# INTERNATIONAL RESEARCH JOURNAL OF PHARMACY

Available online www.irjponline.com

## **RUJAKARA MARMA: A CONCEPTUAL REVIEW**

Rajeshwari P.N<sup>\*1</sup>, Siddaram S. A<sup>1</sup>, R. K. Hibare<sup>2</sup>, B. A. Venkatesh<sup>1</sup>, M. K. Shringi<sup>1</sup> <sup>1</sup>NIA, Amer Road, Jaipur, India

<sup>2</sup>Govt Ayu Med College, Bengaluru, India

Article Received on: 17/10/11 Revised on: 10/11/11 Approved for publication: 09/12/11

\*Dr. Rajeshwari P. N. PhD Scholar, Department of Shalya tantra, NIA, Amer Road, Jaipur, India Email: drrajeshwaripn@yahoo.com

#### ABSTRACT

Marmas are part of a greater sacred physiology which maps the special sacred points just as the earth has its sacred sites and energy currents according to sacred geography. It is must to learn the sacred geography of our own body in order to attune ourselves both to the Earth and to the greater cosmos. Rujakara Marmas are the vital points in the human body which are 8 in number as Manibandha, Gulpha, Kurchashira in the upper limb and Kurchashira in the lower limb, each being two in number and cause severe pain when injured, hence the name "RUJAKARA". The present paper highlights each of these points anatomically as per Ayurvedic literature and their modern correlation and try to conclude as what they can be compared structurally in the modern terms. Key Words: Marma, Rujakara marma.

**INTRODUCTION** 

The word Marma comes from Sanskrit origin 'mru' or 'marr'. "Marayati iti marma", the Sanskrit phrase means likelihood of death after infliction to these places. The word Marma is also used with synonyms as tender, secret or vital spots. To define, Marmas are the sites where muscle, veins, ligaments, bones and joints meet together, though all these structures need not be present at each Marma. This explains Marmas as important connection centers or crossroads in the physical body<sup>1</sup>. Acharya Sushruta stressed the importance of Marmas in surgical practice and stated that, in any surgical procedure knowledge of Marmas is as essential as the knowledge of the nerves, muscles, bones and blood vessels. There are in total 107 Marmas in the human body which are classified according to regional, structural, prognostic, dimensional and numerical criteria. Basically they can be grouped as Sadya Pranahara (19) – immediate death causing, Kalantara Pranahara (33) - long term death causing, Vishalyaghna (3) - fatal if the injury causing material is removed from the site, Vaikalyakara (44) - disability causing and Rujakara (8) - pain causing<sup>2</sup>. The 8 Rujakara marma are Manibandha (2), Gulpha (2) and Kurchashira (4). The present paper throw a light on these 8 Marmas w.r.t their Ayurvedic concept along with modern correlation and an attempt has been made to come to a conclusion regarding their anatomical structure.

#### Rujakara Marma

In simple terms Rujakara Marma are such sites in the body wherein slight injury lead to severe pain though there is no much disturbance in its structural anatomy. Pain is the first sign of morbidity of any tissue. This phenomenon has already been observed in Indian classics by, Father of surgery, Sushruta. This is cry of tissue for want of oxygen giving rise to changes in polarity. According to Sushruta, there are certain places in the body where normally the loss of tissue is not amounting to functional loss. That further means its anatomy is not so much altered that the function of the tissue suffers. However the micro anatomy of the structure is changed affecting the physiology of the tissue but not amounting to functional observation<sup>3</sup>. Here is the review of each marma along with its anatomical corelation.

#### Manibandha marma

Name: Manibandha (bracelet) Number: 2 (one on each wrist) Type: Sandhi (Joint) Size: 2 angula (finger units) Site: The wrist Controls: Controls skeletal system (Asthivaha Srotas) and movement of hands, Sleshaka Kapha (lubrication of the joints) and Vyana Vayu (peripheral circulation).

Anatomical Structures: Wrist joint. Radio – ulnar, radio – carpal ligaments, radial and median nerve and artery.

Qualities relative to injury: Rujakara (Pain - causing)

Symptoms if injured: Loss of flexion and extension of the second, third and fourth fingers and adduction of second, third and fourth metacarpals. Bleeding may lead to pain, shock or infection.

#### Kurcha shira of the hand

Name: Kurchashira (the head of Kurcha)

Number: 2 (one on each hand)

Type: Snayu (Ligament)

Size: 1 angula (finger unit)

Site: The root of the thumb just above wrist.

