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A Review of Diseases Related *Janu Marma* with Special Reference To *Panchakarma Chikitsa*

Dr. Priyanka Priyadarshini Sahoo[1], Dr. Bhumika[2] and Dr. Syamalal S[3], Dr. Kalpana Raje.[4]

[1] PG Scholar (Ayu.), Rachana Sharira Department, Institute of Teaching and Research in Ayurveda, Jamnagar, Gujarat.

[2] PG Scholar (Ayu.), Dravyaguna Department, Ayurveda and Unani Tibbia College and Hospital, Karol Bagh, New Delhi.

[3] Lecturer (Ayu.), Rachana Sharira Department, Institute of Teaching and Research in Ayurveda, Jamnagar, Gujarat.

[4] Professor (Ayu.) & H.O.D., Rachana Sharira Department, Institute of Teaching and Research in Ayurveda, Jamnagar, Gujarat.

ABSTRACT

Introduction:

Marma is very important and unique concept of *Ayurvedic sharir* first and foremost literature of *marma* is seen in *Brihattrayee.*

Janu Marma is *Sandhi Marma* & *Vaikalyakar Marma*. In Sushrut Samhita it was stated that an injury to the *Janu Marma* causes *Khanjata.* Initially swelling, restricted movements in joint, muscle wasting etc. can be seen which further ends in *Khanjata. Khanjata* can be correlated with the limping of leg which may occur due to injury to the knee joint. *Panchakarma* is the best treatment in disease related to *Marma*. Human tissue and cells become healthy by the *panchakarma* therapy. *Snehana* therapy is a unique modality of Panchakarma treatment it nourishes the tissue and cells so its play of important role to heal the tissues. *Swedana* therapy improves blood circulation so it is also helpful in healing process.

Materials And Methods:

The description about the *janu marma* related disease and panchakarma chikitsa are carried out from the classical text book of Ayurveda, various research articles and previous verse related to topic.

Result:

Janu marma is a type of *Sandhi Marmas* and *Vaikalyakara* in nature which means injury on joints are more likely to produce disability. The knee joint is subjected to a variety of forces during day-to-day activities. Fractures, Ligament injuries, Menisci injuries are the most common knee injuries. Various deformity, diseases, and injuries can occur at knee joint which leads to disability. *Panchakarma* is the best treatment in disease related to *Marma*.

Discussion: *Panchakarma* is a best modality to treat disease related in *Janu Marma*.

KEYWORDS: *Janu Marma, Panchakarma chikitsa*.

INTRODUCTION:

Marma is very important and unique concept of Ayurvedic sharir first and foremost literature of marma is seen in Brihattrayee. Marma – "Marayanti Iti Marmani"[1] which means the point of infliction which may cause death or serious damage. It is also known as Jeevasthana & Pranayatana.[2] Marma comprises of vayu, tridosha, triguna & panchamahabhuta[3]. These are energy wells connected by a meridian system of nadi with organ and other parts of body. The balance of this energy equates health. These are unique structures explained in Ayurvedic literature and very first described in Sixth Adhyaya of Sharira sthana Sushruta Samhita.

CLASSIFICATION OF MARMA:

A. Based on Rachanatmaka division[4]:

NAME	SUSHRUT	ASTANGA HRUDAYA
MAMSA	11	10
SIRA	41	37
SNAYU	27	23
ASTHI	08	08
SANDHI	20	20
DHAMANI	---	09

B. BASED ON SHADANGA[5]:

NAME	NUMBER
SAKHA	44
MADHYA	26
GREEVA PRATI URDHWAM	37

C. BASED ON PARINAMA[6]:

NAME	NUMBER
SADYAPRANAHARA	19
KALANTARA PRANAHARA	33
VISHALYAGHNA	03
VAIKALYAKARA	44
RUJAKARA	08

- **JANU AS MARMA[7].**

Janu Marma is Sandhi Marma & Vaikalyakar Marma. In Sushrut Samhita it was stated that an injury to the Janu Marma causes Khanjata. Initially swelling, restricted joint movements, muscle wasting etc. can be seen which further ends in Khanjata. Khanjata can be correlated with the limping of leg which may occur due to injury to the knee joint.

