COMPARATIVE STUDY OF SNIGDHA QUALITY QUOTED IN DHATUSARA PERSONS WITH THE HELP OF SKIN ANALYZER

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ABSTRACT

Dhatu sarata or tissue excellence is a quality assessment of seven Dhatus. Estimation of Sara has a great role in Dashavidha atura pariksha. In Rasasara, Raktasara, Medasara, Majjasara and Shukrasara Lakshanas, ‘Snigda’ or ‘Snigdhata’ is described with reference to Twacha & Varna. The meaning of Snigdhata is given as oiliness, moisture, tenderness, smoothness etc. In Ayurveda, Snigdha quality is estimated by Darshna & Sparshan Pariksha which is a subjective parameter and judgment may change due to subjective bias. There is a need in the present era to prove our fundamental concepts in terms of modern science without disturbing basic principles. Hundred (100) female volunteers between 18-30 yrs were selected and Dhatusarata along with Snigdhata was assessed. Five groups were made and assessment of moisture and oil content of skin in these five groups was done with the help of skin analyzer. It is observed that rasa sara persons have maximum moisture content as compared to other and oil content was more in meda sara persons. After statistical analysis it is concluded that there is significant difference in Snigdhata quoted in different Dhatusara person.

KEYWORDS: Dhatusarata, moisture, oil, skin, Sarata.
INTRODUCTION
Ayurveda is one of the world's oldest holistic healing systems. It is based on the belief that health and wellness depends on a delicate balance among the mind, body and spirit. A person is called as healthy when Dosha, Dhatu, Mala & Agni are in equilibrium condition. Dhatus or tissues can be called as the stabilizing pillars of the body. Well nourished Dhatus give strength to body and maintain health & immunity.

The term Sara has been described to denote the essence of Dhatu with an excellent quality.[1] The concept of Sara is a good mirror to assess properties and function of Dhatu. Acharya Charaka described the importance of Sara under Dashavidha Rogi Pariksha along with other Pariksha like Prakriti, Vikriti, Samhanana, Praman, Satmya, Sattva, aharasakti, vyamasakti and Vaya.[2]

In Rasasara, Raktasara, Medasara, Majjasara and Shukrasara Lakshanas,‘Snigdha’or ‘Snigdhata’ is described with reference to Twacha & Varna. According to Sushruta, Varna can be assessed by first layer of skin i.e. Avabhasini. Charaka described the first layer of skin as Udakadhara which regulates the water content or moisture. Snigdhata is assessed by Darshanedriya and Sparshanedriya. The meaning of Snigdhata is given as oiliness, moisture, tenderness, smoothness etc.

Moisture & oil content in the skin plays an important role in maintaining skin’s protective barrier layer and making skin look younger and healthier. When the water content of Horney layer falls below 8 to10%, it becomes dry & rough. Dry skin is more prone to produce wrinkle which is a sign of skin aging. Hence estimation of oiliness & moisture content is important to decide correct regimen to achieve healthy skin.

In Ayurveda, Snigdha quality is estimated by Darshan & Sparshan pariksha which is a subjective parameter and judgment may change due to subjective bias. There is a need in the present era to prove our fundamental concepts in terms of modern science without disturbing basic principles.

Hence the study is selected to minimize error and bring objectivity in assessment of Snigdhata, which will be beneficial for better understanding of Snigdha Lakshanas quoted in Dhatusarata.
AIM
To compare Snigdha quality quoted in different Dhatusara persons with the help of skin analyzer.

MATERIAL AND METHODS
Materials
During this study “Comparative study of Snigdhata quoted in Dhatusara persons” following materials were used. Ayurvedic literature regarding Dhatusarata and Snigdhata and modern literature regarding moisture and oil content of human skin was taken.

Hundred (100) female volunteers between 18-30 yrs were selected from the post graduate and under graduate students of D.Y.Patil school of Ayurveda, Nerul, Navi- Mumbai. Study was conducted during period December 2015 to February 2016.

For this study Pregnant & lactating women, volunteers having history of congenital, hormonal and skin disorder were excluded.

For assessment of skin moisture and oil BIA skin analyzer (ISO9001:2008) is used.

Method
1. Volunteers were selected according to inclusion criteria and written consent of volunteers was taken.
2. Demographical study (Name, Address, Age, Sex, Diet, Education, Occupation, Economic status) is done by Prashna Pariksha. Socio-economic status is calculated by Kuppuswamy’s socio-economic scale (2016).
3. Assessment of Dhatusarata along with Snigdhata according to CRF was done.
4. Volunteers scored more than 60% by calculating weighted mean were selected.
5. Five groups were made of different Dhatusarata having Snigdha Guna (20 subjects of Rasasara, Raktasara, Medasara, Majjasara & Shukrasara each)
6. Assessment of moisture and oil content of skin in these five groups was done with the help of skin analyzer during proliferative phase of menstrual cycle.
7. Moisture and oil content of skin between these groups were compared.

