



## A REVIEW OF PANCHAKARMACHIKITSA IN DISEASES RELATED TO GULF MARMA

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### ABSTRACT

Gulphamarma Points is located just under the ankle. It can relieve stiffness and leg fatigue also a natural analgesic or pain reliever. The joint between paada and jandha is said to be gulpha. The symptoms is aghat over gulphamarma are Ruja, Stabdhapadata and Khanjata, Vatakantaka, Ankle sprain, Fracture, Soccer injuries, Ankle impingement, Flexor 758alluceslongustendinopathy, Footballers ankle, Sinus tarsi syndrome & Tarsal tunnel syndrome. Panchakarma is the best treatment in disease related to Marma. Human tissue and cells become healthy by the panchakarma therapy. Snehana (Oleation) therapy is a unique modality of Panchakarma treatment it nourishes the tissue and cells so its play of important role to heal the tissues. Swedan (Fomentation) Therapy improves blood circulation so it is also helpful in healing process. Leaches suck impure blood so it is also play important role in healing process. Panchkarma is a best modality to treat disease related in Gulf Marma.

**KEYWORDS:** Panchakarmachikitsa, Gulf Marma.

### INTRODUCTION

Marma is very important and unique concept of Ayurvedic sharir first and foremost literature of marma is seen in Brihatrayee. Which is described in the sixth adhyaya of sharirasthanapratyekmarma Nirdeshsharir of sushrutasamhita. Marma are the vital area of the body any injuries to these parts may lead to severe pain, disability, loss of function, loss of sensation and death. Marma are the points when injured may be life threatening marma are not superficial landmarks on the body surface but these are deep seated important anatomical structure. Marma are the places where there is an inseparable union of mamsa, sira, snayu, asthi and sandhi. Here the prana resides naturally. Hence if the marma is injured it will give rise to respective symptoms.<sup>[1]</sup> Marma therapy in the modern is to promote healing. However as vital points of life marma have also been used for harm. Marma Chikitsa can be used to treat the disease of nerve and brain and traumatic neurological or neurosurgical lesion and orthopaedic lesions and to reduce the pain of nerve, muscles, ligament bones and joints Acharyasushrutahas classified Marma in five types depending upon the ultimate result after trauma inflicted upon these points. These are Sadhyapranhara, kalantarapranhara, Vishalyaghna, Gulphamarma points is located just under the ankle. It can relieve stiffness and leg fatigue also a natural analgesic or pain reliever. The joint between paada and jandha is said to be gulpha. The symptoms

isaghat over gulphamarma are Ruja, Stabdhapadata and Khanjata. Panchakarma is the unique therapy of Ayurveda. It maintains health as well as cure the disease. Snehana therapy (Oleation) & Swedan therapy (Sudation therapy) are best modality for disease related to Gulf Marma.

**Table 1: Types of Sandhi's.**

Types of Sandhi's	Sandhi's
Kora	Anguli, Manibandha, Gulpha, Janu, Kurpara.
Ulukhala	Kaksha, Vanshana, Danta.
amudga	Amsapeeda, Guda, Bhaga.
Pratara	Greeva, Prishtavamksha.
Tunnasevini	Kapala.
Vayasatunda	Hanu.
Mandala	Netra, Hridaya, Kanda.
Sankhavartha	Srotra, Sringhataka.

**Table 2: Classification of Kora Sandhi.<sup>[1]</sup>**

Kora Sandhi (types)	Examples
Khallakora	Manibandha, Gulpha
Parasparakora	Angustamoola
Chakra kora	DantachudaKasheru
SamdanshaKora	KurparaSandhi

**Table 3: Number of Sandhi.**

Sandhi's	Sankhya
Shakha's	68
Kosta	59
Greeva	83
Total	210

dimensional and numerical criteria. Considering the importance of Vasthi, Hridaya and Siras, Charakacharya has emphatically mentioned about these 3 Marmas in the 'Trimarmeyyadhyaya'<sup>[5]</sup>

**Classification of marm**

There are 107 Marma in the human body<sup>[2,3,4]</sup> Marma are classified according to regional, structural, prognostic,

**Table 4: Classification of marma by number.**

Name	Rajananusara	Parinamanusara	Pramana	Sankhya
Talahrudaya	Mamsa	Kalanthara	½	4
Kshipra	Snayu	Kalanthara	½	4
Koorcha	Snayu	Vaikalyakara	4	4
Koorchashira	Snayu	Rujakara	1	4
Gulpha	Sandhi	Rujakara	2	2
Manibandha	Sandhi	Rujakara	2	2
Indravasti	Mamsa	Kalanthara	½	4
Janu	Sandhi	Vaikalyakara	3	2
Kurpara	Sandhi	Vaikalyakara	3	2
Ani	Snayu	Vaikalyakara	½	4
Urvi	Sira	Vaikalyakara	1	4
Lohitaksha	Sira	Vaikalyakara	½	4
Vitapa	Snayu	Vaikalyakara	1	2
Kakshadhara	Snayu	Vaikalyakara	1	2

**Table 5: Prognostic classifications of marma established upon panchamahabhutastrigunas.<sup>[6]</sup>**

Prognostic classification	Number	Trigunas	Bhutas	Prognosis
Sadyapranahara	19	Rajas & Satva	Agni	Sudden death within 7 days.
Kalantarapranahara	33	Rajas & Thamas	Agni + Vayu	Death within 14 days of injury.
Visalyaghna	03	Rajas	Vayu	Vayu escapes if shalya is extracted and result in death.
Vaikalyakara	44	Thamas	Soma	Sthirathvam & saithyam of soma guna result in prana-valambanam and results in deformity.
Rujakara	08	Rajobahulya	Agni + Vayu	Pain.

