

## A Study Twacha Sharir W.S.R. To Kitibha Kustha (Psoriasis)

\*Dr. Gajendra Gurav, \*\* Dr. D. V. Shukla.

\*Reader, Dept. of Rachana Sharir, Govt Akhandanand Ayurved College, Ahemdabad

\*\* Professor & PG Guide, Dept. of Rachana Sharir, R.A.Poddar Ayurved College, Mumbai.

### Abstract:

Ayurveda is God's gift for wellbeing of human kind .Today whole world is looking towards ayurveda as a best therapeutic option for worst skin disorders. Skin is the largest and first site visible organ of body acquiring two square meter of surface area & accounting 16-20% of body weight.<sup>1</sup> In Ayurvediya Samhitas skin is described as *Twacha* various opinion regarding about *Twacha uttapati*, *Twacha stara* & associated disorders are mentioned. In modern era due to changes in life style, food habits, stress & environmental conditions, leads to various skin disorders, among these *Kitibha Kustha* (Psoriasis) is commonest prevalent in India the prevalence of psoriasis varies from 0.44 to 2.8%, it is twice more common in males compared to females, and most of the patients are in their third or fourth decade at the time of presentation.<sup>2</sup> In this study an effort is made to study the anatomical changes occurring in skin layers due to *Kitibha kustha* and to specify the exact location of *Kitibha kustha* (psoriasis) in *twacha stara* described by Sushruta.

**Keywords:** *Twacha*, *Kitibha Kustha* , Psoriasis, *Twacha stara*, Skin biopsy

### Introduction:-

Ayurveda is eternal Science of Life. It is boon for welfare of human beings so it is our moral responsibility to explore the secrets of ayurveda by doing creative research work. In Ayurveda *Twacha* is included under "*Panchdyanan indriya adhisthana*."<sup>3</sup> *Twacha* has various views and counterviews regarding *Twacha Uttapati*, *Twacha Stara* and associated skin disorders. Today it is necessity of time to clarify the visionary of Acharyas by correlating each and every *Twacha Stara* with modern concept of skin Layers.

Psoriasis is most common prevalent cutaneous skin disorder observed in international Society due to changing dietary habits, life style, climatic condition & increased stress condition. Its clinical features bear nearest similarity with *Kitibha Kustha*. Psoriasis is more demoralizing to the patient due to its appearance, recurrence, chronicity and several misbelieves about its nature.

Our prime aim for undertaking this topic is to study the anatomical changes occurring in skin layers due to *Kitibha Kustha* (Psoriasis) and to specify exact location of *Kitihba Kustha* in *Twacha Stara*.

**Aim & Objectives:-**

- To study the *Twacha Sharir* described by various Ayurvedic Literature and Modern Science.
- To study anatomical changes occurring skin layer due to *Kitibha Kustha* and To specify exact location of *Kitibha Kustha* in *Twacha Stara*.

**Materials & Methods:-**

- Study Design : Open Study.
- Place of Study : Dept of Sharir Rachana.  
R. A. Poddar Medical (Ayu) College, Worli, Mumbai  
  
Sarva – Sadharan Chikista OPD  
M.A. Poddar Hospital Worli, Mumbai  
  
Skin OPD & Pathology department  
J. J.Hospital Mumbai.

• **Selection of Patient:-**

Thirty numbers of patients of *Kitibha Kustha* (Psoriasis) are selected by applying following criteria.

**Inclusion Criteria:-**

- i) Sex : Male and female,
- ii) Age group: 20 to 60 yrs.
- iii) Patient having signs & symptoms of *Kitibha Kustha* (Psoriasis) lesions present any where all over the body are selected.

**Exclusion Criteria:-**

- i) Age : Patient below 20 yrs & above 60 yrs are excluded
- ii) Patient having skin lesion other than *Kitibha Kustha* (Psoriasis) are excluded.
- iii) Pregnant women and Lactating mothers are excluded.
- iv) Patient suffering DM, Ca, TB and Hepatitis are excluded.
- v) Patient having HIV and STD are excluded.

• **Case Record form :-**

To Study clinical aspects of *Kitibha Kustha* (Psoriasis) records of all patients included in the study are documented and maintained in case record form.