NAME	SHADANGA ANUSAR	RACHANA ANUSAR	PARINAM ANUSAR	PRAMAN	PAMCHA MAHABHTA PREDOMINANCE	DOSHA	SAMKHYA
Janu	-Sakha gata -Is situated at the junction of jangha and uru	Sandhi	Vaikalyakara marma	3 Angula	Jal Mahabhuta	Kapha	2

JANU AS SANDHI[8].

Sushruta has mainly classified the sandhi into two chashtavanta and sthira, while janu sandhi comes undern cheshtavanta type of sandhi and kora type of sandhi.

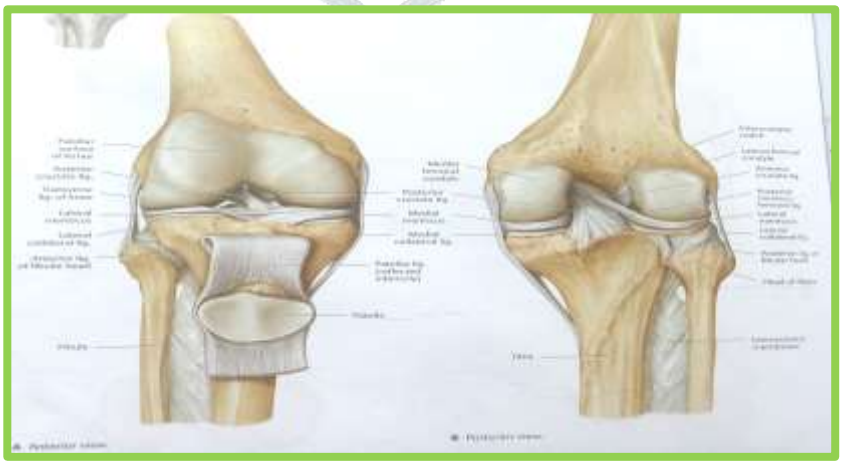
1) Shleshmadhara kala[9]: Shleshmadhara kala is very important amongst all kala which is situated in all sandhis (joints). Thus, the shleshmadhara kala in all sandhis facilitates their proper functioning. This shleshak kapha act as lubricant in janu sandhi and helps in protection as well as movement these all function are same like synovial memebrane and synovial fluid in the knee joint (janu sandhi). Shleshmadhara kala can correlate with the synovial membrane.

2) Sanghaat[10]: Where more than two bones make joint at one place, these places are called as sanghaat. In janu sandhi there is meeting of uru, janu and jangha asthi. These places can be correlated as compound joints. Knee joint is also one of them, here femur, tibia and patella makes the joint.

3) Seemant[11]: These places are associated with sanghata, so their places and numbering are same.

4) Asthi[12]: Janu sandhi is said to be joining part of uru and jangha asthi. Jangha asthi are 2 in no. in each lower limb, uru asthi is 1 in no. in each lower limb. So, we can correlate them as tibiafibula to jangha asthis and femur to uru asthi. At the place of janu sandhi there is description of janu asthi which is a type of Kapalasthi, so can be correlated with patella bone which is a type of flat bone.

KNEE JOINT[13]: According to modern science:



TYPE OF JOINT:

Structurally: Synovial joint

Functionally: Diarthroses- Condylar: incorporating two condylar joints between the condyles of the femur and tibia

Saddle: Joint between the femur and the patella

FEATURES OF KNEE JOINT:

The knee is the largest and most complex joint of the body. The complexity is the result of fusion of three joints in one.

It is formed by fusion of - Lateral femorotibial

Medial femorotibial,

Femoropatellar joints.

ARTICULAR SURFACES: The knee joint is formed by:

1. The condyles of the femur
2. The patella
3. The condyles of the tibia.

The femoral condyles articulate with the tibial condyles below and behind, and with the patella in front.

LIGAMENTS: The knee joint is supported by the following ligaments.

1. Fibrous capsule
2. Ligamentum patellae
3. Tibial collateral or medial ligament
4. Fibular collateral or lateral ligament
5. Oblique popliteal ligament
6. Arcuate popliteal ligament
7. Anterior cruciate ligament
8. Posterior cruciate ligament
9. Medial meniscus
10. Lateral meniscus
11. Transverse ligament

BURSAE AROUND THE KNEE:

As many as 12 bursae have been described around the knee—four anterior, four lateral, and four medial. These bursae are as follows.

Anterior: 1. Subcutaneous prepatellar bursa

2. Subcutaneous infrapatellar bursa

3. Deep infrapatellar bursa

4. Suprapatellar bursa

Lateral: 1. A bursa deep to the lateral head of the gastrocnemius.

