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Review Article

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CONCEPT OF CONTEMPORARY ETIOLOGICAL FACTORS OF KITIBHA KUSHTHA W.S.R. TO PSORIASIS

Dr. Madhavi Khuje* and Dr. Vrunda Kaknurkar

¹MD (Ayu) Assistant Professor, Department of Rognidan SVAMCH, Chandrapur.

²MD (Ayu) Professor and Head, Department of Rognidan SSAM, Hadapasar, Pune.

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*Corresponding Author
Dr. Madhavi Khuje
MD (Ayu) Assistant
Professor, Department of
Rognidan SVAMCH,

Chandrapur.

ABSTRACT

Psoriasis affects the person psychologically due to ugly look and itching which makes the diseased person depressive along with this its recurrences is very often, therefore the study of its **contemporary etiological factors** has become important so that its recurrence can be prevented significantly. Although Psoriasis generally does not affect survival, it certainly has major negative effects on patients. This of itself contributes to disability leading to depression and suicidal ideation in more than 5% of patients. As *Kitibha* is a type of *Kushtha*, its *Hetus* are not separately described. However, for better understanding of *Kitibha*, study of its *Hetu* as a separate disease is

required. One of the fundamental principles of *ayurveda* is *karyakaran siddhanta*. The *karya* i.e. the production of disease is not possible without the *karan*. Knowledge of *nidan* is thus useful to provide proper guidance for treatment as well as in prevention of disease. Contemporary etiological factor is one of the causes for the production of disease; thus its knowledge will be useful to prevent from the disease or to **minimize recurrence** of disease.

KEYWORDS: *Kitibha*, Psoriasis, contemporary etiological factors, minimize the recurrence.

INTRODUCTION

Kitibha is one among the 11 *kshudra kushthas*. Although *Kitibha* is included in *kshudra kushtha*, it is *chirakari* and its recurrence is very common. And therefore it is *darun* by its *swabhava*. Recurrence can be prevented by knowledge of its etiology.

Acharya Charaka, Sushruta, Vagbhata and Madhavnidankar mentioned this disease under the kshudra kushtha and it is described as Vata Kapha pradhan vyadhi.

As *Kitibha* is a type of *Kushtha*, its *Hetus* are not separately described. However, for better understanding of *Kitibha*, study of its *Hetu* as a separate disease is required. All types of *Kshudra Kushtha* differ from *Mahakushtha* with the only fact that they don't undergo *dhatugatavastha*. Otherwise *Nidan Panchak* of each of these 11 *Kshrudra Kushtha* differ as if they are separate diseases. And therefore study of *Hetu* (etiology), independent of *Hetu* (etiology) of *Kushtha* is essential.

Of all the *Hetu* of *Kushtha*, all or few from the list can be quoted as *Hetu* of *Kitibha* as separate disease. This article will focus on studying contemporary *Hetu* among the *Hetu* described and enlisting the newer found Hetu of *Kitibha* by studying (history taking) already diagnosed patients of Psoriasis which resemble with *Kitibha* in clinical features.

Since from the ancient era the primary baseline of treatment is the avoidance of causative factors as said by sushruta.

संक्षेपतः क्रियायोगोनिदानपरिवर्जनम। (स् उ १)

Here *kriyayogo* is treatment or *chikitsa* and *nidan parivarjan* is avoidance of causative factors. It means the simple baseline of treatment is the avoidance of *nidan or hetu*. Incomplete or no knowledge of etiological factors will not help in avoiding the occurrence of disease; so it leads to prolong state of disease or its recurrence. It is said that prevention is better than cure; thus the knowledge about etiological factors is useful to provide guidance in the management as well as in the prevention of disease.

According to charakacharya, kitibha is,

श्यावंकिणखरस्पर्शंपरुषंकिटिभं स्मृतम । (च चि ७/२०)

According to sushrutacharya, kitibha is,

यद स्त्राविवृत्तं घनमुग्रकण्डु तत स्निग्धकृष्ण किटिभं वदन्ति ।(सु नि ५/१४)

Psoriasis is a chronic, recurrent, inflammatory disease of the skin of unknown origin, also an auto immune disease, characterized by well circumscribed erythematous, dry plaques of various sizes with rough surface and discoloration of the skin.

The clinical features of *Kitibha kushtha* are found to be similar with clinical features of Psoriasis. In *Ayurveda*, it is said that, *kinakharsparsha* is seen in *kitibha* which means rough

surface of lesion / wound. Here kina is *vranasthana* i.e. lesion. Whereas in Psoriasis we find dry plaques with rough surface. Another point for comparison is discoloration of skin in Psoriasis and *shyavata* in *kitibha kushtha*; thus we can correlate these diseases with each other.

