

Role of Hanubasti in Temporomandibular Joint Dysfunction

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Abstract

Temporomandibular joint (TMJ) dysfunction is commonly seen in young or middle aged adults, affecting millions of people each year. The prevalence of temporomandibular dysfunction (TMD) ranges from 35-72%. It is comparable to *Hanushula* a disease that affects *Hanu sandhi* (temporomandibular joint), caused by *vata dosha*. For the present study, *Hanubasti* with *Nirgunditaila* was administered for seven days along with internal medication in a patient of TMJ dysfunction. The case report of 39-year old female who presented with complaints of pain and tenderness in the TMJ usually aggravated by manipulation or function, such as chewing, clenching or yawning, and is often worse upon waking, limited mouth opening and clicking sounds/crepitus from the TMJ has been presented here.

Keywords: *Hanubheda; Hanushula; Hanubasti; Temporomandibular Joint.*

Introduction

Temporomandibular joint dysfunction is the second most frequent cause of orofacial pain after dental pain (i.e. toothache) [1]. An older name for the condition is Costen's syndrome. The most important feature is pain, followed by restricted mandibular movement [2] and noise from the temporomandibular joints (TMJ) during jaw movement. Although temporomandibular dysfunction (TMD) is not life threatening, it can be detrimental to quality of life [3] as the symptoms can become chronic and difficult to manage. Oral medication is the main method of managing pain in TMD, mostly because there is little if any evidence of the effectiveness of surgical or dental interventions. In a subset of people with TMD who are not helped by either non-invasive and invasive treatments, long term use of opiate analgesics has been suggested, although these drugs carry a risk

of drug dependence and other side effects [4].

As per Ayurveda, this condition may be considered as *Hanushula* [5]. It is a condition wherein vitiated *vata dosha* takes shelter in *hanusandhi* (temporomandibular joint) in turn vitiating *kaphadosha*, resulting in pain and restricted movements. '*Bahyaparimarjana* (external therapies)' is a popular treatment modality in Ayurveda, advocated for disorders of *vata* include *abhyanga* (massage), *svedana* (fomentation), etc. *Hanubasti* (retaining oil on temporomandibular joint) is the procedure of applying heat to the temporomandibular region by retaining warm medicated oil within a specially formed frame on this region. Warm medicated oil by virtue of its *snigdha* (unctuous quality) is likely to correct the imbalance of *vata dosha*. In addition to this, the warmth of the oil helps in rectifying the morbid *kaphadosha* as well. Hence considering this, *Hanubasti* was selected as treatment of choice to combat the root cause of *Hanushula*.

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Case Report

A 39 year old female presented with the complaints of pain and tenderness in the TMJ, usually aggravated by manipulation or functions such as when chewing, clenching or yawning, and often worse upon waking. Patient also has limited mouth opening and clicking sounds/crepitus from the TMJ since 11/2 years (Table 1). Patient underwent medical management including a variety of topical ointments, analgesics,

etc. that did not provide much relief and symptoms would recur on discontinuation of medication.

The *Ayurveda* treatment was administered in 3 stages as

Stage 1: *Purva Karma*: The patient was advised to sleep comfortably in right lateral position and a frame of black gram paste was made over the left TMJ (Image1a);

Stage 2: *Pradhan Karma*: Warm medicated oil (*Nirgunditaila*) was poured into the frame and the TMJ region was massaged gently by dipping the thumb in the oil in a circular fashion for 20 minutes. The temperature of the oil was maintained throughout the duration by changing the oil frequently (Image1b);

Stage 3: *Paschat Karma*: After 20 minutes, the oil and frame were removed, followed by mild massage and fomentation of the pre-auricular region using a hot cotton towel for about 5

minutes. The patient was advised to avoid exposure to air or breeze. The same procedure was repeated for 7 days and on left TMJ also. The patient was advised to take a diet of light, easily digestible and soft food and avoid hard food, cold items, yawning with mouth wide open, excessive talking, loud speaking etc. She was further followed up twice weekly for 4 months.

The pain and tenderness in the TMJ reduced on the 3rd day. The patient was able to chew the food without pain on the 5th day. A complete reduction in the symptoms was observed on the 7th day of treatment except mild clicking sounds in the Rt. TMJ, which also reduced after 10 days. She was also prescribed oral medication viz., *Dashmulakwath* 3 tsp tid before food and *Rasnaadi Guggulu* 2 tab tid after food with water for 1 month. At the follow-up after 4 months, the patient was absolutely normal.

Table 1: Presenting symptoms of the patient

Symptoms	Right side	Left side
Joint sounds	+++	++
Muscle tenderness	++	+
Pain during mouth opening	+	+
Limitation on mouth opening	++	++
Joint tenderness	+++	++

+++ - Severe, ++ - Moderate, + - Mild

Discussion

TMJ dysfunction is used to refer to a group of problems involving the TMJs and the muscles, tendons, ligaments, blood vessels, and other tissues associated with them [6]. The condition is akin to *Hanushula* where in *vata dosha* gets vitiated and takes shelter in temporomandibular joint and in turn vitiates the *Kapha* resulting in pain and restricted movements in *hanusandhi*. In the current study, we report the beneficial effects of classical Ayurveda intervention in a patient of *Hanushula*. Significant reduction was observed in pain and improved range of movements of the TMJ. The general line of treatment mentioned for *Vatavyadhi* in Ayurvedic classics includes *Snehana* (both internal and external), *Swedana*, *Mrudusamshodhana*, *Basti*, *Shirobasti*, *Nasya*, and so on [7]. Charaka further states that, depending on the location and *dushya* (tissue element vitiated by *Vata*) each patient should be given specific therapies [7]. Hence *Hanubasti* was selected as this procedure is performed directly over the TMJ and can play a vital role in recovery. This procedure may be considered as a variety of *Snigdha sweda*. It may be understood that the warm oil kept over the TMJ

removes *Dosha* accumulated in micro channels by virtue of its *Sukshma*, *Ushna*, *Vyavayiguna* and *Kashaya rasa* (*rotasamnirmalatvam* - softens the channels) [19]. *Hanubasti* makes the joint sturdy and resistant to *Vatavyadhi*. It brings smoothness (*mardava*) to the joints. It depletes the morbid *vata* and *kapha* and replenishes the joint and its contents. After certain period the oil reaches upto *Romakupa* (hair follicles) and then progressively reaches into the most deeply situated tissues like *rakta*, *mansa*, *meda* and *asthi-majja* respectively. (Thus probably it reaches to the central part of the disc and gives nourishment). It reduces *kharatwa* of *mansa*, *snayu* and *asthi*, gives nourishment and improves their strength. Overall it keeps the continuity of *sneha* (*dhatu-snehaparampara*) thus helps in maintaining the level of synovial fluid in the cavities and hence promotes *dhatu*. Relieves the stiffness in the joints and thus improves the flexibility and range of joint movement. (*sandhisthabdamhanti*). It increases circulation, especially to nerve endings and tones up muscle endings [10]. And also it gives quick relief from pain (*shulaharam*). In addition to this, this procedure helps in rectifying the morbid *kapha* dosha also [11].

Therefore the *hanubasti* can be considered as very much efficacious in such clinical conditions where

the vitiation of *vata dosha* is the predominant like TMJ joint disorders.

Conclusion

Hanushula is a disabling disease affecting the normal lifestyle of the patient. *Hanubasti* restores normal functioning of the TMJ by improving flexibility and range of joint movement and also stimulates the underlying tissue structures. *Hanubasti* may be used as an effective therapy along with internal medicines in the management of *Hanushula*.

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