2. A bursa between the fibular collateral ligament and the biceps femoris.

3. A bursa between the fibular collateral ligament and the tendon of the popliteus.

4. A bursa between the tendon of the popliteus and the lateral condyle of the tibia.

Medial: 1. A bursa deep to the medial head of the gastrocnemius.

2 The anserine bursa is a complicated bursa which separates the tendons of the sartorius, the gracilis and the semitendinosus from one another, from the tibia, and from the tibial collateral ligament

3. A bursa deep to the tibial collateral ligament.

4. A bursa deep to the semimembranosus.

Blood Supply: The knee joint is supplied by the anastomoses around it. The chief sources of blood supply are:

1. Five genicular branches of the popliteal artery.
2. The descending genicular branch of the femoral artery.
3. The descending branch of the lateral circumflex femoral artery.
4. Two recurrent branches of the anterior tibial artery.
5. The circumflex fibular branch of the posterior tibial artery.

Nerve Supply:

1. Femoral nerve, through its branches to the vasti, especially the vastus medialis
2. Sciatic nerve, through the genicular branches of the tibial and common peroneal nerves
3. Obturator nerve, through its posterior division.

POPLITEAL FOSSA[14]:

Popliteal (Latin hamstring of knee) fossa is a shallow diamond-shaped depression felt best at the back of knee joint, when the joint is semi-flexed.

BOUNDARIES:

- Superolaterally: The biceps femoris
- Superomedially: The semitendinosus and the semimembranosus, supplemented by the gracilis, the sartorius and the adductor magnus.
- Inferolaterally: Lateral head of the gastrocnemius supplemented by the plantaris.
- Inferomedially: Medial head of the gastrocnemius

The floor of the popliteal fossa is formed from above downwards by:

a. The popliteal surface of the femur.

b. The capsule of the knee joint and the oblique popliteal ligament.

c. The strong popliteal fascia covering the popliteus muscle.

CONTENTS SEEN IN THE POPLITEAL FOSSA:

1) Popliteal artery and its branches
2) Popliteal vein and its tributaries
3) Tibial nerve and its branches
4) Common Peroneal nerve and its branches
5) Posterior cutaneous nerve of thigh
6) The Genicular branch of obturator nerve
7) Popliteal lymph nodes
8) Fat

LAKSHANA OF JANU MARMAKSHATA:

SUSHRUTA SAMHITA[15]	ASTANGA HRUDAYA[16]	ASTANGA SAMGRAHA[17]
Khanjata	**Khanjata**	**Khanjata**

DISEASES RELATED TO JANU MARMA[18]:

1. GOOSE FOOT OR PES ANSERINE BURSITIS:

   Inflammation in between tibia & hamstring muscle.
   Sign & symptoms: pain & restrict motion in knee

2. QUADRICEPS TENDON TEAR:
   Patient can't extend the knee, acute knee pain, swelling

3. ACL MUCOID DEGENERATION: Patient unable to flex the knee
   Symptoms: painful terminal knee flexion, stiffness

4. MEDIAL COLLATERAL LIGAMENT INJURY:

   MCL is one of the ligament maintaining the mechanical stability of the knee joint
   Symptoms: pain, swelling, and limping, instability

5. ANTERIOR CRUCIATE LIGAMENT INJURY:
   Signs and symptoms: A loud pop or a "popping" sensation in the knee, Severe pain and inability to continue activity, Rapid swelling, Loss of range of motion

6. POSTERIOR LIGAMENT INJUY:

   Sign& symptoms: pain, swelling, feeling of instability of knee, stiffness, difficulty in walking.

7. MENISCUS TEAR: Pain, swelling, stiffness, difficulty in extending the knee.

PANCHAKARMACHIKITSA IN DISEASE RELATED TO JANU MARMA:

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.

PANCHAKARMA CHIKITSHA IN JANU MARMA:

- **स्नेहोपनाहाग्निकर्मबन्धनोन्मर्दनानि च |**
  स्नायुसन्ध्यस्थिसम्प्राप्ते कुर्याद्वायावतन्द्रितः ||Su. Chi.4/8||

According to acharya Sushruta snehan. Upanaha, agni karma,bandha, and unmardan are effective healing and pain reliving procedure for Snayugat, asthigat, sandhigat vata.

