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CASE REPORT

Acupressure gua sha and massage with kutus-kutus oil accompanied using a stabilization splint in patients with temporomandibular disorder

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Keywords: Acupressure, Gua sha, Massage, Stabilization splint, TMJ disorder

ABSTRACT

Background: The most common temporomandibular disorder (TMD) is characterized by disc displacement with reduction (DDWR). Despite its typical signs such as clicking, DDWR has complex symptomatic characteristics, thus; conservative treatment including occlusal splint and physical therapy are commonly performed. Physical therapy, such as acupressure using acupuncture points and massage, is an alternative to DDWR treatment. Objectives: This paper aims to explain the DDWR treatment using stabilization splints and acupressure therapy using gua sha accompanied by a massage with Kutus-Kutus oil. Case report: A 36-years-old male patient arrived at USU Dental Hospital with complaints of clicking right jaw and feeling pain in zygomatic and mandibular area. The patient has been experiencing pain under stress and during periods of high activity for the past six months. This pain is often accompanied by clenching of the jaw, particularly when the patient is worried or concentrating, and the patient tends to sleep on one side. Upon clinical examination, a sound was detected in the right temporomandibular joint (TMJ). The patient was able to open their mouth to a width of 34 mm without experiencing pain, although there was a noticeable deviation to the right. No pain was reported in the joint area during mouth opening. Radiographic examination revealed that the right and left mandibular condyles were positioned anterior to the articular tubercle. For symptomatic treatment, stabilization splints were used in conjunction with physical therapy, which included acupressure gua sha and massage with Kutus-Kutus oil. The use of a stabilization splint caused the patient to experience discomfort during clenching, which gradually led to the cessation of this detrimental habit. This intervention helped to reduce pain and eliminate the clicking sounds associated with TMJ disorder. Conclusion: the combined use of acupressure gua sha, massage with Kutus-Kutus oil, and a stabilization splint can effectively alleviate the pain and clicking symptoms in patients with TMJ disorder. (IJP 2024;5(2):145-151)

Introduction

Temporomandibular disorders (TMD) are a collective term for conditions involving pain and dysfunction of the temporomandibular joint (TMJ) that involve the masticatory muscles and related structures.[1-3] Most TMD involves either muscle or skeletal structures, or both. It is estimated that 8-15% of women and 3-10% of men currently suffer from TMD. About 60-70% of the general population has at least one sign of TMD dysfunction, but only one in four people are aware of these symptoms and seek examination from a dentist.[5,6] TMD is the second most common musculoskeletal condition (after chronic lower back pain) that results in pain.[7] It is generally recognized that pain-related TMD is most often observed in the adult population between the ages of 18 and 45, with a prevalence rate of up to 25%.4 Pain-related TMD can affect an individual's daily activities, psychosocial function, and quality of life.[7]

Temporomandibular disorders (TMD) can be classified into: complex condylar disc derangement: disc displacement, disc displacement with reduction (DDWR), and disc displacement without reduction (DDWOR); structural mismatch of the articular surface: disc, condyle or fossa deviation, adhesion, subluxation, spontaneous dislocation; Inflammatory conditions of the TMJ: synovitis/capsulitis, retro discitis, and arthritism; Inflammatory disorders in related structures: temporal tendonitis and inflammation of the stylomandibular ligament.[2] Patients often consult with dentists for TMD associated with pain. Diagnostic criteria for TMD with simple, clear, reliable, and valid operational definitions for history taking, examination, and imaging procedures are needed to make a physical diagnosis. In addition, the assessment of habits from pain-related behavior and psychosocial function is an important part of the diagnostic process.[7,8] Diagnostic Criteria (DC/TMD) both Axis I and Axis II simultaneously will provide evidence-based criteria that doctors can use when assessing patients, and will facilitate communication related to consultation, referral, and prognosis.[2,7,8] Its etiology is multifactorial, involving several factors such as parafunctional habits like bruxism and clenching, jaw trauma, degenerative joint disease, postural changes, TMJ anatomy, hormonal changes, and instability of the maxillomandibular relationship. Research shows that emotional factors (stress, anxiety, depression) also play a significant role in TMD.[2,5,9]

TMD is characterized by symptoms such as muscle pain, clicking sounds, deviation or limitation in mouth opening, restricted mandibular movement, myofascial pain, palpable trigger points (TPs), and related headaches.[2,5,9,10] Among various clinical issues, manstudies focus on TMD-related pain, which can disrupt daily activities like

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Table 1. Examination results of muscles and functional manipulation related to TMD and TMJ examination

