ANATOMICAL PERSPECTIVE OF SOME MARMA AND THEIR CLINICAL SIGNIFICANCE: A REVIEW

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ABSTRACT
Ayurveda the science of Indian medical system accredited to Dhanvantari. Anatomical knowledge in ancient India developed on the basis of practical experiments and continuous observation. The Caraka Samhita and Susruta Samhita are the important text of Ayurveda science. The Susruta Samhita concern about surgery and provides anatomical important information; Susruta Samhita encompasses many chapters regarding the human anatomy. The anatomical text of Ayurveda science also described a term Marma which means the joining point of Mamsa, Sira, Snayu, Asthi and Sandhi; these Marma are special points (Sthana) in human body and any injury on these Marma may leads disease, disability and fatal conditions. Tri-Marma i.e. Shiram, Hridayam and Basti described by Acharya Charaka possess significant clinical importance. This article described anatomical perspective of some Marma with their clinical significance.

KEYWORDS
Marma, Gulpha Marma, Adhipati Marma, Indrabasti Marma and Urvi Marma.

INTRODUCTION
Ayurveda the traditional science of Indian medical system not only involve medical practices on the basis of logical experimental reasoning but also encompasses holistic approach. As per the traditional science of Indian medical system the prana (life) encompasses Sharir, Atma, Mana and senses. The basic principles of Ayurveda belongs from the ancient literature Samhita; Sarira Sthana of the Susruta Samhita dedicated to the human anatomy it described human body as six main components such as; the four extremities (upper and lower), the middle
body and the head. Similarly the ancient science also described a term Marma which means prana, jiva, Marma is one of the important concepts of Sharirsthana; as per Dalhana there are some susceptible points (Marma) in human body that any type of injury through these points may lead to serious condition. There are some anatomical features involved in Marma point such as; Mansa, Sira, Snayu, Asthi and Sandhi. Marma Vigyana is used for various purpose like; surgery, diagnosis and diseases treatment (Figure No.1). There are various types of Marma classified in Ayurveda text such as; Snayu Marmam, Sira Marma and Sandhi Marma, the classical example of various types of Marma are as follows:

**Snayu Marma:** Kurch and Aani.
**Sira Marma:** Lohitaksh and Urvi.
**Sandhi Marma:** Janu.

Anatomically the positioning and size of Marma also mentioned in literature i.e; Janu Marma is three Angula in dimension Kurch Marma is one Paanitala while Urvi and Vitap are one Angula and Aani and Lohitaksh are ½ Angula in Dimension.

**GULPHA MARMA**
Gulpha Marma is anguli pramana. The Gulpha Marma may be used for Siravedha, Agni karma and for ankle joint. The Gulpha Marma resides in the Gulpha region where the Pada and Jangha meet together, injury on this region may leads symptoms like: Ruja, khanjata and stabdha padata. Gulpha Marma shows various correlated compositions such as:

**Mansa:** Fibularis (peroneus) longus, fibularis brevis, superior fibular (peroneal) retinaculum
**Sira:** Perforating branch of Fibular (peroneal) Artery, Fibular nerve
**Snayu:** Lateral ligament of the ankle along with anterior talofibular ligament, a flat weak band calcaneofibular ligament and posterior talofibular ligament.
**Asthi:** Tibia, Lateral malleolus of Fibula and Talus.
**Sandhi:** Joint between Tibia, Fibula and Talus.

As per Sushrta Gulpha is Sandhi Marma associated significantly with the joint injury5.

**SIRAVYADHA MARMAS**
Siravyadha is one of the types of Rakthamokshana and Marma sthana are suggested as anatomical point for specific conditions of Siravyadhana. Researchers investigated and reported anatomical and clinical consequence of Siravyadha; also described Siras for Siravyadha in particular diseases. There are different site of Siravyadha and Marma Sthana for various Roga like; Vama Kurpara Sandhisthita Sira means left side medial cubital vein or Sira present between left Kanishtika and Anamika Angulas for Pleehodara, two Angula below from Indrabasti Marma for Apachi (Lymphadenitis), four Angula above the Kurpara Sandhi for Vishwachi and Dakshina Kurpara Sandhisthita Sira means right sided medial cubital vein or Sira present between Kanishtika and Anamika Angulis (Right dorsal venous arch) for Kasa and Shwasa6.

**ADHIPATI MARMA**
Adhipati Marma is situated at top of skull. The superior saggital sinus is a place of Adhipati marma. Due to the abundance of veins it described as Sandhi marma which on skull is represented by Avarta form by hair in outer expression, it is correlated with sub arachnoid pressure on cerebral veins which may lead symptoms such as; Murcha, Bhram, Pralap7.

**INDRABASTI MARMA**
Indrabasti marma is a Mamsa marma is located between elbow and wrist, towards the hand. Indrabasti marma is present 8 angula from elbow to wrist (Prakoshta madhya prati). Indrabasti marma is described as mamsa marma since middle of forearm pronator teres, brachioradialis, flexor carpi radialis and flexor digitorum superficial is muscles are situated at this region, ulnar artery along with its branches, radial artery and median nerve are also located in this area. Any injury which may result loss of the blood supply is more common at the forearm level in the upper extremity. Branches of ulnar artery, radial artery are found in the proximity of Marma, so injury on this region may lead significant blood loss and obstruction in blood supply8.
LOHITAKSHA MARMA
Sushruta described Marma Sharira in “Pratyekamarmarindesha Sharira” and Vagbhata in Marmavibhagam Shariram. Lohitaksha Marma located in lower limb is Vaikalyakar Marma where femoral artery passes in femoral triangle two inches lateral to pubic symphysis. Lohitaksha Marma is located above Urvi Marma and below Vankshana Sandhi, it can be described as Sira Marma. Lohitaksha Marma situated beneath the great inguinal canal through femoral triangle. The basic structural component of this region is: skin, superficial fascia, fascia lata, femoral nerve, femoral artery and femoral vein. The femoral vein and artery moves through the femoral triangle with a separator line that divide to motor nerve the femoral vein in upper part medial to the femoral artery and at the top the association between artery and vein is antero-posterior. The any shock to this Marma may result hemorrhage.

URVI MARMA
Urvi Marma is Vaikalyakara Marma and related to the Sira thus described under Sira Marma with dimension of one Angula. Adductor magnus, rectus femoris, sartorius, vastus medialis, femoral artery and its branches, femoral vein along with tributaries, superficial inguinal lymph nodes, saphenous nerve, subsartorial plexus of nerves are located at the region of Urvi Marma, position of Marma is in adductor canal, no direct correlation regarding Sandhi and Asthi. The leading structural component of the Urvi Marma site is femoral vein with Adductor magnus, Sartorius and Vastus medialis etc.

CONCLUSION
Ayurveda emphasized on anatomical knowledge as part of diagnosis and treatment. The surgical interventions needed great consideration of anatomical perspective, any misconception regarding anatomical framework may leads failure of medical procedure. This article described various Marma points which need to be cover while injury or shock to prevent fatal conditions. Present article mention anatomical perspective of some Marma with their clinical significance to explore medical consideration of Marma points.

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CONFLICT OF INTEREST
We declare that we have no conflict of interest.
BIBLIOGRAPHY


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