

A CORRELATIVE STUDY OF MARMA SHARIR WITH NERVE PLEXUSES AND MYOFASCIAL TRIGGER POINTS IN MODERN ANATOMY

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ABSTRACT

This study investigates the anatomical and physiological connections between Marma Sharir, a key concept in Ayurveda, and two modern anatomical components: nerve plexuses and myofascial trigger points. Marma points are vital locations where muscles, blood vessels, ligaments, bones, and joints converge, acting as centres of prana (life force). Similarly, nerve plexuses consist of networks of nerves responsible for motor and sensory functions, while myofascial trigger points are hyperirritable spots in muscle that can cause pain and dysfunction. The study highlights overlapping features such as anatomical positioning, pain sensitivity, and therapeutic potential, suggesting a significant relationship between these systems. By comparing the three, the goal is to foster an integrative medical approach that combines Ayurvedic principles with modern biomedical practices. This can enhance pain management, improve surgical awareness of vital areas, and support holistic healing through targeted

therapies like Marma Chikitsa and trigger point release, ultimately leading to more effective patient-centered healthcare.

KEYWORD: Marma Sharir, Nerve Plexus, Myofascial Trigger Points, Ayurveda, Integrative Medicine, Pain Management, Vital Points.

INTRODUCTION

The human body is a complex network of structures that work together to sustain life. Both ancient practices like Ayurveda and modern fields such as anatomy and neurology offer

insights into its functioning. A key Ayurvedic concept is Marma Sharir, which identifies 107 vital points where muscles, blood vessels, ligaments, bones, and joints intersect. These points are believed to be centres of prana (life energy) and play a significant role in health; injuries can lead to pain or dysfunction. Modern medicine recognizes similar regions of importance through nerve plexuses—networks of interconnected nerves—and myofascial trigger points, which are hyperirritable spots in muscles that can cause pain and dysfunction. This study aims to explore the connections between Marma points, nerve plexuses, and myofascial trigger points, advocating for a holistic approach to pain management and healthcare. Understanding these relationships can improve clinical interventions and promote collaboration between Ayurvedic and modern medical practices.

OBJECTIVE

To explore anatomical, physiological, and clinical correlations between:

- Ayurvedic Marma Sharir.
- Modern nerve plexuses.
- Myofascial trigger points, as defined in pain medicine and physical therapy.

METHADODOLOGY

- Literature review of classical Ayurvedic texts: Sushruta Samhita, Ashtanga Hridaya.
- Modern texts on neuroanatomy and trigger point therapy (Travell & Simons).

OBSERVATION AND DISCUSSION

1. Cervical Region

Marma: Manya Marma (2 on each side of the neck)

Location: This area is on the side of the neck, near the sternocleidomastoid (SCM) muscle. **Modern Connection:** Nearby, we find the cervical plexus, which includes spinal nerves C1 to C4. Important branches of this plexus include the ansa cervicalis, lesser occipital nerve, greater auricular nerve, and transverse cervical nerve. These nerves are important for feeling and moving parts of the neck and head. The carotid sheath is also close by and contains the vagus nerve and carotid artery. **Trigger Points:** Key trigger points can develop in the upper trapezius, levator scapulae, and SCM muscles. These trigger points may cause pain and discomfort, affecting the neck and shoulders. **Symptoms of Injured:** If these muscles or nerves are injured, people might have headaches, feel dizzy, experience hoarseness, or have vagal symptoms like nausea and fainting. Understanding this area is important for diagnosing and treating these issues effectively.

2. Shoulder Region

Marma: Aani Marma (one on each shoulder joint)

Location (Ayurveda): The area at the junction of the shoulder, specifically at the glenohumeral joint. Modern Correlation: This region is associated with the brachial plexus, which spans from C5 to T1. Notably, the divisions of the brachial plexus pass through the axillary sheath and are near the axillary nerve and suprascapular nerve. Trigger Points: Key trigger points in this area include the deltoid, supraspinatus, and infraspinatus muscles. Clinical Implications: *Conditions* such as frozen shoulder may arise, leading to symptoms like radiating arm pain and weakness in the ability to abduct the arm.

3. Lower Back/Hip Region

Marma: Katikatarun Marma (2, located in the pelvic region)

Location in Ayurveda: The area of interest is located at the junction of the pelvic bones and the base of the spine, specifically near the sacroiliac joints. Modern Correlation: This region corresponds to the lumbosacral plexus, which spans from spinal segments L1 to S4. It is near the origins of key nerves such as the sciatic nerve and the superior gluteal nerve. Trigger Points: Significant trigger points in this area include the gluteus medius, gluteus maximus, and quadratus lumborum muscles. Clinical Significance: Conditions commonly associated with this area include sciatica, piriformis syndrome, and low back pain, which can result from or be aggravated by issues within these muscle groups and nerve pathways.