Newer found *hetu* can't be enlisted as *hetu* of *kitibha* unless it is been compared with modern disease Psoriasis which clinically resembles *kitibha*. For e.g. according to modern science, Trauma is the etiological factor for Psoriasis but for enlisting it as a *hetu* of *kitibha* it is necessary to compare *Kitibha* with psoriasis without which trauma cannot considered as *Hetu* of *Kitibha*. Therefore to study contemporary etiological factors of *Kitibha*, Psoriasis is considered as contemporary version of *Kitibha*.

Contemporary etiological factor is one of the causes for the production of disease; thus its knowledge will be useful to prevent from the disease or to minimize recurrence of disease.

Aim and Objective

To study the contemporary etiological factors of *Kitibha Kushtha* with special reference to Psoriasis.

MATERIALS AND METHODS

Materials

Review of literature

- 1. Literature regarding *Kitibha* was studied from classical *Ayurvedic* text books.
- 2. Literature regarding Psoriasis was studied from modern text books.
- 3. Internet data were studied.

Methods

Type of study

- 1. Observational
- 2. Analytical
- 3. Cross sectional

Review of literature

In Ayurveda, Tvaka vikar are described under the heading Kushtha and Kshudra Roga along with their Lakshana and Chikitsa. Kitibha is one among the Kshudrakushtha.

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Classification

Acharya charak has classified kushtha into two major groups, 7 Mahakushtha & 11 Kshudrakushtha. Majority of the acharyas described 18 types of Kushtha but difference of opinion in symptoms & names of some of Kushtha exits.

The word *mahat of mahakushta* is ability to penetrate in *uttarottar dhatu* (sequential from rasa to shukra) according to *Dalhan*. And *kshudrakushtha* differs by not having the ability to penetrate the *uttarottar dhatu*. (*Da.on Su.Ni*. 5/5).^[3]

Literary review of Kitibha

किटिभ - किटिरिव भाति कृष्ण्तवात्। (वाचस्पत्यम भाग - ३)

It means having blackish discoloration of skin.

Kitibha Vyakhya

1) श्यावं किणखरस्पर्शं परुषं किटिभं मतम्। (च.चि.७/२१)

A skin disease with blackish discoloration of the skin, rough surface of lesions and dryness.

2) यत् स्त्रावि वृत्त्तं घनमुग्रकण्डू तत् स्निग्धकृष्णं किटिभं वदन्ति। (सु.नि.५/१३)

According to Sushrutacharya, lesions are discharging, circular, dense and slimy having blackish discoloration with severe itching.

3) रुक्षं किणखरस्पर्शं कण्डूमत्परुषासितम् । (अ.ह्.नि.१४/२०)

According to *vagbhata*, it is dry having rough surface of lesion with itching sensation and blackish discoloration.

4) अस्वेदं मत्स्यशकलसन्निभं किटिभं प्न: ।

रुक्षं किणखरस्पर्शं कण्डूमत् परुषासितम् ॥ (अ.सं.नि.२२/१)

According to *Ashtang samgraha*, it resembles like scales of fish, dry, produces sound while scraping, rough, cores, blackish discoloration, itching and absence of sweating seen.

5) श्यामं किणखरस्पर्शं परुषं किटिभं स्मृतम् । (भा.प्र.म.ख अध्याय३३)

According to Bhavaprakasha, it is blackish, rough, dry surface of lesion.

6) श्यावं किणखरस्पर्शं परुषं किटिभं स्मृतम् । (मा.नि. ४६/१८)

किण – व्रणस्थान, परुषं – रुक्ष (मा.नि. टिका - मधुकोश)

According to Madhav nidankara, it is blackish, rough, dry surface of lesion.

7) श्यावं किणखरस्पर्शं परुषं किटिभं स्मृतम् । (sha.pu.kha. adhyaya-7)

As per Sharandhar samhita, it is blackish, rough, dry surface of lesion.

Skin is black, dark brown, reddish, rough, patchy with discharge, increasing in size, heavy, recurring repeatedly after getting cured.

