Incidence of psychological stress as an etiological factor of skin disorders- A review

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Introduction

Acharya Charaka defines Ayu (life) as the combined state of Sharira (body), Indriya (senses), Sattva (psyche/mind) and Atma (soul).

The state of health represents the balance between the mental, emotional, physical and spiritual areas.

Ayurveda gives equal importance to psychosocial and psycho spiritual relationship for healthy life.

Dermatological conditions are intimately related to stress.

Stress could be involved as a trigger factor for a lot of cutaneous diseases: Psoriasis, vitiligo, lichen acne, atopic dermatitis, urticaria, etc.

About 80% of affections could be induced or aggravated by stress.
Knowingly or unknowingly, we are not giving much importance to the role of these basic factors in the occurrence of a disease.
In present Study, We have summarized the possible incidences and evidences from the dissertation works carried out on skin disorders in department of RS and BK, IPGT & RA and available classical literature and articles were reviewed to find out the role of stress in 5 skin disorders:

*Eka-kushtha* (Psoriasis)  
*Vicharchika* (Eczema)  
*Shvitra* (Vitiligo)  
*Yauvanpidika* (Acne) and  
*Kshudrakushtha*. 
## Results and discussion

<table>
<thead>
<tr>
<th>Sr No.</th>
<th>Skin disease</th>
<th>No. of Dissertation</th>
<th>Total Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><em>Yauvanpidika</em> (Acne)</td>
<td>2</td>
<td>79</td>
</tr>
<tr>
<td>2</td>
<td><em>Eka-kushtha</em> (Psoriasis)</td>
<td>7</td>
<td>502</td>
</tr>
<tr>
<td>3</td>
<td><em>Vicharchika</em> (Eczema)</td>
<td>7</td>
<td>339</td>
</tr>
<tr>
<td>4</td>
<td><em>Kshudrakushtha</em></td>
<td>9</td>
<td>247</td>
</tr>
<tr>
<td>5</td>
<td><em>Shvitra</em> (Vitiligo)</td>
<td>5</td>
<td>252</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>30</strong></td>
<td><strong>1419</strong></td>
</tr>
</tbody>
</table>
Demographic data

Age group

- Acne
- Kshudra Kushtha
- Eka Kushtha
- Vicharchika
- Shvitra

Age groups:
- 16-30
- 30-45
- 46-60
Psychological factors

Psychological factors in Different Skin disorders

- Anxiety
- Tension
- Depression
- Sentimental

<table>
<thead>
<tr>
<th>Condition</th>
<th>Anxiety</th>
<th>Tension</th>
<th>Depression</th>
<th>Sentimental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acne</td>
<td>53.16%</td>
<td>31.65%</td>
<td>17.72%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Kshudra Kushtha</td>
<td>28.05%</td>
<td>14.39%</td>
<td>10.79%</td>
<td>15%</td>
</tr>
<tr>
<td>Eka Kushtha</td>
<td>17.80%</td>
<td>15%</td>
<td>6.52%</td>
<td>6.52%</td>
</tr>
<tr>
<td>Vicharchika</td>
<td>15%</td>
<td>16.67%</td>
<td>6.52%</td>
<td>6.52%</td>
</tr>
<tr>
<td>Shvitra</td>
<td>14.50%</td>
<td>6.52%</td>
<td>6.52%</td>
<td>6.52%</td>
</tr>
</tbody>
</table>
Etiological factors and Skin disorders
## Manas Bhava in Patho-physiology of disease

<table>
<thead>
<tr>
<th>Sr. No</th>
<th><strong>Manas Hetu</strong></th>
<th><strong>Srotas Dushti</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Bhya</strong></td>
<td><strong>Ambuvahini</strong></td>
</tr>
<tr>
<td>2</td>
<td><strong>Chinta</strong></td>
<td><strong>Rasavaha</strong></td>
</tr>
<tr>
<td>3</td>
<td><strong>Krodha, Bhaya, Shoka</strong></td>
<td><strong>Swedavaha</strong></td>
</tr>
</tbody>
</table>
Patho physiology

psychological stress increases levels of neuro-endocrine hormones, affects the immune system and alters the level of neuro-peptides, which may be the initial steps in the pathogenesis of Skin diseases.

Factors affects the psychological stress

1. Chronicity
2. Mental strength
3. Socio-economical state
4. Nature of Work/ Occupation
Chronicity

<table>
<thead>
<tr>
<th></th>
<th>Acne</th>
<th>Kshudra Kushtha</th>
<th>Eka Kushtha</th>
<th>Vicharchika</th>
<th>Shvitra</th>
</tr>
</thead>
<tbody>
<tr>
<td>acute</td>
<td>25.32%</td>
<td>30.43%</td>
<td>26.75%</td>
<td>43.39%</td>
<td>21.00%</td>
</tr>
<tr>
<td>chronic</td>
<td>56.96%</td>
<td>69.57%</td>
<td>73.25%</td>
<td>56.61%</td>
<td>79.00%</td>
</tr>
</tbody>
</table>
Chronicity

Somatic diseases when become chronic they grow to be very irritating and intolerable for the patient. In some physical disorders where pain is acute or constant, psychological stress develops earlier and may be intense enough to produce certain acute psychological responses or even long-lasting psychosomatic diseases.
Mental strength

Satva of the patients

- Acne: 97%, 6.63%, 8.39%
- Kshudra Kushtha: 35%, 74.41%, 8.20%
- Eka Kushtha: 78.71%, 7.44%, 7.44%
- Vicharchika: 71.64%, 14.22%, 8.20%
- Shvitra: 70.12%, 20.15%, 22.44%

P, M, A
Mental strength

The tolerance and temperament of the patient is most important factor. Even the effect and degree of the emotional hazards also greatly depend upon the mental-strength (Satvabala) of the patient.

