distribution of patches

Ekadeshaja: p patches found at one part of the body

Sarvadeshaja : patches found on different parts of the body

According to prognosis :

- a) Sadhya {curable}
- b) Asadhya {incurable}

Modern aspect of Vitiligo:

vitiligo a depigmenting skin disorder is characterized by the selective loss of melanocytes which in turn leads to pigment dilution in the affected areas of the skin .The characteristic lesion is a totally amelanotic ,nonscaly, chalky white macule with distinct margins. Considerable recent progress has been made in our understanding of the pathogenesis of Vitiligo ,and it is now clearly classified as autoimmune disease ,associated with genetic and environmental factors together with metabolic ,oxidative stress, and cell detachment abnormalities .Vitiligo should not be dismissed as a cosmetic or insignificant disease as its effects cab be psychologically devastating often with a considerable burden on daily life.

In 2011 , an international consensus classified vitiligo into two major forms:

Nonsegmental vitiligo and segmental vitiligo .The term Vitiligo was defined to designate all forms of nonsegmental vitiligo (including acrofacial ,mucosal, generalized ,universal, mixed and rare variants)

Distinguishing SV from other types of vitiligo was one of the most important decisions of the consensus ,primarily because of its prognostic implications.

Etiological factors :

Dietary causes :

- 1.excessive intake of liquid and heavy foods for a very long time
- 2.Negligence normal orders and rules of diet
- 3.Excessive eating in the condition of indigestion
- 4.Excessive intake of new grain ,curd,fish,sesame seed ,salty and sour food ,milk, jaggery ,sweets.

Physical causes:

- 1.suppression of the natural urges specially vomits
- 2.severe physical exercise in excessive heat and after taking very heavy meals.
- 3.panchakarma vyapad (incorrect application of body purification therapy)
- 4.Drinking cold water or having cold bath immediately after direct contact of heat.
- 5.having coitus in state of indigestion
- 6.Daytime sleep.
- 7.genetic factor

Specific causes:

Dietary causes :

Dietic incompatibility (eating fish with milk or sour fruits with milk for long time)

Physical causes:

Untruthfulness and ungratefulness.

Improper social behaviour like insulting to the teachers and saints ,bad deeds of the past lifew,excessive exposure to sun.

Etiology according to modern:

- 1.Genetic factors
- 2.Autoimmune
- 3.excessive sunlight exposure.

Exact cause of vitiligo remains unknown .self destruction of melanocytes is hallmark of pathogenesis,but cause of this phenomenon is still unknown.

Poorvaroopa:

The disease Shwitra appears abruptly without any specific premonitory features .of course ,the disease may follow general premonitory features of Kushtha itself.

Sparsh agytavam {loss of touch},Sveda Asveda {excessive sweating /absence of sweating},vaivarnya{colour change},Koth{rashes},lomharsha {horripilation},kandu {itching},toda{piercing pain },shrama{physical fatigue},klam {mental fatigue},vranana amd hikam shoolam ,shigrotpattischirsthic{ early manifestation along with chronicity},daah {burning sensation}suptaangata {numbness},kshatavisarpana,ruksha {dryness},Atishlakshna {smoothness},kharasparsha {roughness },asrijah kashranya {roughness},asrijah kashranya {blakish discoloration of blood}.

Roopa:

Colour of patches Shweta ,kamal patravat,tamra,aruna,parisravi,sakandu,sadaham,ruksha,snigdha,parusham,romadhvansi,paridhvansi,mandala,ghana/bahalam.

Samprapti Ghatak :

Doshas :vata specially udana vayu

Dushya : rasa,rakta,mansa,meda.

Strotas :rasavaha,raktavaha,mansavaha,medovaha.

Stroto dushti lakshan : Sanga,vimarga gaman

Marga: bahya rog marga

Gati Tiryaka

Adhishshthana :twacha

Samprapti :