Table 1: Kshudrakushtha – classification as per various Acharyas.

| Sr. No. | Types | Ch.Chi7 | Su.Ni 5 | A.H.Ni 14 A.S.Ni. 14 | K.S.Chi. Kushtha Adhyay | B.S. Ni.5 | M.N. 49 | B.P.M. Kh. Chi Kushtha Adhyay |
|------------|-------------|---------|------------|-------------------------------|-------------------------------|--------------|------------|--|
| 1 | Ekkushtha | + | + | + | + | + | + | + |
| 2 | Kitibha | + | + | + | + | + | + | + |
| 3 | Charmadala | + | - | + | + | - | + | + |
| 4 | Pama | + | + | + | + | + | + | + |
| 5 | Vicharchika | + | + | + | + | + | + | + |
| 6 | Charmakhya | + | - | + | 1 | + | + | + |
| 7 | Vipadika | + | - | + | + | + | + | + |
| 8 | Alasaka | + | - | + | ı | - | + | + |
| 9 | Dadru | + | - | - | + | + | + | + |
| 10 | Visphotaka | + | - | + | ı | + | + | + |
| 11 | Shataru | - | - | + | + | + | + | + |
| 12 | Sidhma | - | + | + | 1 | - | - | - |
| 13 | Sthulruksha | - | + | - | 1 | - | - | - |
| 14 | Mahakushtha | - | + | - | - | - | - | - |
| 15 | Visarpa | - | + | - | 1 | - | - | - |
| 16 | Parisarpa | - | + | - | 1 | - | - | - |
| 17 | Ruksha | - | + | - | 1 | - | - | - |
| 18 | Shwitra | - | - | - | 1 | + | - | - |
| 19 | Vishaja | - | - | - | + | + | - | - |

Modern review

Psoriasis

Psoriasis is a papulosquamous disorder of the skin, characterized by sharply defined erythematosquamous lesions. They vary in size from pin point to large plaques. At times it may manifest as localized or generalized pustular eruptions. Besides the skin, it may also affect the joints and the nails. It is universal in occurrence and the incidence is 1 to 3% of the world population. It affects the members of either sex, usually in the third decade of life. A family history of psoriasis is found in 30% of patients.

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The pathogenesis of psoriasis is debatable. It may be precipitated by trauma, infection, endocrine factors, climate and emotional stress. It may appear at the site of local injury (Koebner's phenomenon). Infection with beta-hemolytic streptococci usually precedes guttate psoriasis. Drugs like chloroquine, lithium carbonate, salicylates, steroids, iodides, nystatin, progesterone and beta-blockers also precipitate psoriasis.

Etiology of Psoriasis

- 4. Genetic one parent sufferer chances in offspring -15%, Two parent sufferer chances in offspring 50%, Non psoriatic parents but child with psoriasis 10% (for subsequent child).
- 5. Immunopathological –it is an autoimmune disease. The inflammatory reaction may be a part of an immunological response to as yet unknown antigens.
- 6. Trauma kobner's phenomenon
- 7. Infections beta hemolytic streptococcal throat infection often precede guttate psoriasis and HIV infection.
- 8. Sunlight UV radiation worsens psoriasis.
- 9. Drugs antimalarial, beta adrenocepter antagonist, lithium
- 10. Emotions anxiety / stress
- 11. Alcohol, Tobacco, Smoking

Clinical features

Psoriasis is characterized by,

- Well-circumscribed sharply demarcated erythematous papules and / or plaques.
- These are covered by dry, brittle, silvery or grayish white, loosely adherent, micaceous scales.
- The scales are disposed in lamellar fashion.
- Occasionally, a white blanching ring is seen around the psoriatic lesion (Woronoff's ring).
- On grattage, silvery white scales come off in layers. After their removal, a characteristic coherence is observed, as if one scratches on a wax candle (candle grease sign).
- On further grattage, a thin peel like membrane, Berkley's membrane, is seen which comes off as a whole. On its removal, a wet surface with multiple pinpoint bleeding is revealed (Auspitz's sign).
- The sites of predilection are the elbows, knees, scalp and lumbosacral area.