• **Photographs :-**

Photographs of patient understudy are taken to evaluate clinical features of *Kitibha Kustha* (Psoriasis).

- **Laboratory investigation :-**

All routine investigation is done for selection of patients.

Such as CBC, ESR, Urine routine, Blood Sugar Level, HIV, HbsAg

- **Skin Biopsy:-**

There are several methods of skin biopsy. Punch biopsy, Incisional biopsy, Excisional biopsy and Shave biopsy.<sup>4</sup>

Punch biopsy is preferred to study anatomical changes in skin layers due to *Kitibha Kustha* (Psoriasis) and to specify exact location of *Kitibha Kustha* in *Twacha Stara*.

### OBSERVATION & RESULTS:-

When thirty patients of *Kitibha Kustha*(Psoriasis) are examined histopathologically by doing skin biopsy following anatomical changes are observed.

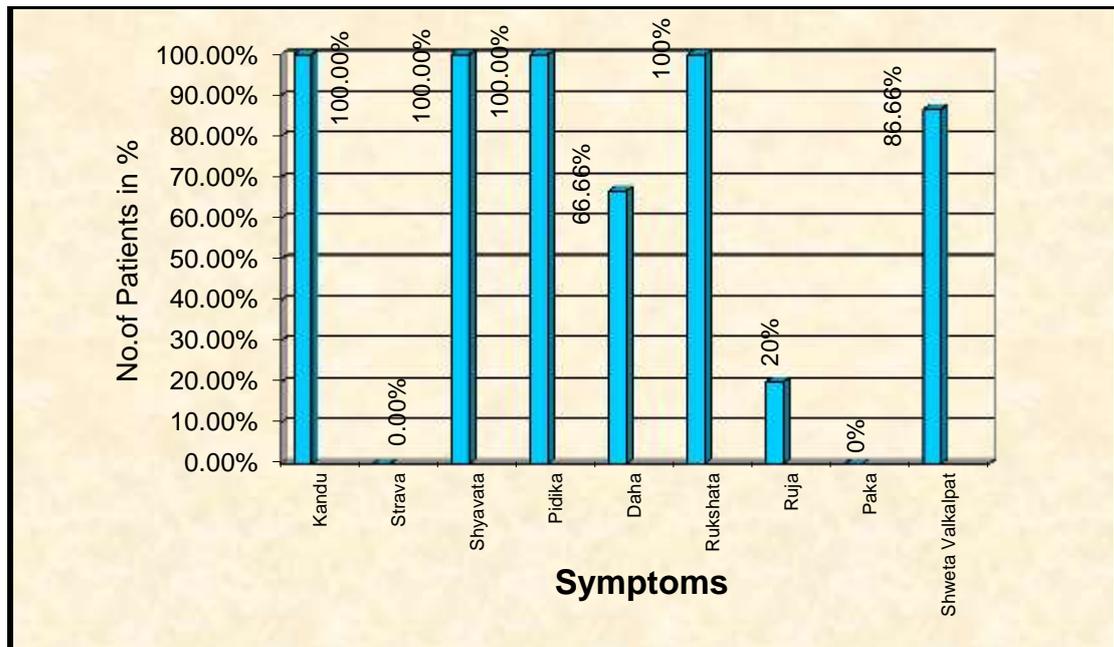
- **Histopathological findings observed in thirty patients of *Kitibha Kustha*(Psoriasis)**

Sr. No.	Histopathological findings	Total no. of Patient	Percentage
1)	Hyperkeratosis	27	90%
2)	Mounds of Parakeratosis	26	86.66%
3)	Acanthosis	16	53.33%
4)	Elongation, fusion and clubbing of rete ridges	27	90%
5)	Perivascular mononuclear infiltrates of Lymphocytes	29	97%
6)	Supra Papillary thinning	13	43.33%
7)	Oedema & Vascular ectasia	12	40%
8)	Munro micro abscesses	11	36.66%
9)	Psoriasiform hyperplasia	11	36.66%
10)	Hypogranulosis or absent granular layer	03	10%
11)	Chronic inflammatory infiltrate	04	13.33%

