

ANATOMICAL AND PATHOLOGICAL PERSPECTIVE OF SANDHI SHARIRA: AN
AYURVEDA REVIEW

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ABSTRACT

The Ayurveda anatomy deals with various structural features of body and described physiology of different body parts. In this regards Ayurveda mentioned term Sandhi which is described as the meeting point of two or more structures and can be correlated with the joint as per the modern science. As per Acharya Sushruta Asthi Sandhi mainly considered as Sandhis and Sushruta has classified Sandhi on the basis of functions or mobility into Cheshtavanta and Sthira Sandhi. Similarly Acharya Gananatha Sen classified them into Bahucheshta, Alpacheshtha and Acheshta. Anatomically they are classified into eight categories including Kora, Ulukhala, Samudga, Pratara, Tunnasevani, Vayasatunda, Mandala and Shankhavarta. These Sandhis performs specific functions and any abnormalities leads particular types of manifestation or disability. Present article summarizes anatomical and pathological perspective of Sandhi Sharira.

KEYWORDS: Ayurveda, Sharira, Anatomy, Sandhi, Joint.

INTRODUCTION

Ayurveda classics explain many concepts related to the Shareer and physiological aspects of human body along with pathological manifestation of various diseases. The Chikitsa of disease merely depends upon the knowledge of Shareer. Ayurveda described clinical significance of different body parts including Sandhi Shareer. Ayurveda described Sandhi as meeting points of Asthi, Snayu, Peshi and Sira, but the Snayu, Peshi and Sira Sandhis are innumerable thus Ayurveda philosopher considered Asthi Sandhi as Sandhi. The classification of Sandhi based on their action (Kriyanusar) and based on their anatomy (Rachananusar).^[1-4]

Kriyanusar Sandhis

The classification is based on the action (Kriya) of Sandhis, this classification mainly considered mobility of Sandhi as basis of categorization. The Kriyanusar Vargeekaran of ability of Sandhis is of two types as depicted in Figure 1.


Figure 1: Kriyanusar Vargeekaran of Sandhis.

The Cheshtayukta Sandhi is situated in the Shakhas, Hanu and Kati. The other Sandhi is Sthira in nature. The Cheshtayukta Sandhis are classified further into Bahu chala and Alpachala. This classification based on the extent of movement of Sandhi; the Bahu chala Sandhi are freely movable while Alpachala Sandhi is slightly movable. The examples of Bahuchala Sandhi are Sandhi of Shakhas, Hanu and Kati while Sandhi of Prushtha is comes under the heading of Alpachala Sandhi.^[4-6]

Rachananusar Sandhi Vargeekaran

This classification is based on the structure of Sandhi, Acharya Sushruta has described eight types of anatomical types of Sandhi including; Kora, Samudga, Ulukhala, Pratara, Vayastunda, Tunnase-vani, Shankhavarta and Mandala.

Number of Sandhis

Aacharya Sushruta described 210 Sandhi in body which distributed as follows:

1. Sixty eight Sandhi is present in four extremities.
2. Fifty-nine Sandhi is present in trunk region.
3. Eighty-three Sandhi in neck and the upper region of body.

✓ Kora Sandhi

Kora Sandhi is found in the region of Anguli, Manibandha, Janu, Kurpara and Gulpha.

✓ Ulukhala Sandhi

These Sandhis found at Kaksha, Vankshana and Dashana region.

✓ Samudga Sandhi

These Sandhis found at Ansapeeth, Bhaga, Guda and Nitamba region.

✓ Pratara Sandhi

Pratara Sandhi found at Greeva, Kasherukha and Prushthavansha region.

✓ Tunnasevani Sandhi

This type of Sandhi is found at Sirakapala and Katikapala region.

✓ Vayastunda Sandhi

Hanu situated within Shankhasthi of both side of chin is considered Vayastunda Sandhi.

✓ Mandala Sandhi

This Sandhi present in Kantha, Netra and Hrudaya.

✓ Shankhavarta Sandhi

Shankhavarta Sandhi found in Shrotra and Shringataka.

Pathological Conditions Associated With Sandhi

Sandigatha Vatha, Avabahuka, Kostukashirsha, Vatha kantaka, Khalli, Grudrasi, Hanu bramsa, Visvachee and Asthi majjagata Vatha are pathological conditions associated with Sandhi. Pain, swelling, inflammation, deformities, restriction in movement and abnormal posture, etc. are common features of Sandhi Vyadhi.

Asthi majjagata vatha and Urusthambha are conditions in which involvement of bone mainly occurs. Amavatha, Avabahuka, Kostukashirsha, Grudrasi, Khalli and Vatha kantaka, etc. are the conditions in which muscle and joint both get affected. Vatha raktha and Khalli are the conditions in which ligaments & joint both get affected.