- In psoriatic arthritis nails may be involved in 85 to 90% cases.
- The fingernails are more often involved than the toenails.
- Nail changes the characteristics by the following:
- Thick, Brittle, lusterless nails that are difficult to cut
- Pitting of the nail plate, pits are small
- Subungual hyperkeratosis may be seen under the free edge of the nail
- The nail plate becomes discolored. Brownish red, oval or round lesions can be seen, resulting from an accumulation of parakeratotic material in the nailbed. This is termed as 'Olfleck phenomenon'
- Distal onycholysis is the frequent abnormality
- Loss of nail plate

Classification of Psoriasis

- 1) Chronic Plaque Psoriasis
- 2) Guttate Psoriasis
- 3) Flexural Psoriasis
- 4) Erythrodermic Psoriasis
- 5) Pustular Psoriasis
- 6) Psoriasis of the Scalp
- 7) Psoriasis of the palms and the soles
- 8) Psoriatic Arthritis

DIAGNOSIS

The diagnosis of psoriasis is clinical. It is based on recognizing the cardinal morphological lesion of psoriasis characterized by erythematoscaly eruption, single or multiple, disposed primarily on extensor surface of the body. The scales are lamellated and silvery white. Auspitz's sign is positive, evident as pinpoint bleeding on grattate.

Psoriasis need to be differentiated from the followings

- > Seborrheic dermatitis
- ➤ Lichen simplex chronicus
- > Syphilis
- Candidiasis
- > Tinea corporis

- > Pityriasis rosea
- Parapsoriasis
- ➤ Borderline tuberculoid leprosy
- Discoid lupus erythematosus

DISCUSSION

Kitibha is a type of Kushtha. It is one among the eighteen Kshudra Kushtha described in Ayurvedic texts. Though Kitibha comes under kshudra kushtha by its type but sometimes becomes kruchchhrasadhya as hetu sevan initiates samprapti leading to recurrence of this disease.

Study of etiological factors plays important role while dealing with such diseases because avoidance of etiological factors is the basic principle in Ayurveda stated by Sushrutacharya.

Newer found *hetu* can't be enlisted as *hetu* of *kitibha* unless it is been compared with modern disease Psoriasis which clinically resembles *kitibha*. For e.g. according to modern science, Trauma is the etiological factor for Psoriasis but for enlisting it as a *hetu* of *kitibha* it is necessary to compare *Kitibha* with psoriasis without which trauma cannot considered as *Hetu* of *Kitibha*. Therefore to study contemporary etiological factors of *Kitibha*, Psoriasis is considered as contemporary version of *Kitibha*.

In this study 30 diagnosed patients of Psoriasis were selected as *Kithiba kushtha* as both of them shows clinical resemblance. A detailed case history of the patients was taken with the help of case record proforma with intention to find out *hetu* of *Kitibha kushtha*.

Found Hetu were further classified into Granthokta hetus and contemporary hetu.

Following are the observations of this study,

Age

In this study, it was observed that the maximum number of patients i.e. 43% belonged to the age group between 18-34 years. 40% belonged to age group 35-50 years, 17% belonged to age group 51-66 years and 0% belonged to age group 67-85 years of age group. This variation may be due to the limited sample size.

Gender

In this study, data shows that male patients were 57% and 43% were female patients. Number of variation is not significant hence we can say that Psoriasis affects both the gender.

Religion

It is evident from the data that maximum patients were Hindus i.e. 93%, while 7% belonged to Muslim religion. No patients were registered from any other religion. Predominance of Hindu community in this particular region may be the reason behind greater percentage of patients from Hindu community.

Occupation

Among the number of patients studied, Maximum numbers of patients were housewife i.e. 40%, 13% were worker, 10% were service and students, 3% were labor, businessman, shopkeeper, counselor, tailor, teacher, watchman, hotel work each. In this study though female patients were comparatively less than that of male patients but occupation wise female patients were found more where as anxiety and *diwaswapa* were the common etiological factors in all female patients of this study.

Marital status

Among the number of patients studied 80% were married and 20% were unmarried.

Type of diet

It was observed that 87% patients were vegetarian and 13% patients were taking mix diet. Among 30 patients 26 were taking Vruntak in their regular diet which is the causative factor for *kitibha*. All the patients from non vegetarian group were taking fish with milk or alcohol in their diet which is also one of the causative factors of *kitibha*.

Lakshana (clinical features) of Kitibha

Study revealed that *kina*, *kharasparsha*, *parusha*, *ruksha*, *kandu*, *punarutpadyate* these *lakshanani* were found in 100% patients, *shyavata Lakshana* was seen in 93% patients, *vruddhi lakshana* was seen in 63% patients, *krushna varna was* seen in 27% patients, *stravi* and *snigdha Lakshanani* were seen in 23% patients, *vritta Lakshana* was seen in 20% patients, *Ghana Lakshana* was seen in 10% patients while *aswedata and guru lakshanani* were not seen in any patient of this study.

From the above observations *kharasparshata*, *Parushata*, *Rukshata*, *shyavata*, *punarutpadyate* these *lakshanani* found in greater percentage which proves the *vata* dominance in *kitibha kushtha*.