The disease Shwitra is a Bahya Roga where internal environment of the body is markedly hampered. In various Ayurvedic classics, it is described as a tridoshaja Vyadhi, where pitta, is excessively vitiated. No clear cut pathogenesis of Shwitra roga is described in the main Ayurvedic classic. Keeping in mind all the general nidana explained under kushtha and doshic involvement of the disease here an attempt has been made to formulate & explain the pathogenesis of shwitra. Due to frequent intake of one or all of the above said nidanas leads in to formation of toxins {aam} which further provoke or vitiates all doshas & which get mixed with digestive juice {pitta} & then rasa dhatu & so on it spreads from one dhatu to next dhatu. Thus, the vitiated doshas spreads from the Koshtha to the shakha. While travelling through all over the body wherever there is sthanavaigunya it gets lodged and shows the symptoms of the disease. Then these vitiated doshas move in triyakgata siras and get lodged in tamra layer of twacha causing sanga or obstruction to the local rasvaha strotas and raktavaha strotas. The reason behind dosha dushya sammurchana in tamra layer of twacha is due to the presence of khavaigunya in the respective areas of twacha. This leads to the kshaya of decline of local bhrajakapitta and causes twak shwetata. Further the samprapti continues & the deeper dhatus like mamsa & meda are also involved. The involvement of each dhatu exhibits specific discolouration on the patches. Doshas settled in rakta dhatu produces rakta varna, mamsa dhatu produces tamra varna and Shweta varna when settled in medo dhatu. These altogether involved invariably in different grades & produce white macules all over external surface of the skin causing Shwitra kushtha. Though all the three doshas are involved mainly vitiated udanavata and bhrajakapitta are held responsible because these two are responsible for maintenance of colour of twacha. The functioning of vyanavata cannot be neglected as it is the main motivating force behind the movement of dushta dosha along with rasa. According to sushruta the pathogenesis of shwitra is restricted upto level of skin only. It cannot reach further deeper level & also it is devoid of secretions.

Treatment :

Looking towards the intensity of disease, acharya Vagbhata stated that the treatment of shwitra should be started as quickly as possible. He quotes that the fire should be controlled within time before it engulfs the burning forest. Ayurvedic treatment for vitiligo is sought after by many because it remains a difficult skin disorder to treat. Acharya Charaka

Explained treatment of Shwitra after detailed description of kushtha chikitsa. The important steps of Shwitra Chikitsa are as follows:

Shodhana karma:

Purification therapy using a herbal decoction of ficus racemose {malapu} mixed with jaggery . This medicine is expected to induce purgation.

Suryapadasantapam :

Exposure of lesions to sunlight as long as the patient can tolerate for 3 days .if the patient feels thirsty he/she is given peya to drink.

Sphota utpatti:

If sphota or bullae arise after sun exposure ,they must be punctured using a sterile needle.then,every morning for next 15 days ,patient is given a decoction made up of Malapu,asana ,priyangu and shatpushpa or is given palasha ksara along with phanita .

Topical applications:

Manasiladi lepa,bakuchayadi lepa,savarnakar lepa,switranashaka lepa, karviradi lepa,marichadi lepa,bhallatakadi lepa,avalgujadi lepa,etc.

Churna:

panchanimbadi churna, bakuchyadi churna,manjisthadi churna,khadirsaradi churna,kakodumbarikadi yoga,mustadi churna,Narsimha churna.

Grita:

Jatyadi ghrita,mahaneela grita,mahatikta grita,tiktashatpaka ghrita, mahakhadira ghrita,somraji ghrita,neelaka ghrita,neelinyadi ghrita.

Avleha:

Bhallatakavleha,shashanklekhadi leha,Dhatryavleha,udumbaravleha,vidangadi loha.

Taila:

Panchanana taila, vibhitaka taila,aragvadhadya taila,marichyada taila,jyotishmati taila,chitrakadya taila,kustaraksasa taila,manasiladya taila, kusta kalanala taila,mahavajraka taila.

Asava -Arishta:

Kanakabindvarishta,madhwasava, khadirarishta.

Kwatha:

Manjishayadi kwatha,bibhitakadi kwath,patoladi kwath.

Vati:

Arogyavardini vati,Shashilekha vati,kaishor guggulu,saptasama gutika, swayambhu guggul,triphal gutika.

Rasa:

Switari rasa,Rasmanikya rasa,swetari rasa,Swarna makshika bhasma, kasisabadha rasa,gandhaka rasayana,talakeshwar rasa,vijayeswara rasa.

Discussion:

Ayurveda as holistic science has very different approach towards treating & understanding of Shwitra.The combined effect of all shaman and shodhan,bahya chikitsa may be due to increased hepatic function,immunostimulation and photoreaction .The main dushya in shwitra is rakta dhatu and dosha is pitta dosha the expression of disease is at skin level.And the above all are interlinked with each other so the best treatment for the pitta dosha pacification is Virechana.Virechana removes the dosha sanga and breaks the samprapti and enhances the absorption of drugs given in Shaman chikitsa.

Conclusion:

Scientific rationale behind use of all the medication in Ayurvedic texts need to be further explored with modern methods and research also. Though the shwitra is explained as kashtasadya vyadhi and takes long period to cure can be managed with better improvement with practice of shodhan, shaman and external application of oils and lepas taking the consideration of rugna bala, vyadhi bala, dosha involved dushya, desh, prakriti and kaal.

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