**Table 6: Sandhi Marma.**

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### Gulpha sandhi

Etymologically the word 'Gulpha' has been derived from the Sanskrit root 'Gal'- Ankle. So the derivation of the word Gulpha is from 'Gal' dhatu (root). 'Fuk' prateya (affix).<sup>[7]</sup>

### Synonyms

Gulpha, Khulaka, Khudaka, Khallaka and Kuduka are synonyms of Gulphasandhi.

Gulpha Sandhi is one of the important Sandhi of the lower extremities. It is mainly associated with locomotion and is a weight bearing joint. Structurally it is classified under Kora Sandhi and functionally it is a Bahuchala Sandhi. Susrutha has explained that Gulpha Sandhi is present between or at the union of Pada and Jangha.<sup>[8]</sup> When we go through the classification of marma it has been considered under the heading of Sandhimarma of Rujakaravariety. According to Gananathsen the typical location of Gulpha Sandhi is below the Jangha and above the Kurchashira marma.<sup>[9]</sup> Present at the junction of foot and leg. Number- Right side -1 Gulpha Sandhi. Left side -1 Gulpha Sandhi. Total - 2 Gulpha Sandhi.

### Gulpha marma

Susruthacharya says Gulpha Marma is situated on the junction of the jangha and pada, in both lower extremities<sup>10</sup>. In Astangahridaya, the description of the ankle joint is the joint between the Jangha and Charana.<sup>[11]</sup> In Astangasamgraha, Gulpha Marma is the joint between Pada and Jangha.<sup>[12]</sup> Jangha is the leg and Charana indicate the foot. The meaning of word Jangha is leg, between knee and the ankle. Regionally Gulpha Marma is a Shaka Marma, which dimensionally is a Dwyangulapramana and it is two in number. Based upon anatomical classification, it is included in Sandhi Marma. Prognostically, Gulpha Marma is grouped under Rujakara Marma in which Agni, Soma & Vayu Mahabhuta is predominant. Any injury at this site feels as if full of thorns, even after healing there is shortening of the limb, lameness, decrease in strength, restriction of movements, and atrophy of muscles and swelling of the joint.<sup>[13]</sup> Acharya Susrutha says while highlighting the importance of marmaghatha the person whose trunk, Head, Scalp are severely injured and Legs, arms, feet and hands are completely amputated or else the other parts of the body are studded with injuries are likely to survive if the Marma are saved.<sup>[14]</sup>

### Peshi's

500 Peshis are present in human body.<sup>[115]</sup> Ten Peshis are present in Gulpha<sup>[16]</sup> sandhi to provide shape and help to impart movements to the foot.<sup>[17]</sup> Peshis cover and strengthens the Sira, Snayu, Asthi, Parva and Sandhi.<sup>[18]</sup>

### Ankle foot complex<sup>[19]</sup>

The ankle/foot complex is structurally analogous to the wrist-hand complex of the upper extremity but has a number of distinct differences to optimize it's primarily

role to bear weight. The complementing structures of the foot allow the foot to sustain large weight –bearing stresses under a variety of surfaces and activities that maximize stability and mobility. The ankle/foot complex must meet the stability demands of;

- 1) Providing a stable base of support for the body in a variety of weight-bearing postures without excessive muscular activity and energy expenditure.
- 2) Acting as a rigid lever for effective push-off during gait.
- 3) The stability requirements can be contrasted to the mobility demands of;
  - a. Dampening rotations imposed by the more proximal joints of the lower limbs.
  - b. Being flexible enough to absorb the shock of the superimposed body weight as the foot hits the ground.
  - c. Permitting the foot to conform to a wide range of changing and varied terrain.

The Ankle/foot complex meets these diverse requirements through the integrated movements of its 28 bones that form 25 component joints. These joints include

- ❖ Proximal and distal tibiofibular joints
- ❖ Talocrural joint or Ankle joint.
- ❖ Talocalcaneal or Subtalar joint.
- ❖ The Talonavicular and calcaneocuboid joints.
- ❖ The five tarsometatarsal joints.
- ❖ The five metacarpophalangeal joints.
- ❖ Nine interphalangeal joints.

To facilitate description and understanding of the Ankle/foot complex, the bones of the foot are traditionally divided into three functional segments. These are the: Hindfoot (posterior segment)-composed of Talus and Calcaneus. Midfoot (middle segment)-composed of the navicular, cuboid and three cuneiform. Fore foot (anterior segment)-composed of the metatarsals and phalange. The terms are commonly used in descriptions of ankle or foot dysfunctions are similarly useful in understanding normal ankle and foot function. The frequency of many ankle or foot problems can be traced readily to the complex structure of the foot and their participation in all weight-bearing activities. Structural abnormalities can lead to altered movements between joints and contribute to excessive stresses on tissues of the foot ankle that result in injury.