Affected area wise distribution

Data of this study shows that, 27% patients had *Kitibha* on Palmoplanter area, 20% patients had *Kitibha* on scalp area, 17% patients had *Kitibha* on soles, 10% patients had *Kitibha* on legs (lateral and medial side), 7% patients had *Kitibha* on forearms whereas 3% patients had *Kitibha* individually on ankle joints, legs (anterior aspect) & palms, chest and right under arm, Palmoplanter & forehead, generalized psoriasis means all over the body.

It is found that Exposed parts of the body are mostly involved in the patients of Psoriasis. So exposing body parts could be the etiological factor of Psoriasis.

Hetu

Hetu sevan observed in various patients was further classified as:

- 1) Aharaja with subcategories as:
- a) Gunatah
- b) Rasatah
- c) Viruddhahar
- d) Mithyahar
- 2) Viharaj
- 3) Viharaj (others) Beej Dosha janya hetu
- 4) Papkarma

Aharaja hetu

a) Gunatah

- From the study it revealed that 87% patients were taking *guru ahar*, 47% patients were taking *Drava ahar* and 33% patients were taking *Snigdha ahar*.
- In this study, after taking detail case history of patients, food items consumed by patients were listed up and categorized as *guru*, *drava*, *Snigdha ahar*.
- *Guru Ahar* includes vadapav, misalpav, bekary products, Chinese food, junk food, milk and milk products like paneer, kheer, shikaran etc. poha, fermented food items, rice/pulav, curd-rice, milk-rice, tea-chapati, nonveg diet, panipuri, paratha.
- Drava ahar includes milk, cold drinks, tea, alcohol, curd, buttermilk, kheer.

• *Snigdha ahar* includes – fried food items like bhajee, papad, vadapav, samosa, kachori, cheeps, patis, sabudana vada, chiwda.

b) Rasatah

- Data of the study shows that 53% patients were habitual to take *atiamla rasa* and 47% patients were habitual to take *atilavan rasa* also.
- Amla rasa includes Bhel, Panipuri, Sauce, Pickle, Chatani, Lemon, Takra and Dadhi.
- Lavan rasa includes pickle, papad, salt (some people have habit of taking extra salt during meal), salty nuts, farsan, panipuri, bhel, chatani.
- Amla and lavan rasa atisevan are the dushtikaran of raktavahasrotas as these are pittakapha dosha prakopaka,^[1] which results in Raktavaha Srotas dushti lakshanani,^[2] and results in diseases like kushtha which comes under raktapradoshaja vikara,^[20] or Raktadushti janya vyadhi.

c) Viruddha ahar

In this study 23.33% patients were taking *shaka payasa* (consumption of green vegetables with milk / milk products), intake of *gramyanupaudaka mamsa payasa*, *madya payasa*, *matsya payasa nimbu* (*gramya*, *anup*, *uadaka* meat with milk or milk products, alcohol with or followed by milk or milk products, fish with milk or milk products adding lemon in it) contributing in 3.33% patients and *matsya payasa sevan* (fish with milk or milk products) were seen in 10% of patients. Intake of *chilichim payasa* (*chilchim* fish with milk or milk products), *payasa guda sahamulakam* (radish with milk or milk products) and *haritaki payasa sevan* (haritaki with milk or milk products) was not found in this study.

Vegetarian patients are more than non vegetarian patients that's why *shaka payasa hetu* found in more number of patients of this study.

d) Mithya ahar

In this study about 86.67% patients were taking *Vruntak* (brinjal) regularly in their diet and it was observed that after the intake of Vruntak symptoms of patients were aggravating. 73.33% patients were taking *vidagdha ahar* (food which is heavy to digest), 50% patients were taking *ajirnadhyashinam ahar* (intake of food because of time not due to hunger), 6.67% patients were taking *navanna dhanya* (new cereals), 36.67% patients were taking *atimatre kshira and atimatre takra*, 23.33% patients were taking *atimatre mulaka*, 30% patients were taking *tila* (tila chatani or oil), 43.33% patients were taking *pishthanna* (food items made up

of besan, maida etc.), 40% patients were taking atimatre guda & shitoshna vyatasat ahar (consuming hot meal and cold drinks or vice versa together or followed by.) 13.33% patients were taking atimatre matsya, 16.67% patients were taking bhuktwa va api ushna ahar (eating hot food when feel hungry), 3.33% patients were taking santarpan – apatarpan vyatasat aha (following strict diet pattern i.e. apatarpan and then discountinuing the same or following regular diet pattern i.e. santarpana or vice versa). None of the patient was taking asatmya ahar, atimatre masha, atimatre atasi, atimatre kulatha, kusumbha sneha aticharat, madhu, lakucha, kakamachi, pippali, madya-madhu -ushna -ahar together and phanit.