4. Buttock/Posterior Hip

Marma: Nitamba Marma (buttock region)

Location (Ayurveda): Posterolateral region of the buttocks. Modern Correlation: This area corresponds to the location of the sciatic nerve and the branches of the sacral plexus, making it significant in understanding nerve-related issues. Trigger Points: Key muscles in this region that can contribute to discomfort include the piriformis, gluteus maximus, and gluteus minimus. Symptoms of Irritation: A common symptom associated with issues in this area is radiating pain down the leg, often referred to as pseudo-sciatica.

5. Upper Back

Not a classical Marma, but related

The area located between Amsa Marma and Manya Marma is significant in understanding muscle tension and pain. Key trigger points in this region include the upper and middle fibers

of the trapezius muscle, which are well-known for being common sites of stress-induced pain. Additionally, the rhomboids and levator scapulae muscles also play a role in this tension, contributing to discomfort and tightness in the upper back and shoulder area. Understanding these trigger points can be essential for effective pain management and treatment strategies.

Integrated Table of Mapping

Marma	Location	Modern Nerve Correlate	Trigger Point Match
Manya	Side of the neck	Cervical Plexus, Vagus Nerve	SCM, Trapezius, Levator Scapulae
Aani	Shoulder joint	Brachial Plexus	Supraspinatus, Deltoid
Katikatarun	SI Joint region	Lumbosacral Plexus, Sciatic Nerve	Gluteus Medius, QL, Piriformis
Nitamba	Buttocks	Sciatic Nerve	Gluteus Maximus/Minimus, Piriformis

CONCLUSION

The present study reveals a significant anatomical and functional correlation between the classical Ayurvedic concept of Marma Sharir and the nerve plexuses and myofascial trigger points recognized in modern medical science.

Marma points, as described in *Sushruta Samhita* and other Ayurvedic texts, are vital anatomical sites where structural and energetic convergence occurs. These sites correspond closely to regions rich in neural, muscular, and vascular elements, such as the brachial plexus (Aani Marma), cervical plexus (Manya Marma), and lumbosacral plexus (Katikatarun Marma). Furthermore, these points often coincide with the location of myofascial trigger points, which are known to be sources of referred pain and muscular dysfunction in modern anatomy.

The overlap suggests that the ancient Ayurvedic scholars possessed a profound understanding of human physiology, albeit through a different paradigm. This anatomical correlation validates many principles of Marma Chikitsa and highlights its potential application in modern pain management, rehabilitation, and integrative therapies.

By bridging traditional knowledge with modern science, this study encourages a **holistic**, evidence-based approach to health that respects both historical wisdom and contemporary anatomical understanding. Future research involving imaging, cadaveric studies, and neurophysiological monitoring is warranted to deepen this integrative perspective.

REFERENCES

1. Sushruta Samhita with the Nibandhasangraha commentary of Dalhana, Edited by Vaidya Jadavji Trikamji Acharya, Chaukhambha Orientalia, Varanasi, Reprint Edition, 2014.
2. Ashtanga Hridaya of Vagbhata, with Sarvangasundara commentary of Arunadatta and Ayurveda Rasayana of Hemadri, Edited by Pt. Harishastri Paradkar Vaidya, Chaukhambha Surabharati Prakashan, Varanasi, Reprint 2015.
3. Travell, J. G., & Simons, D. G. (1999). *Myofascial Pain and Dysfunction: The Trigger Point Manual* (Vol. 1–2). Williams & Wilkins.
4. Standring, S. (2020). *Gray's Anatomy: The Anatomical Basis of Clinical Practice* (42nd ed.). Elsevier.
5. Moore, K. L., Dalley, A. F., & Agur, A. M. R. (2018). *Clinically Oriented Anatomy* (8th ed.). Wolters Kluwer.
6. Netter, F. H. (2019). *Atlas of Human Anatomy* (7th ed.). Elsevier.
7. Rachna Sharir, by Dr. Bhagwan Dash and P.V. Tiwari, Chaukhambha Sanskrit Series Office, Varanasi.
8. Kunte A. M., & Navre D. A. (2013). *Marma Vigyan (Science of Marma Points)*, Chaukhambha Sanskrit Pratishthan, Delhi.
9. Sharma R. K., & Dash B. (1995). *Charaka Samhita* (Vol. 1–3), English translation with critical notes. Chaukhambha Sanskrit Series Office, Varanasi.
10. Simons, D. G., Travell, J. G., & Simons, L. S. (2005). *Travell & Simons' Myofascial Pain and Dysfunction: Upper Half of Body* (Vol. 1). Lippincott Williams & Wilkins.
11. Pal, G. P. (2022). *Textbook of Anatomy (Volume I–III)*. CBS Publishers & Distributors.
12. Kulkarni, P. H. (2010). *Marma and its Management*. Sri Satguru Publications.
13. Chaurasia, B. D. (2021). *Human Anatomy: Regional and Applied* (Vol. 1–4). CBS Publishers.