Lev Pavlovsky, Alon Friedman Pathogenesis of Stress-Associated Skin Disorders: Exploring the Brain-Skin Axis
Socio-economical state

- Kshudra Kushtha
- Eka Kushtha
- Vicharchika
- Shvitra

- Poor
- Middle
- Upper
Factors affected by the psychological stress

1. Sleep
2. Addiction
3. Bowel habit
4. Digestion process

The skin disease itself can induce a secondary stress for the patient, influencing his quality of life.
Sleep

<table>
<thead>
<tr>
<th>Condition</th>
<th>Insomnia</th>
<th>Sound</th>
<th>Disturbed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acne</td>
<td>5.50%</td>
<td>22.80%</td>
<td>71.70%</td>
</tr>
<tr>
<td>Kshudra Kushtha</td>
<td>50.22%</td>
<td>40.67%</td>
<td>9.11%</td>
</tr>
<tr>
<td>Eka Kushtha</td>
<td>17.49%</td>
<td>32.29%</td>
<td>50.22%</td>
</tr>
<tr>
<td>Shvitra</td>
<td>27.08%</td>
<td>28.36%</td>
<td>44.56%</td>
</tr>
</tbody>
</table>
Sleep

Sleep is described as one among the three *Upastambha* which are the essential factors for healthy life.

Chronic sleep disturbance can be seen as an unspecific state of chronic stress, which affects immune functions and general health.

Addiction

- Acne
- Eka Kushtha
- Vicharchika
- Shvitra

- Tobacco
- Smoking
- Alcohol
- Tea
Site of the lesions

Area of Lesions

<table>
<thead>
<tr>
<th>Condition</th>
<th>Exposed</th>
<th>Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acne</td>
<td>100%</td>
<td>1%</td>
</tr>
<tr>
<td>Kshudra Kushtha</td>
<td>49%</td>
<td>51%</td>
</tr>
<tr>
<td>Eka Kushtha</td>
<td>51.28%</td>
<td>48.72%</td>
</tr>
<tr>
<td>Vicharchika</td>
<td>49.37%</td>
<td>50.63%</td>
</tr>
<tr>
<td>Shvitra</td>
<td>72%</td>
<td>28%</td>
</tr>
</tbody>
</table>
Lesions on exposed part of the body affects the appearance of the patients and thus they became more anxious toward the disease.

Stress involvement as trigger factor in different skin conditions

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INTRODUCTION
The state of health represents the balance between the mental, emotional, physical and relational areas. The stress means an abnormal or extreme physiological adjustment to the adverse effects of the environment. Selye defined stress and described the physiologic changes induced by stress, under the designation “general adaptation
Skin and the Nervous System: Stress, Itch and More


Pathogenesis of Stress-Associated Skin Disorders: Exploring the Brain-Skin Axis

Lev Pavlovsky, Alon Friedman

Departments of Physiology and Neurosurgery, Soroka University Hospital and Zlotowski Center of Neuroscience, Ben-Gurion University, Beersheva, Israel
Psychosocial effect of common skin diseases

Benjamin Barankin, MD  Joel DeKoven, MD, FRCPc

ABSTRACT

OBJECTIVE To increase awareness of the psychosocial effect of acne, atopic dermatitis, and psoriasis.

QUALITY OF EVIDENCE A literature review was based on a MEDLINE search (1966 to 2000). Selected articles from the dermatologic and psychiatric literature, as well as other relevant medical journals, were reviewed and used as the basis for discussion of how skin disease affects patients’ lives and of appropriate management. Studies in the medical literature provide mainly level III evidence predominantly based on descriptive studies and expert opinion.

MAIN MESSAGE Dermatologic problems can result in psychosocial effects that seriously affect patients’ lives. More than a cosmetic nuisance, skin disease can produce anxiety, depression, and other psychological abnormalities.
Conclusion

Psychological Stress is a very important factor to be taken in consideration as precipitating or aggravating factor in different skin conditions. We should concentrate on both the factors affecting and affected by stress and their impact on patients’ life to achieve the goal of Ayurveda

-Swasthsya swasthysa rakshanam
and aturasya vikara prashamanam
THANK YOU

SLOW DOWN
KEEP CALM
BE POSITIVE
TAKE IT EASY
UNPLUG
ENJOY LIFE
HAVE FUN
BREATHE
RELAX
GO OUTSIDE
MEDITATE