

**MANAGEMENT OF TEMPORO MANDIBULAR JOINT SYNDROME
THROUGH AYURVEDA: A CASE STUDY****Diptendu Kumar Dash*¹ and Aparna Sharma²**¹Lecturer, Sri Sai PG Ayurvedic Medical College, Aligarh, U.P.²Assistant Professor, National Institute of Ayurveda, Jaipur, Rajasthan.Article Received on
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ABSTRACT

TMJ syndrome is a common ENT problem seen now a day. The temporomandibular joint (TMJ) acts like a sliding hinge, connecting your jawbone to your skull. You have one joint on each side of your jaw. TMJ disorders, a type of temporomandibular disorder or TMD, can cause pain in the jaw joint and in the muscles that control jaw movement. Causes of temporomandibular joint (TMJ) syndrome include injury to the teeth or jaw, misalignment of the teeth or jaw, teeth grinding, poor posture, stress, arthritis, and gum chewing. Though it is mostly seen in elderly people but its prevalence is increasing in early or middle age also. In the present case study, a

diagnosed case of TMJ syndrome has been included for its ayurvedic management. Chief complains were pain and stiffness over the jaw area since 8 months and pain over the right jaw was radiating towards the right ear. Degenerative changes with joint disc inflammation of right TMJ were reported in his x-ray of right TMJ. Effect of Hanu basti (external therapy) and Nasya (Internal therapy) along with oral medication of Kaishor guggulu and *Dashmoola* Kwatha on TMJ syndrome had been evaluated. Different parameters have been assessed during and after the treatment schedule. There is a complete relief in the parameters like jaw pain & stiffness whereas the parameters like pain in ear & disc inflammation has also shown significant improvement.

KEYWORDS: TMJ syndrome, Hanubasti, Nasya, Kaishor guggulu, Dashmoola Kwatha.**INTRODUCTION**

Continuous talking or chewing gutka, chewing gum, working on computers perpetually and lack of exercise, no voice rest are some of the atrocious components of current lifestyle. The

prevailing consequences of such lifestyle appear in numerous problems like metabolic, musculoskeletal etc. Degenerative diseases which are mainly seen in elderly persons are now becoming common in early or middle age persons also. Headache and ear pain are the most common ENT problems and TMJ syndrome is a common in >30 age group. Recent studies depicted that TMJ syndrome increases with aging before age 50 years.

Disease review

TMJ syndrome or TMD of the mandibular joint produces jaw pain radiating to the ear or eye with headache (frontal region). Dysfunction of the muscles of mastication (the muscles that move the jaw) and the temporomandibular joints (the joints which connect the mandible to the skull). The most important feature is pain, followed by restricted mandibular movement, and noises from the temporomandibular joints (TMJ) during jaw movement. Although TMD is not life-threatening, it can be detrimental to quality of life, because the symptoms can become chronic and difficult to manage. Chewing hard substances, talking in loud voice and occupation are the main risk factors for TMJ syndrome.

In Ayurvedic perspective, hanustambha is one of the eighty types of vatavyadhi which is characterised by stambha (stiffness) in the mandibular region, which is commonly seen in TMJ syndrome. TMJ syndrome may also be considered as hanugraha (mandibular region) or a kind of sandhivata also, especially in degenerative condition. Pain during the flexion – extension of a joint along with swelling and coarse crepitations (grating sensation) on joint movement is the typical clinical features of sandhivata. Acharya sushruta has described hanustambha which is caused by diwaswapna (sleeping during daytime), talking loudly and constant gazing in upward direction, leading to the vitiation of vata dosha. Such condition may simulate with the condition of TMJ syndrome.

MATERIAL AND METHODS

Case study

It is to mention that prior informed consent has been obtained from the patient and study has been carried out as per International conference of Harmonization-Good Clinical Practices Guidelines (ICH-GCP) or as per Declaration of Helsinki guidelines.

