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AyurvedPanchkarma–Janu Dhara: “A Promising Approach ForOsteoarthritis Knee Joint Management”

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Abstract

Osteoarthritis (OA) of the knee joint is a prevalent musculoskeletal disorder characterized by pain, stiffness, and reduced joint function, significantly impacting the quality of life. Janu Dhara, an ancient Ayurvedic therapy, involves the localized application of medicated oils or decoctions over the knee joint. This systematic review aims to evaluate the effectiveness of Janu Dhara therapy with traction in managing symptoms and improving functional outcomes in patients with osteoarthritis of the knee joint.

Keywords; Ayurveda, Janu Dhara, Knee Joint, Panchakarma.

Introduction

Osteoarthritis (OA) is a persistent condition marked by joint disability and progression. Its hallmark is the breakdown of the cartilage within joints, leading to decreased space between bones and heightened friction¹. This process triggers inflammation and pain sensations transmitted through nerve endings within the joint space. Knee osteoarthritis (KOA) stands out as a prevalent form of this condition.. The clinical presentation of osteoarthritis includes symptoms such as joint pain, swelling, stiffness, and other related discomforts. These manifestations significantly impact patients' quality of life and contribute to substantial social and economic burdens. In Ayurveda, osteoarthritis (OA) can be correlated with SandhigataVata, which arises due to Dhātu–Kshaya and other factors aggravating Vata. Acharya Charaka mention symptoms of sandhigatavata in chikitsa sthanavatawaydi chapter with most of its clinical features like osteoarthritis² – Vatpurndartisparsha: shotha: sandhigateanile | Prasarnankunchanyo: pravrtischsvedana || (Ch. Chi.28/37)

According to Acharya Charaka, the key symptoms of SandhigataVata, resembling those of OA,

include Vatapurnandritisparsha (touch sensitivity due to Vata), shotha (swelling of knee joint)
Prasarnankunchanyo: pravrtischsvedana
(painful movement of knee joint)

Vedana (pain), Sandhi Shoola (joint pain), and Atopa (swelling). In PanchakarmaChikitsa, Dharakarma is a treatment mentioned within MurdhniTaila Chikitsa, known as Shiro Dhara. When applied specifically to the knee, it's termed Janu Dhara. In a case study, Janu Dhara with parijat tail was administered for 15 days along with traction for 15 minutes yielding satisfactory outcomes.

CASE REPORT

A 64-year-old female patient visited the Panchakarma OPD of sanjivaniayurvedhospitakonmay 01, 2024, with an outpatient department registration number 30762, under the care of Dr. S R. at Rajasthan Ayurveda University, Jodhpur. She presented with a history of bilateral knee joint pain persisting for 5 years, experiencing difficulty in walking, sitting in a squatting position, and climbing stairs. Upon examination, crepitus was noted in both joints along with limited range of motion. X-rays revealed reduced joint space in both bilateral knee joints.

Observations: subjective criteria – pain, stiffness, tenderness.

Objective criteria – walking distance, standing time, ROM, X-ray

Assesment of criteria.

	Subjective criteria		Objective criteria
1	Pain	1	Walking distance
2	Stiffness	2	Standing time
3	Swelling	3	ROM
4	WOMAC Score	4	X ray

Pain	1. Mild	2. Moderate	3. Severe
Stiffness	1. Mild	2. Moderate	3. Severe

PROCEDURE

In Janudhara a bowl containing parijat oil is heated on hot water utensil. A clean sponge is immersed in lukewarm oil, squeezed, and then guided over the knee joint in a steady stream, following the direction of the inverted thumb. Throughout the procedure, the stream's height is consistently maintained at about 9 inches. Simultaneously, a gentle massage is administered with the left hand. The oil's temperature is carefully regulated to ensure it remains comfortable for the patient. Subsequently, lukewarm oil is poured slowly and cautiously over the Janu-Sandhi (knee joint) for approximately 45 minutes. The oil's heat level should be tolerable for the patient. Following the Taila Dhara, a 5-minute Abhayanga massage is performed over the Janu-Sandhi.

After completion of janudhara mechanical Traction was given for 15 minutes on each knee joint every day.