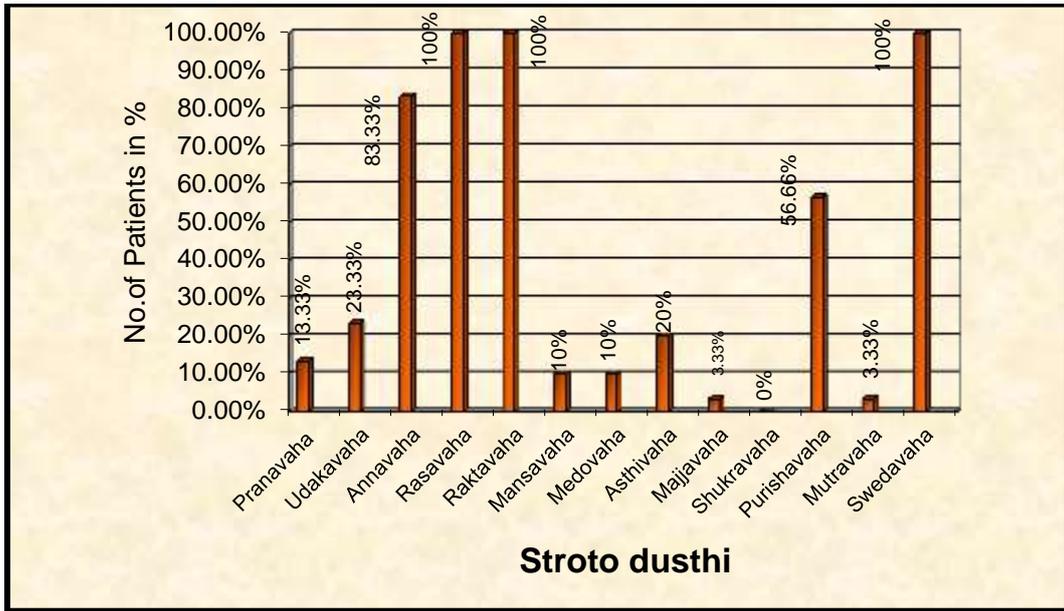
12)	Spongiosis	02	6.66%
13)	Neutrophilic exocytosis	02	6.66%
14)	Spongiform Pustules of Kogoj	01	3.33%

- 1) 27 (90%) patients are observed having Hyperkeratosis, and Elongation, Clubbing, fusion and broadening of rete ridges.
- 2) 26 (86.66%) patients are having Mounds of parakeratosis
- 3) 29 (96.66%) patients show Perivascular mononuclear infiltrates of lymphocytes.
- 4) 16 (53.33%) patients are noted for Acanthosis.
- 5) 13 (43.33%) patients are observed having Suprapapillary thinning.
- 6) 11 (36.66%) patients are shows Munro micro abscesses and Psoriasiform hyperplasia.
- 7) 12 (40%) patients are having oedema and vascular ectasia.
- 8) 04 (13.33%) patients shows chronic inflammatory infiltrate.
- 9) 03 (10%) patients are observed with Hypogranulosis or absent granular layer.
- 10) 02 (6.66%) patients exhibit changes like Spongiosis and Neutrophilic exocytosis
- 11) 01 (3.33%) patients are founded having Spongiform pustules of Kogoj.

### Symptoms wise distribution of Kitibha Kustha Patient



### Stroto dusthi wise distribution of Kitibha Kustha Patients





Photographs showing clinical manifestation of kitibha kustha (Psoriasis)

#### Discussion :-

After detail study of *Twacha Sharir* in various ayurvedic Literature and modern concept of skin layer. We may correlate each and every *Twacha stara* with modern's skin Layers. As per direction given by Dr. Bhaskar Ghanekar :-

#### Correlation of Sushruth stated *Twacha stara* with modern concept of skin layer<sup>5</sup>:-

1.	<i>Avabhasini</i>	Stratum Corneum	Epidermis
2.	<i>Lohita</i>	Stratum Lucidum	
3.	<i>Shweta</i>	Stratum Granulosum	
4.	<i>Tamra</i>	Stratum Malphigii	
5.	<i>Vedini</i>	Papillary Layer	Dermis
6.	<i>Mansadhara</i>	Reticular Layer	

After detail study of etiopathogenesis of *Kitibha Kustha* from ayurvedic samhita and study of various dermatological disorders, it reveals that clinical features of Psoriasis bear nearest similarity with *Kitibha Kustha*.