OBSERVATION
During this study “Comparative study of Snigdha quality quoted in Dhatusara persons” observations are displayed with the help of tables & graph.
Table no – 1: Moisture content of skin in different Sara

<table>
<thead>
<tr>
<th></th>
<th>RASA SARA</th>
<th>RAKTA SARA</th>
<th>MEDA SARA</th>
<th>MAJJA SARA</th>
<th>SHUKRA SARA</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEAN</td>
<td>2.45</td>
<td>1.85</td>
<td>2</td>
<td>0.7</td>
<td>1.95</td>
</tr>
<tr>
<td>S D</td>
<td>0.94</td>
<td>1.017</td>
<td>1.065</td>
<td>0.837</td>
<td>1.264</td>
</tr>
<tr>
<td>MEDIAN</td>
<td>2.00</td>
<td>1.667</td>
<td>2.00</td>
<td>0.667</td>
<td>2.000</td>
</tr>
</tbody>
</table>

P value is <0.0001, considered extremely significant.

Kruskal-Wallis statistics KW=31.120.

Table no – 2: Oil content of skin in different Sara

<table>
<thead>
<tr>
<th></th>
<th>RASA SARA</th>
<th>RAKTA SARA</th>
<th>MEDA SARA</th>
<th>MAJJA SARA</th>
<th>SHUKRA SARA</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEAN</td>
<td>3.53</td>
<td>3.71</td>
<td>4.31</td>
<td>1.71</td>
<td>3.15</td>
</tr>
<tr>
<td>S D</td>
<td>1.417</td>
<td>1.016</td>
<td>0.6795</td>
<td>0.7668</td>
<td>1.420</td>
</tr>
<tr>
<td>MEDIAN</td>
<td>3.833</td>
<td>3.667</td>
<td>4.333</td>
<td>1.667</td>
<td>2.667</td>
</tr>
</tbody>
</table>

The P value is < .001, considered extremely significant.

Kruskal-Wallis statistic KW=38.628.

DISCUSSION

Table no 1 show that Rasasara persons were having high moisture content in comparison to other Sara.

Table no 2 shows Mean oil content of skin in different Dhatu Sara persons. It was observed that Medasara persons were having high oil content in comparison to other Sara.

*Rasa Dhatu is Aap Mahabhuta Pradhana.*[^3] This may be a cause for presence of maximum moisture content in Rasasara persons.
Rakta Dhatu has predominance of Tejo and Jala Mahabhuta.\textsuperscript{[4]} Drava guna of Jala Mahabhuta may be a cause of more moisture content in skin found in Raktasara persons. Sushruta describes ‘Snigdha’ as a quality of Rakta Dhatu, may be due to this quality, Raktasara persons were having Snigdhata.

Meda Dhatu has predominance of Jala and Prithivi Mahabhuta, so moisture content is found in Medasara persons. Function of Meda Dhatu is Snehana.\textsuperscript{[5]} This may be a cause of high oil content observed in Medasara persons.

Majja Dhatu has predominance of Aap Mahabhuta.\textsuperscript{[6]} According to Charak Vayu causes porosity in the interior bones and this porous space get filled with Meda, this substance is Majja, so qualities of Meda carries to Majja and function of Majja Dhatu is Sneham, therefore Snigdhata is observed in Majjasara persons.\textsuperscript{[7]}

Shukra Dhatu has predominance of Aap Mahabhuta.\textsuperscript{[8]} According to Sushruta quality of Shukra is Soumya. May be due to this moisture and oil content of skin is found in Shukra Sara person.

Due to Ashraya-Ashrayi relation of Dosha and Dhatu, Snigdha quality of Kapha & Pitta Dosha is observed in Rasa, Rakta, Meda, Majja and Shukra Dhatu.\textsuperscript{[9]}

Mamsa Dhatu has predominance of Prithivi Mahabhuta. Due to this distinguished Snigdhata may not be mentioned in Mamsa Sara persons.

Asthi Dhatu has predominance of Prithivi and Vayu Mahabhuta, and Asthi Dhatu is Ashraya of Vata Dosha. Due to Ashraya-Ashrayi relation of Dosha and Dhatu, Rukshya quality of Vata Dosha is observed in Asthi Dhatu. So distinguished Snigdhata may not be mentioned in Asthi Sara persons.

**CONCLUSION**

After the statistical analysis it is found that there is significant difference in Snigdha quality quoted in different Dhatusara person.

From observation it is found that Rasa Sara persons are having more moisture content in skin and Meda Sara persons are having more oil content in skin.
Through modern parameters, it is concluded that oil content of skin is more than moisture content in all Saras as mentioned in Ayurvedic compendia which proves Basic principles of Ayurveda.

ACKNOWLEDGEMENT

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REFERENCES