Mithya ahar food items are the hetu of *Raktavaha Srotas dushti* which ultimately results in *raktapradoshaja vikara* like *kushtha*.

Contemporary aharaja hetu

In this study while taking history for *aharaj hetu* it was noticeable that certain food items that are not mentioned in *Ayurvedic samhita* but can be considered as *contemporary hetu* of *Kitibha* as these can be considered under the headings of either *viruddhaahar* or *mithyaahar* or showing similar characteristics for *rasatah or gunatah hetu* i.e. either *atiamla* or *atilavan rasa* or of *guru, drava or Snigdha guna*. Such food items are very popular in today's era are considered as contemporary food items. Such food articles have an important role in etiopathogenesis of *Kitibha*. Their percentage in this study is as follows, 20% patients were taking chat, sauce, vadapav, misalpav and paneer, 26.66% patients were taking bread and biscuit, 16.67% patients were taking toast, noodles and burger, 23.33% patients were taking pizza, 13.33% patients were taking cake and tea with chapatti, 10% patients were taking pickle and only 3.33% patients were taking milk with meal. Biscuit, Toast are pishthanna and bread, paneer are fermented food item. Chat, sauce, misalpav are amla – lavan rasa pradhan and all are *hetu* of *kushtha* as per ayurvedic text. Patients of this study were taking contemporary food item regularly (*Contemporary aharaja hetu*).

Viharaj hetu

In this study, 43.33% patients do *mutravegadharan* (avoiding the urge of urination) & diwaswapa, 30% patients do *purishavegavidharan* (avoiding the urge of defecation), 23.33% patients were *cheshtadweshi*, 16.67% patients were *shayyasansukhe*, *gharm drutam shitambusevinam and shram drutam shitambusevinam* i.e. drinking cold water soon after exposure to sun and drinking cold water soon after exertion was found in 20% patients. *Beej doshata hetu* was found in only one patient i.e. in 3.33%. None of the patients were doing

bhayartanam drutam shitambusevinam, chardivegavidharana, vaantasya vyayama sevan, vantasya gramyadharma sevan.

Viharaj contemporary hetu

Following are the predisposing and aggravating factors of Psoriasis found in today's era thus can be considered as contemporary *viharaj hetu* of *Kitibha*.

In this study, 66.67% patients were exposed to sunlight for maximum time, 73.33% patients were aggravating the symptoms in cold weather i.e. in winter season. Anxiety was seen in 50% of patients, H/o trauma was found in 36.67% patients, Beta hemolytic streptococcal infection and HIV infection are the etiological factors of Psoriasis but not found in any of the patient of this study.

Hormonal etiological factors as Contemporary hetu

Some diseases and physiological conditions due to the Hormonal change in body are found to be the causative factors for Psoriasis thus considered as *hetu* of *Kitibha*.

In this study, 13.33% patients were suffering from Psoriasis just after pregnancy. Due to the limited sample size Patients of menopause, hypothyroidism and hyperthyroidism were not found in this study, whereas age group between 18 to 85 yrs was the inclusion criteria of this study, so patients belonging to puberty age group were not included in the study.

Papkarma hetu

Papkarma is the granthokta hetu of kitibha kushtha but it is not found in any patient of this study.

In this study, *vipran guru dharshtam* (showing disrespect to teachers, elders, commenting on elders or teachers), *vadha and anyaswaharnadyashchya hetu* were not found in any patients of *Kitibha*.

Distribution of Granthokta hetu found in patients

In this study it was observed that, among 39 granthokta aharaj hetus, 27 aharaj hetus were found in patients. Among 12 granthokta viharaj hetus 8 hetus were found in patients. Viharaj other hetu was one i.e. Beej dushti janya and it was found in only one patient. All Papkarma hetus were not found in any patient.

Percentage of Granthokta hetu and contemporary hetu

It is observed that, in every patient studied, on an average *granthokta hetus* found were 69% while contemporary *hetus* found were 31%. It proves that contemporary etiological factors are significantly found in the patients of *kitibha kushtha*.