Table showing similarity between clinical features of *Kitibha Kustha* and Psoriasis.

Sr. No.	Clinical features of <i>Kitibha Kustha</i> <sup>6a&amp;6b</sup>	Clinical features of Psoriasis <sup>7</sup>
1.	<i>Shyavata, Krishnata</i>	Reddish brownish scaly papules and plaques.
2.	<i>Kina – Khara – Sparsha</i>	Horny layer get thickened at the expense of granular layer due to which feeling of roughness, hardness like scar.
3.	<i>Parusha</i>	Lesions are dry and knotty hard in feeling.
4.	<i>Stravi</i>	Scrapping of lesion reveals bleeding point that is Auspitz's sign.
5.	<i>Ghana</i>	Dense gross lesions are observed.
6.	<i>Ugra Kandu</i>	Severe Pruritus.
7.	<i>Puna – Puna uttapadyante</i>	Emission and reemission are common in Psoriasis.

**Conclusion:-**

**Following anatomical changes are observed in skin layer after skin biopsy.**

Sr No.	Anatomical Changes	Observed in skin layer
1.	Hyperkeratosis	Stratum Corneum.
2.	Mounds of parakeratosis	Stratum Malphigii
3.	Acanthosis	Stratum Malphigii
4.	Elongation, clubbing and fusion of rete ridges	Stratum Malphigii
5.	Suprapapillary thinning	Papillary Layer

6.	Mononuclear and lymphocytic infiltrate	Papillary Layer
7.	Psoriasiform hyperplasia	Lower half of Epidermis
8.	Munro micro abscesses	Stratum Corneum
9.	Absence of granular layer	Stratum Granulosum
10.	Chronic inflammatory infiltrate	Papillary Layer
11.	Spongiosis	Stratum Malphigii
12.	Neutrophilic exocytosis	Papillary Layer
13.	Papillary oedema & vascular ectasia	Papillary Layer
14.	Spongioform pustules of kogoj	Stratum Malphigii

From the histopathological changes observed in skin layer and correlation given of *Twacha Stara* we may say that most of the anatomical changes are noticed in

- Stratum Corneum - *Avabhasini*
- Stratum Malphigii - *Tamra*
- Papillary layer - *Vedini*

From above we may say that *Avabhasini, Tamra and Vedini* as the exact site of *Kitibha Kustha*.

#### **References:**

- 1) Practice of Dermatology by P.N Behl, A. Agrawal & Govind Srivastav; CBS publication 9<sup>th</sup> edition 2002 chapter-1 page. no 5-6
- 2) Psoriasis in India: Prevalence & Pattern, Research article author by Sunil Dogra & Savita Yadav published by Indian Journal of dermatology Venereology & leprosy in 12 /11/2010 page no 595-601.
- 3) Charak Samhita *Vidyotini* hindi commentary by P.Kashinath shastri & Dr. Goraknath Chaturvedi ,published by Chowkhambha Sanskrit sansthan Varanasi 2007 Charak Sharirsthana ch.7/7 page no:912
- 4) Dermatological Surgery Made Easy by Virender N.Sehgal Published by Jaypee Brother Medical publisher ne delhi 2<sup>th</sup> edition 2012 page no.50

- 5) Ghanekar's commentary on Sushruth Samhita Sharirsthana "Ayurved Rahasya Deepika" by Dr. Bhaskar Govind Ghanekar, published by Meherchand prakashan Delhi 2007reprinted edition , Sushruth.Sharirsthana ch.4/3 page no 107
- 6) a) Charak Samhita *Vidyotini* hindi commentary by P.Kashinath shastri & Dr. Goraknath Chaturvedi ,published by Chowkhambha Sanskrit sansthan Varanasi 2007reprinted edition Charak Chikitasthana ch.7/22 page no: 252
- b) Susrutha Samhita *Ayurved Tatva Sandeepika* hindi commentary Author: Kaviraj Ambikadatta Shastri published by Chowkhambha Sanskrit Sansthan Varanasi reprint edition 2010 Sushruth Samhita Nidansthana ch.5/14 page no:322
- 7) Illustrated Synopsis of Dermatology and sexually transmitted disease by Neena Khanna , Bhalani Publisher 2007 fourth edition chapter no 4 page no: 39-56