A 36 years old male, farmer by profession, has visited OPD on 08.07.2018 with chief complains of pain and stiffness over the jaw since 8 months. Pain over the right jaw is radiating towards the right ear. He is also having tingling sensation over right jaw and ear,

especially during talking, eating, chewing. He also experiences tenderness & grating sensation sometimes. He is also suffering from constipation. After consulting an orthopedician for the same problem, he did his X-ray- TMJ which reported degenerative changes with inflammation of disc of right temporo mandibular joint. He was diagnosed as a case of TMJ syndrome with Otagia. He is advised to take analgesics and anti-inflammatory medicine regularly for some initial time period, followed by their use whenever necessary. He had also undergone physiotherapy session for about 15 days and got mild relief in symptoms. As a known case of constipation & piles, patient was taking miralax powder, 5gm, twice daily since one year. Other investigations like Haemogram, ESR, L.F.T, K.F.T, Lipid profile, Thyroid profile etc. are within normal limits. On examination, patient is having tenderness over the jaw. jaw pain is increasing with movement of mouth but relieves on after mild massage. After thorough examination, a diagnosis of hanusthambha (TMJ syndrome) has been established and patient is advised for Hanu basti, nasya with oral ayurvedic medication.

Following materials were required in this case study -

- Masha (black gram) flour – 500 grams
- Mahanarayana taila – 500ml
- Dashmoola kwath – 2 litres (for *nadi swedana*),
- Spatula – 01
- Small piece of sponge – 01
- Water – as per requirement
- *Nadi swedana* yantra (Local steam apparatus) – 01

Treatment plan – A schedule has been planned with two therapy sessions of *Hanu basti* and *Nasya* (5 days in each session) and 7 days gap in between each session. Along with this, patient is advised to take following ayurvedic medicines throughout the treatment schedule:

| Name of the medicine | Dose |
|----------------------|---|
| kaishor guggulu | 500 mg, twice a day with lukewarm water |
| Dashmoola kwatha | 20 l, once a day, empty stomach |

Hanu basti

- Hanu basti is a distinctively developed ayurvedic procedure which is done primarily to pacify aggravated doshas in the mandibular region, especially in chronic cases.

Procedure for Hanu basti – Paste of Masha (Black gram flour) is traditionally used to make circular boundary wall in *Hanu basti*. Whereas in the present case study, plastic Hanu basti moulds has been used. These moulds are available in different sizes. Patient is asked to lie down in Rose position on the table and a towel roll is placed under the neck to make neck region slightly elevated. After this, plastic mould is placed over the right jaw area and its margins are sealed with the masha paste (paste of black gram flour and water). Then it is kept for 5-10 minutes to settle. Now, slightly heated mahanarayana oil is poured in this hanu basti yantra by using a sponge piece. Precaution should be taken to maintain oil temperature as tolerated by patient and also for leakage of oil for basti yantra. The oil in basti yantra has to be replaced with warm oil at regular interval. After doing this procedure for 20 minutes, oil is drained out and plastic mould is removed. After this, a gentle massage is done over the jaw and around right ear region, followed by nadi swedana (local fomentation) with dashmoola kwatha.

Nasya

Nasya is one among the five chief purification procedures i.e. Panchakarma. It includes instillation of medicine through nasal route and it is mainly indicated for the diseases that affects the region above the clavicle bone. It pacifies vitiated doshas present in head region.

- Procedure for Nasya – After 30 minutes of hanu basti, patient is asked to sit on a chair with slightly extended neck. A gentle massage over the forehead, cheeks and sides of nose (region of sinuses) is done for 5 minutes by using Til oil, followed by nadi swedana. Then 4-4 drops of anu taila were instilled in each nostril. It is followed by luke warm salt water gargles.

Assessment parameters

- Jaw pain
- Jaw stiffness
- Pain radiating in Ear
- Disc inflammation

Table 1: Grading of parameters.