Distribution of patients according to prakriti

In this study it is observed that, 46.67% patients with *vata-kaphaj prakriti* 23.33% patients with *vata-pittaj prakriti* and *pitta-vataj prakriti*, 6.67% patients with *pitta-kaphaj prakriti*.

Thus percentage wise more number of patients were with *vata-kaphaj prakriti* and *doshapradhanata* in *Kitibha kushtha* is also the same i.e. *vata-kaphaj* as per *Ayurvedic* texts.

Distribution of hetu according to 14 types of granthokta hetu

In this study, all the *grathokta hetus* as well as contemporary etiological factors are categorized into 14 types of *hetu* described in *Ayurvedic* texts. From the data it is found that, 99% were *sannikrushtha hetu*, *abhyantar hetu*, *doshahetu* & *utppadak hetu*. 91% were *bahyahetu*. 84% were *pradnyaparadha*. 5% hetu were asatmendriyartha sanyoga. 3% hetu were vyanjak. Viprakrushta hetu is only one i.e. "Havi Prashan" (हवि: प्राशन्मेहकुष्ठयो – च.नि.८/११) and it is mandatorily present in all thirty patients of this study. *Pradhanika*, vyabhichari, parinam, vyadhihetu, ubhayhetu were 0% in this study.

Sannikrushta – viprakrushta – vyabhichari - pradhanik

- Sannikrushta it is explained in madhukosha tika by giving an example of jwara i.e. rukshadi hetus causes jwara. All the hetu found in this study are included as sannikrushta hetu as they directly lead to doshaprakopa.
- Viprakrushta it is durastha nidan. Acharya chakrapani in his commemtry on charak samhita said that 'havi prashan' is the viprakrushta hetu of kushtha and being a type of kushtha also considered as viprakrushta hetu of Kitibha. So it is assumed that havi prashan is Viprakrushta hetu for all patients of this study.
- *Vyabhichari* weak or *durbal hetu* which cannot produce the disease independtly are known as *Vyabhichari hetu*. No such *hetu* were found in this study.
- *Pradhanik hetu* that causes instant or immediate manifestation of disease are called as *pradhanik hetu*. For eg. Poisons etc. in case of *Kitibha* no such *hetu* found.
- Asatmendriyarthasamyoga– pradnyaparadha parinama

- Asatmendriyarthasamyoga is hinayoga, atiyoga, mithyayoga of indriya with their indriyarthas.
- Asatmendriyarthasamyoga hetu are 8% in all hetus.
- *Pradnyaparadha* is due to *mithya* or *ayathartha dnyan* when person follows *visham pravartan* it is called as *Pradnyaparadha*. 85% *hetus* are found under this heading. It includes *mithya ahar*, *viruddha ahar*, contemporary *ahar*, all *viharaj hetu* and *papkarma*.
- Parinama hetus which can be included in this were no found in the studied patients.
- Bahya hetu Abhyantar hetu
- Bahya hetu these are external causative factors like ahar, vihar, kal which causes doshaprakop results in occurrence of vyadhi are known as bahya hetu where as Dosha dushya are the aabhyantar hetu.
- In this study, abhyantar hetu are 100% and bahya hetu are 93%.
- Dosha vyadhi ubhaya hetu
- *Dosha hetu* are the *hetu* that leads to *doshaprakopa* and results in disease. 99% *doshahetu* are found in the patients of this study.
- *Vyadhi hetu* were not found in this study as there were no specific causative factor which is strongly responsible for occurrence of *Kitibha kushtha*.
- *Ubhaya hetus* are those which can be included under both *Dosha & vyadhi hetu* but such *hetu* were not found in the patients.
- *Utpadak hetu vyanjak hetu*
- *Utpadak hetu*: 100% hetus were included under it.
- All the *aharaja*, *viharaja granthokta* and contemporary which cause *doshaprakopa* leading to disease come under this heading.
- *Vyanjak hetus* are found in 2%. These are disease promoting factors for eg. Infections or microorganisms like beta hemolytic streptococcal infection and/or HIV infection.

CONCLUSION

On the basis of observations and discussion it can be concluded that,

- In this study, total *Granthokta hetu* enlisted are 55 and total contemporary *hetu* enlisted are 25 which contribute 69% & 31% respectively.
- Out of 55 *Granthokta hetu* enlisted, 39 hetu are actually found in the patients, which mean 71% *granthokta hetu* are found in the patients. *Granthokta hetu* categorized as *aharaj hetu, viharaj hetu* and *papkarma hetu*. Out of 39 *Granthokta aharaja hetu* 27 i.e.