- **अनिलो हि पित्तकफसमुदीरणे हेतुः प्राणमूलं च, स बस्तिकर्मसाध्यतमः,**
  तस्मान्न बस्तिसमं किञ्चित् कर्म मर्मपरिपालनमस्ति| || Ch. Sid. 9/7||

Among the Tri-Doshas (i.e.Vata, Pitta and Kapha), Vata is of primary importance as it regulates the movement of the other two Doshas, Dhatus and Malas all over the body, mainly because of its Chala

Guna. When Vata gets aggravated, either due to Vata Vardhaka Ahara (Vata aggravating diet), or Vihara, or Manasika Nidanas, or a combination of these causative factors, it gets firmly embedded in the Khavaigunya Yukta Srotas associated with specific parts of the body, and impairs the functions of those body parts, causing the disease. So in marma sthana we have to protect from vayu, so basti is the best treatment for marma chikitsha.

SL. NO.	NAME OF PROCEDURE		IMAGE
1.	JANU DHARA:	**सेकः श्रमघ्नोऽनिलहृद्भग्नसन्धिप्रसाधकः** |Su.Chi.24/31| ➢ "Dhara" represents the rhythmic and systematic pouring of medicaments over specific body parts or the entire body surface for a stipulated time. ➢ In case of knee ligament injuries, two specific dhara procedures are adopted; 1. The Kashaya dhara (pouring of herbal decoctions) and is selected in an inflamatory phase 2. The Taila dhara (pouring of medicated oils. Kashaya and is appropriate where infla matory signs are minimal, i.e., in a degenerative phase.	
2.	JANU LEPA	➢ "Lepana" refers to local application of medicated pastes. After mixing the medicated powder with the prescribed leaf juice, the mixture is heated and when warm, is applied over the afflicted joint. ➢ Application of paste or the lepa is the first and foremost treatment for inflammation.	
3.	ABHYANGA	➢ "Abhyanga" refers to specific massaging techniques with medicated oils. ➢ After the acute/inflammatory phase, abhyanga is specifically indicated in fractures and other joint pathologies	
4.	MATRABASTI	➢ Matra-basti is the trans-rectal administration of medicaments especially medicated oils, in predetermined doses. ➢ It is expected to reduce the symptoms of pain and stiffness and it also strengthens musculoskeletal systems.	

5.	JANUBASTI	➢ It is a practical modification of Snigdha Sweda, where warmed Sneha is allowed to stand over the knee area for a prescribed period of time. This procedure helpful in janushoola caused by degenerative joint diseases.	
6.	UPANAHA SWEDA	➢ The word upanaha means to tie. It is a type of ekanga Sweda. It can be done with or without heating the medicine. ➢ If it is done during day time it is removed at night and if it done during night, it is removed in morning. ➢ Usually done in osteoarthritis.	
7.	PATRA POTTALI SWEDA	➢ It is a type of pindaswedan or usma Sweda . in this sudation is performed by specially prepared bundle of medicinal leaves accompanied with base of taila. ➢ widely used in janu shoola.	

DISCUSSION :

According to Ayurveda, a healthy human body is supposed to have a relatively stable equilibrium of Dosha (psychobiological rhythm - Vata, Pitta, Kapha), Dhatu and Mala. Imbalance in this equilibrium leads to disease, and the aim of the therapy is to restore this balance.

Vata has Ashraya-Ashrayi Sambandha with Asthi Dhatu; this means that Vata takes shelter in Asthi. In case of Janu Sandhi, if Vata is aggravated then because of its dry nature, it leads to a reduction of the Snehansha from there; because of the decrease in Sneha, Khavaigunya occurs in Asthi and Sandhi, leading to the production of disease.

Sandhigata Vata is a Kashtasadhya Vyadhi because of factors like Madhyama Rogamarga involving Marma, Asthi and Sandhi, as well as vitiation of Asthi and Majja that are associated with Dhatukshaya, and occurrence primarily in Vriddhavastha[4]. It is included among the Mahagadas.

Janugata Vata being a Vata Vyadhi that results in Dhatukshaya, Panchakarma therapies are recommended as viable treatment approach.

CONCLUSION:

Panchakarma is the best treatment in disease related to Marma. Human tissue and cells become healthy by the panchakarma therapy. Snehana 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 therapy improves blood circulation so it is also helpful in healing process. Leaches suck impure blood so it is also playing important role in healing process. Panchakarma is a best modality to treat disease related in Janu Marma.

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