Controls: Controls Alochaka Pitta (power of site), Agni (digestive power), stomach, (forms of Pitta, Kapha and Vata governing digestion ). Also influences the head, mind and nervous systems, alleviating Vata.

Anatomical Structures : Tendon of flexor Carpi radialis, tendon of abductor pollicis longus, tendon of extensor Carpi radialis longus, tendon of extensor pollicis longus and brevis.

Qualities Relative to injury: Rujakara (Pain - causing)

Symptoms if injured: Impairment of the flexion and abduction of the wrist, bleeding from the radial artery and pain due to injury to the radial nerve.

### Gulpha marma

Name: Gulpha (ankle joint)

Number: 2 (one on each ankle)

Type: Sandhi (Joint)

Size: 2 angula (finger units)

Site: The ankle joint

Controls: Controls fat, bone and reproductive systems (Medovaha, Asthivaha and Shukravaha Srotamsi), Vyana Vayu (circulation of Prana), Sleshaka Kapha (lubrication of the joints) and movement of the feet.

Anatomical Structures: Flexor hallucis longus and bravis, tibilias posterior and flexor digital longus muscles, posterior tibial artery and vein.

Qualities Relative to Injury: Rujakara (Pain - causing)

Symptoms if Injured: Injury to the joint will cause swelling and impair the functions of flexion and extension.

## ISSN 2230 - 8407 Review Article

### Kurcha shira marma of the foot

Name: Kurchashira (the head of Kurcha)

Number: 2 (one on each leg)

Type: Snayu (Ligament)

Size: 1 angula (finger units)

Site: Plantar surface of the foot

Controls: Controls muscular system (Mamsavaha Srotas), particularly muscles of the foot, and bodily posture.

Anatomical Structures: Peroneous bravis and longus muscles. Peroneal artery and tributaries of short saphanous vein, peroneal nerve.

Qualities Relative to injury: Rujakara (Pain - causing).

Symptoms if injured: Damage to the ligaments and bone may cause severe pain along with the impairment of the functions of the foot.



Fig 2 Kurcha shira (hand)



### DISCUSSION AND CONCLUSION

Rujakara Marmas are the areas where any injury causes pain and this is due to minimum tissue damage. They are Manibandha, Gulpha, and Kurchashira in hand & leg, in total 8 in number. These areas are more dynamic and highly mobile in function and often prone to injury in day to day activities. Modern medicine also says that the structures involved in the wrist and ankle are bones, tendons, ligaments and nerves. The injury is categorized into mild, moderate

and severe. The manifestation of symptom is purely based on the extent of injury and structure involved. The combined action of all these structures results in normal function and likewise in injury. The ankle joint depends on the ligaments for its stability. The ligaments of lateral side of the ankle are injured more frequently than medial side, as the deltoid ligament present in medial side is stronger than the other. Among the lateral ligaments anterior talofibular ligaments are injured more than other ligaments. Wrist joint is formed by the articular surface of radius and articular disc of scaphoid. Joints are held by articular capsule, palmar radio-carpal ligament, palmar ulno carpal ligament<sup>4</sup>. Dorsal radio carpal ligaments are thinner and weaker hence prone to injury<sup>5</sup>. So based on the review of the Rujakara marma and the underlying anatomical structures we can roughly conclude that Manibandha is radio-carpal joint and its allied structures, Gulpha is tibio-calcaneal joint and its allied structures, Kurchashira in the hand is abductor pollicis longus and extensor pollicis brevis which form radial boundary of anatomical snuff box and Kurchashira in the leg is flexor digitorum longus, flexor hallucis longus, flexor digitorum brevis, bounded by flexor retinaculum extending from medial malleoli attach to medial surface of calcaneum.

### ACKNOWLEDGMENT

Authors are thankful to Dr. Ravishankar Peravaje, Consultant Ayurvedic Surgeon, Sushruta Ayurveda Hospital, Puttur, Karnataka for his valuable guidance for the review,Dr.M.S Krishnamurthy,HOD, department of Bhaishajya kalpana, Alva's Ayurveda Medical College Moodbidri for his guidance in publishing this manuscript, Dr. Anita Prem, Asst Prof, Padmashri Institute of Physiotherapy, Bengaluru for her support and Dr. Santhosh B, PhD Scholar, Dept of RS and BK, NIA, Jaipur, for preparing this manuscript.

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