71% are actually found in patients of this study. Out of 13 *Granthokta viharaj hetu* 9 i.e. 24% are actually found. Though *papkarma hetu* are mentioned in *Ayurvedic samhitas* but actually not found in this study.

- Along with the granthokta hetu, there are newer found hetu which are termed as
 contemporary etiological factors & are responsible for kitibha kushtha. Newer found
 hetus are etiological factors of Psoriasis.
- Total Contemporary *hetu* enlisted are 25 and Contemporary *aharaj hetu* among them enlisted are 14 which contribute 56% of the total *hetu* and are found in all patients (i.e. 100%) in this study. Whereas Contemporary *viharaj hetu* found are 11 and contribute 44% of the total and their percentage in this study is 43%.
- Based on some other parameters and observations following different conclusions are drawn.
- Conclusion drawn from categorization of all *hetu* into 14 types of *granthokta hetu* described in *Ayurvedic* texts is as follows, *sannikrushtha hetu*, *abhyantar hetu* & *utppadak hetu* found are 81 i.e. 99%, *doshahetu* are 80 i.e.98%, *bahyahetu* are 75 i.e. 91%, *pradnyaparadha hetu* found are 69 i.e. 84%, *asatmendriyartha sanyoga hetu* are 5 i.e. 6%. 2% i.e. only 2 *hetus* are *vyanjak*. 1% is *viprakrushta i.e.* "havi prashan" and *pradhanika*, *vyabhichari*, *parinam*, *vyadhihetu*, *ubhayhetu* are not actually found in this study.
- *Dehaprakruti* of patients of this study is found that, out of 30 patients 14 patients are of *vata-kaphaj prakriti* and contribute 46.67%. 7 i.e. 23.33% patients are of *vata-pittaj prakriti* and *pitta-vataj prakriti*, only 2 i.e. 6.67% patients are of *pitta-kaphaj prakriti*.
- In this study, it is found that 13 patients i.e. 43% belongs to the age group between 18-34 years. 12 patients i.e. 40% belong to age group 35-50 years, 5 i.e. 17% belong to age group 51-66 years and none of the patients belong to age group 67-85 years of age group.
- In this study, male patients found are 17 i.e. 57% and 13 i.e. 43% are the female patients.
- It is found that 93% patients belong to Hindu community and 7% belong to Muslim community which contributes 28 and 2 in number. Among them 24 patients are married and remaining i.e. 6 are unmarried patients.
- Occupation wise patient's distribution found in this study is, Maximum numbers of patients are housewife i.e. 12 contribute 40% of all patients, 13% i.e. 4 are worker, 10% i.e. 3 patients are doing service and again 10% i.e. 3 patients are students, 3% i.e. 1 of each is labor, businessman, shopkeeper, counselor, tailor, teacher, watchman, hotel work

- each. Female patients are comparatively less than that of male patients but occupation wise female patients are found more where as anxiety and *diwaswapa* are the common etiological factors in all female patients of this study.
- In this study kina, kharasparsha, parusha, ruksha, kandu and punarutpadyate these lakshanani are found in all the 30 i.e. 100% patients, shyavata Lakshana is found in 93% i.e. 28 patients, vruddhi lakshana is found in 19 i.e. 63% patients, Matsyashakalasannibham lakshana is found in 15 i.e. 50% patients. Krushna Varna is found in 8 i.e.27% patients, stravi and snigdha Lakshanani are found in 7 i.e. 23% patients, vritta Lakshana is in 20% patients, Ghana Lakshana is found in 10% patients, Aruna Varna is found in only one patient i.e. 3% of all patients. Aswedata and guru lakshanani are not found in any of the patient of this study. Here we can conclude that kharasparshata, Parushata, Rukshata, shyavata, punarutpadyate these lakshanani are found in greater percentage which proves the *vata* dominance in *kitibha kushtha*.
- In this study, 27% i.e. 8 patients had *Kitibha* on Palmoplanter area, 20% i.e. 6 patients had *Kitibha* on scalp area, 17% i.e. 5 patients had *Kitibha* on soles, 10% i.e. 3 patients had *Kitibha* on legs (lateral and medial side), 7% i.e. 2 patients had *Kitibha* on forearms whereas 3% patients had *Kitibha* individually on ankle joints, legs (anterior aspect) & palms, chest and right under arm, Palmoplanter & forehead, generalized psoriasis individually. It is found that Exposed parts of the body are mostly involved in the patients of Psoriasis.

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