### Articular surfaces

The articular surface for the medial malleolus is restricted to the upper part of the medial surface of the Talus. It is fairly flat and comma shaped, being deeper in front than behind. The articular surface on the lateral side of the Talus is triangular in outline and concave from the above downwards; that on the lateral malleolus is reciprocally curved. Posteriorly, the edge between the trochlear and fibular articular surfaces of the talus is beveled form a flattened triangular area which articulates with the inferior transverse Tibio-fibular ligament. It is to

be emphasized that all these talar surfaces are continuous; separate description is a mere convenience.

**Ligaments**

The bones are connected by a fibrous capsule and by deltoid, anterior and posterior talofibularcalcaneo fibular ligaments. The fibrous capsule surrounds the joint; it is thin in front and behind and attached above to the borders the articular surfaces of the tibia and malleoli, and below to the talus close to the margins of the trochlear surface except in front where it is attached to the dorsum of the neck of the talus at some distance in front of its superior articular surface.

It is supported on each side by strong collateral ligaments. The posterior part of the capsule consists principally of transverse ligament and is somewhat thickened laterally where it reaches as far as the malleolar fossa of the fibula.

**Medial ligament or deltoid ligament**

The medial ligament or deltoid collateral ligament is a strong, triangular band attached above to the apex and anterior and posterior borders of the medial malleolus. It consists of superficial and deep fibers, of the superficial fibers the anterior (tibionavicular) pass forwards to the tuberosity of the navicular bone, and immediately behind this they blend with the medial margin of the plantar calcaneonavicular ligament, the middle fibers (tibiocalcanean) descend almost perpendicularly to the whole length of the sustentaculum tali of the calcaneus, the posterior fibers (tibiotalar) pass backwards and laterally to the medial side of the talus and to its medial tubercle. The fibers are well developed and are

fixed above to the tip of the medial malleolus and below to the non articular part of the medial surface of the talus. The deltoid ligament is crossed by the tendons of tibialis posterior and flexor digitorum longus.

**Lateral ligament**

The anterior talofibular ligament passes from the anterior margin of the fibular malleolus, forwards and medially to the talus, where it is attached in the front of the lateral articular facet and to the lateral aspect of the neck. The posterior talofibular ligament strong and deeply seated, runs almost horizontally from the lower part of the lateral malleolar fossa to the lateral tubercle of the posterior process of the talus a bundle of fibers (the ‘tibial slip’) leaves it to be attached to the medial malleolus. The calcaneo fibular ligament is a long rounded cord, running from the depression in front of the posterior talofibular ligament.

**Muscles**

Muscles give shape to the body by holding the bones in position. It expand and contract to impart movement. The muscles act on the ankle through three separate compartments such as

- Anterior
- Posterior and
- Lateral compartments

Anterior compartment muscles cross the ankle joint anteriorly to act as dorsiflexors. The muscles of posterior and lateral compartments cross the ankle joint, posteriorly to form plantar flexors.

**Table 7: Muscles subsiding to foot and ankle movements.**<sup>[20]</sup>

<b>Dorsiflexion</b>	Extensor digitorum longus, Extensor hallucis longus Peroneus tertius Tibialis anterior
<b>Plantar flexion</b>	Flexor digitorum longus, Flexor hallucis longus Gastrocnemius Peroneus longus, Peroneus brevis Plantaris, Soleus, Tibialis posterior
<b>Inversion</b>	Extensor hallucis longus, Flexor digitorum longus Flexor hallucis longus, Tibialis posterior, Tibialis anterior
<b>Eversion</b>	Extensor digitorum longus, Peroneus brevis, Peroneus longus Peroneus tertius

**Surrounding structures**

Ankle joint is surrounded anteriorly by tendons of tibialis anterior, extensor hallucis longus, tibial vessels, tibial nerves, tendons of extensor digitorum longus and posterior tibialis in order. These structures are held in position by superior and inferior retinaculae.

Posteriorly, ankle is surrounded by tendons of tibialis posterior, flexor digitorum longus, posterior tibial vessels, tibial nerves and tendon of flexor hallucis longus pass in order behind and below the medial malleolus. Flexor retinaculae hold them in position. Posteriorly tendo - Achilles and plantaris. These tendons are all covered by synovial sheath with no muscular covering.<sup>[22]</sup> Posterolaterally peroneus longus and brevis held in position by

superior and inferior peroneal retinaculae.

**Tendons**

Ends of muscles are attached to bone, cartilage or ligaments by a cord of fibrous tissue called tendon<sup>22</sup>. They vary in length and thickness according to the site within the body.

A tendon may be enclosed in a sheath to prevent friction and may be separated from neighboring structures by a bursa. They are very strong structures and so are rarely ruptured but injuries occur at the attachment to bone or the tendo-muscular junction. The forces applied to a tendon may be more than five times of body weight.



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