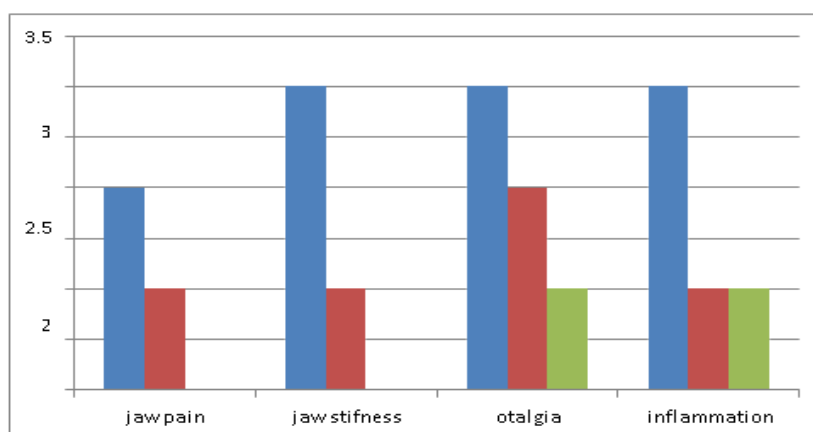
| S.No | Parameters | Grading | Observation |
|------|-------------------|---------|--|
| 1. | Jaw pain | 0 | Absent |
| | | 1 | Mild and intermittent pain |
| | | 2 | Moderate and bearable pain |
| | | 3 | Severe and unbearable pain |
| 2. | Jaw stiffness | 0 | Absent |
| | | 1 | Mild stiffness |
| | | 2 | Moderate stiffness with partially restricted movement |
| | | 3 | Severe stiffness with restricted movement |
| 3. | Pain in Ear | 0 | Absent |
| | | 1 | Mild intermittent pain |
| | | 2 | Moderate pain with occasional tingling sensation |
| | | 3 | Severe pain radiating from jaw with tingling sensation |
| 4. | Disc inflammation | 0 | Absent |
| | | 1 | Mild |
| | | 2 | Moderate |
| | | 3 | Severe |

OBSERVATIONS AND RESULTS

Observations seen in different parameters before and after the course of treatment are as follows:

Table 2: Observation in different parameters.

| S.No | Parameters | Before treatment | After I st session | After II nd session |
|------|-------------------|------------------|-------------------------------|--------------------------------|
| 1. | Jaw pain | 2 | 1 | 0 |
| 2. | Jaw stiffness | 3 | 1 | 0 |
| 3. | Pain in Ear | 3 | 2 | 1 |
| 4. | Disc inflammation | 3 | 1 | 1 |

**Figure 1: Graphical presentation of changes in different parameters.**

DISCUSSION

In Ayurveda, the main etiological factor for the development of Hanustambha is considered as vitiated vata dosha. In the present case study, a special schedule has been adopted to manage TMJ syndrome with a prime focus to pacify vata dosha. Mahanarayana oil used for hanu basti which has been indicated in different types of vatavyadhi 10 and it also provide strengthen to the local soft tissues. Nasya with anu taila helps in elimination of vata- kapha dosha and clears obstruction in the channels. Kaishor guggulu is a special ayurvedic formulation for vatavyadhi. It contains drugs like guggulu, triphala, trikatu, guduchi etc which are having vata and kapha, shothhara properties. Its significant effect has been evaluated in the condition of sandhivata in different studies. Dashmoola kwatha is a well known ayurvedic medicine having anti-inflammatory, analgesic effect.

A combination of kaishor guggulu and dashmoola kwatha has vata-kapha pacifying, anti-inflammatory and analgesic properties. In this study, the patient was having jaw pain with stiffness, which got significant relief after first session. Complete relief in the pain and stiffness has been observed after second session. Others parameters like pain in ear and inflammation has also shown a significant improvement and regularity in the bowel habits has also been observed during the treatment.

CONCLUSION

It is to conclude that combination of ayurvedic therapies like hanu basti and nasya along with oral medication of kaishor guggulu & dashmoola kwatha has a significant role in the management of TMJ syndrome.

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