Result

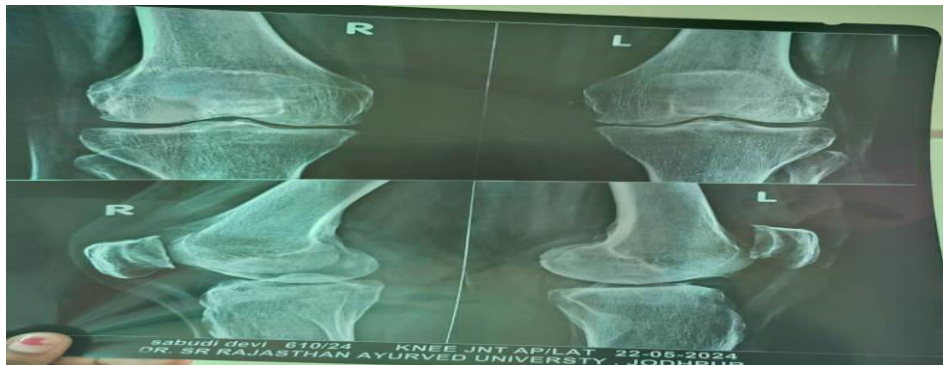
	Subjective criteria	Before treatment	After treatment
1	Pain		
	Pain in rest	Moderate	No pain
	Pain in movement	severe	Mild
2	Stiffness	moderate	mild
3	Swelling	moderate	mild

4	Crepitation	On rest	present	absent
		On movement	Present daily	occasionally

	Objective criteria	Before treatment	After treatment
1	Walking distance	50 meter	500 meter
2	Standing time	15 minutes	45 minutes
3	ROM	flexion	90 degree
		extension	Whole hand (10 degree)
4	X- RAY	3	3

Before

After



PROBABLE MODE OF ACTION OF JANUDHARA

line of treatment for the *Sandhigata Vata* is "*Sneha upnahaagnikarmabandhanaunmardanani cha*"³

In Sandhi vat vata dosha is dominating and gunas of vata are ruksh sheet laghusukshmchalavishada and khara and these gunas of vata are controlled by snehayuktswedana acharya charka says *Snehoanilamhantimridukarotidehammalanamvinihantisangam* / | ⁴ sneh is helpful in reducing increased vata dosha.

In swedana acharyasushruta mentioned dravsweda and acharya charak mentioned parisheksweda and heated oil causes snehayuktaswedana.

Swedana properties are stambhgauravsheetsaghnaswedanamswedkarkam /⁵ Swedan relieves stiffness (stambhan), guruta (heaviness), cold (sheeta), this helps in reducing pain and helps in lightness of joint.

Sudation, or sweating, can help relieve pain through several mechanisms:

1. Release of Endorphins: Exercise-induced sweating, such as through physical activity or sauna use, can trigger the release of endorphins, which are natural pain-relieving hormones. Endorphins

act on the body's opioid receptors, reducing the perception of pain and promoting feelings of well-being.

2. Muscle Relaxation: Heat from sweating can help relax muscles, reducing tension and easing muscle-related pain. This is particularly beneficial for individuals experiencing muscle soreness or stiffness.

3. Improved Circulation: Sweating can increase blood flow to muscles and tissues by vasodilation, promoting healing and reducing pain. The improved circulation helps deliver oxygen and nutrients to injured or sore areas while removing waste products and toxins.

4. Detoxification: Sweating facilitates the elimination of toxins and metabolic waste products from the body. By removing these substances, sweating may help reduce inflammation and pain associated with toxin buildup.

5. Stress Reduction: Sweating can help to reduce stress and promote relaxation. Stress and anxiety can exacerbate pain perception, so anything that helps alleviate stress can indirectly help manage pain.

Swedana operates as the metabolism of body increases. *Swedana Ushna Guna* expands the capillaries and increases the circulation. Increasing circulation increases waste disposal and increased absorption of *Sneha* or drugs by the skin. It also promotes the rehabilitation of muscles and heat management may have the hypo analgesic effects. ⁶

DISCUSSION

"Dhara karma" is a therapeutic procedure in Ayurveda that falls under the category of "Murdh Tail Chikitsa".⁷

When the therapeutic procedure of "Dhara" is applied to a localized area of the body, it is termed "Ekanga Dhara." In the case of treating a specific body part such as the knee joint, it is referred to as "Janu Dhara." According to Acharya Sushruta, the Veerya of the Dravyas applied over the skin is absorbed by Tryagaami Dhamani⁸

which are present all over the body and are attached to *Romakoopas*. *Swedana* opens these *Romakoopas*. Parijaat patra and Til tail are mostly Ushna, Teekshna, Laghu, in properties and thereby ascertain Kaphvatahara and Shophahraeffects. Due to these properties oil reaches the target part. Hence these will be helpful in pacification of the vitiated Vata Dosha.⁹

CONCLUSION

Janu Dhara is suggested for conditions such as osteoarthritis, knee joint stiffness, and pain. It can enhance blood circulation to the affected region, rebalance Doshas, fortify the surrounding muscles, facilitate toxin elimination, and diminish inflammation. Through the application of medicated oils, Janu Dhara specifically calms Vata Dosha, making it particularly beneficial for Vata-related disorders, offering a straightforward yet impactful treatment for knee joint issues.

traction can be an additional beneficial adjunctive therapy in the management of OA knee along with janudhara for providing pain relief, improving joint mobility, and enhancing overall function.

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