Sandhigata vatha is common articular disorder, smaller joints involves vitiation of Vatha and Dhatukshaya leading to the dryness of tissues and causes restriction in movement. Vata raktha involves swelling, dryness, discoloration, itching and pain in joint. Avabahuka, Vatakantaka, Grudrasi, Khalli, Urustambha, Hanusthambha, Asthimajjagata vatha, Visvachee, Amavatha, Raktha vatha, Jirna vatha, Vatha khuddatha, Gulpha graha, Uru sara, Janubheda, Thrika graha, Bahu shosha and Griva sthambha, etc. are the conditions associated with joints or possess clinical manifestations of joint related problems. The involvement of Vata vitiation is considered as major cause of such types of diseases therefore Vataprakupaka Nidana i.e.; Vataprakupaka Ahara Vihara play

significant role in the pathogenesis of joint disorders. Atiruksha, Atialpa, Atisheeta, Abhojana and Atilaghu, etc. are Aharaja factors play role in disease pathogenesis. Diwaswapna, Ativyavaya, Atiprajagaran, Vegasandharana, Atibhaya and Plavana, etc. are the Viharaja factors which play significant role in the pathogenesis of joints disorders.^[5-9]

Factors Associated with Samprapti of Joint Disorders

| | |
|-----------------|----------------------|
| ✚ Dosha: | Vata (Vyanavayu) |
| ✚ Dushya: | Asthi, Majja, Sandhi |
| ✚ Srotas: | Asthivaha, Majjavaha |
| ✚ Vyaktisthana: | Asthi – Sandhi |
| ✚ Dosha Marga: | Sandhi |

The Hetu Sevan causes Dhatukshaya and vitiation of Vata along with obstruction of Srotas which ultimately causes Rukshta in Sandhi and triggers symptoms of Sandhi-Vyadhi.

Diseases Affecting Elbow Joint

Tennis elbow.

Diseases Affecting Shoulder Joint

- ✓ Frozen Shoulder
- ✓ Adhesive capsulitis

Diseases Affecting Wrist Joint

Carpel Tunnel Syndrome.

Diseases Affecting Ankle and foot

- ✓ Achilles Tendonitis
- ✓ Plantar Fasciitis

Diseases Affecting Hip Joint

- ✓ Avascular Necrosis of Head of Femur

Diseases Affecting Knee Joint

- ✓ Rheumatoid Arthritis
- ✓ Osteo Arthritis

CONCLUSION

The Ayurveda anatomy described physiology and structural features of different body parts. Ayurveda described many terms related to the body organs including Sandhi which described meeting point of two or more structures and the term Sandhi related with joint as per the modern science. Cheshtavanta and Sthira Sandhi are two types of Sandhi on the basis of mobility of Sandhi. Anatomically Sandhi can be classified into eight categories including Kora, Ulukhala, Samudga, Pratara, Tunnasevani, Vayasatunda, Mandala and Shankhavarta. These Sandhis performs functions related to the movement and provides flexibility in body. The abnormalities in Sandhi leads many pathological conditions including Sandigatha Vatha, Avabahuka, Kostukashirsha, Vatha kantaka, Khalli, Grudrasi, Hanu bramsa, Visvachee and Asthi majjagata Vatha. Pain, swelling, inflammation, deformities, restriction in movement and abnormal posture, etc. are common

features of *Sandhi Vyadhi*. The *Hetu Sevan* causes *Dhatukshaya* and vitiation of *Vata* along with obstruction of *Srotas* which ultimately causes *Rukshta* in *Sandhi* and triggers symptoms of *Sandhi-Vyadhi*.

REFERENCES

1. Sushruta, Sushruta Samhita, Edited With Ayurveda Tatvasandipika Hindi Commentary, By Kaviraja Ambikadutta Shastri Part I, Chaukhambha Sanskrit Sansthan, Varanasi, 12th Edition Year of Reprint Sharir Sthana, 2009; 62.
2. Pratyaksha Shariram, A text-book of Human Anatomy in Sanskrit, By Gananath Sen, Part I, Chaukhambha Sanskrit Sansthan, Varanasi, 2009; 115.
3. Sushruta, Sushruta Samhita, Edited With Ayurveda Tatvasandipika Hindi Commentary, By Kaviraja Ambikadutta Shastri Part I, Chaukhambha Sanskrit Sansthan, Varanasi, 12th Edition Year of Reprint Sharir Sthana, 2009; 61.
4. Charaka Samhita of Agnivesa Edited with Vaidyamanorama Hindi Commentary By Prof. Ravi Dutt Tripathi, Acharya Vidhyadhar Shukla, Chaukhambha Publications, Edition, 2009.
5. Bhavamishra Bhavaprakasha edited by Bhramashankar Shastri, Chaukhambha Sanskrit Series, Varanasi, 1984.
6. Sharma PV. Introduction to dravyaguna vignana. 2nd ed. Varanasi: Choukhamba orientalia, 1995; 95-127.
7. Chopra A, Doiphode VV, Ayurvedic medicine, core concept, therapeutic principles and current relevance. Complement Altern Med, 2002; 86: 75-89.
8. Ashtang Hridya, Sutra sthana, 11/25, Kaviraj Atrideva gupta, Chaukhamba Sanskrit Bhawan sansthan Varanasi-221001, 2000; 88.
9. Dr. Brahmanada Tripathi, Charak Samhita of Maharshicharak, Chukhambhaprakashan, Varanasi, Chikitsastan, 2011; 28(74): 951.