Examination	Regio	
	KA	KI
Temporalis	Ant: 0 Med: 1 Post: 1	Ant: 0 Med: 0 Post: 0
Tendon temporalis	1	0
Lateral pterygoid	2	0
Masseter	Superior: 1 Middle: 0 Inferior: 0	Superior: 0 Middle: 1 Inferior: 0
Regio submandibula	0	0
Sternocleidomastoideus	Posterior: 1 Anterior: 2 Clavicle: 1	Posterior: 0 Anterior: 1 Clavicle: 0
Splenius Capitis	-	-
Trapezius	0	0
Maximum Mouth Opening without Pain (mm)	34mm	34mm
Maximum Mouth Opening with Pain (mm)	42mm	42mm
Maximum Mouth Opening with Operator Assistance (mm)	56mm	56mm
Lateral Movement	5mm	10mm
TMJ Pain	2	0
TMJ Sound	Opening: Clicking Closing: Clicking	Opening: - Closing: Clicking
Headache	-	-
Tinnitus	-	-
Occlusion	Right: Class I Angle (molar relationship); Class I Angle (canine relationship) Left: Class I Angle (molar relationship); Class I Angle (canine relationship) Overbite: 2 mm Overjet: 3 mm	
Midline Deviation at Maximum Opening	Deviation to the right at maximum mouth opening	

Figure 1. Front and side view of the facial profile

eating and speaking. This pain is often mild and temporary, but for some individuals, it can become chronic and persistent. Factors like bruxism (teeth grinding), clenching, specific oral habits, body pain complaints, being female, and various psychological factors have been identified as risk indicators for pain-related TMD.[2,5,11] Various types of therapy are performed to treat the symptoms of TMD dysfunction. Therapy can be reversible such as occlusal splints and physical therapy, or irreversible therapy such as occlusal adjustment, orthodontic treatment to surgical procedures.[12] Occlusal splints are removable occlusal devices made of plastic or metal that are used by patients temporarily to change the occlusal contact and mandibular function pattern that are placed on the occlusal and incisal surfaces on one of the jaw arches, which can produce proper occlusal contact with the teeth on the opposite jaw arch.[2,12,13] O treat TMD symptoms, therapies can range from reversible options, such as occlusal splints and physical therapy, to irreversible treatments like occlusal adjustment, orthodontic interventions, and surgery. Occlusal splints, which are removable devices made of plastic or metal, are worn temporarily to modify occlusal contact and mandibular function. These devices are placed on the occlusal and incisal surfaces of one jaw arch, ensuring proper occlusal contact with the opposite jaw. Stabilization splints, a specific type of occlusal splint with a flat surface, permit the muscles to position the condyle into the centric relation without interference from the teeth's inclines. Stabilization splints are favored as a treatment option for their reversibility, non-invasive nature, cost-effectiveness, and notable efficacy.

TMD has complex symptoms, leading to the use of conservative treatments such as patient education, pharmacotherapy, and physical therapy. Additionally, relaxation techniques and acupressure serve as complementary therapies for TMD patients experiencing pain.[9] In the field of dentistry, acupressure has been validated for addressing various chronic orofacial disorders. Evidence from randomized controlled trials (RCTs) highlights the analgesic benefits of acupressure for managing postoperative pain from diverse dental procedures and other chronic conditions. The literature suggests acupressure's superiority over placebo, positioning it as a viable option in dental practice for pain relief and the treatment of dental and TMD-related issues.

Gua sha, a technique from Chinese medicine, is recognized for its pain relief capabilities, achieved by scraping the skin to eliminate blood stagnation at the surface. Beyond its use for pain, gua sha addresses conditions like the flu, respiratory issues, and musculoskeletal (MS) and joint pain. The potential mechanisms through which gua sha alleviates MS pain include: Enhancing local microcirculation to alleviate distal myalgia; Mitigating pain via the activation of serotonergic, noradrenergic, and opioid systems; and reducing the direct impact of pain on nociceptors and their connections within the spinal cord.[14-16]

To mitigate pain associated with TMD, massage therapy emerges as a viable treatment strategy. It engages the pain gate mechanism, effectively reducing pain perception. Additionally, this therapy activates the parasympathetic nervous system and enhances muscle flexibility. Beyond these benefits, massage therapy boosts local blood flow and the production of endogenous opioids, which

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diminishes pain perception and fosters both tonic and relaxation effects. These outcomes are particularly relevant in the management of TMD.[17]

Kutus-kutus oil can be used in massage therapy. Kutus-kutus oil is a herbal spice oil made from 69 different herbal plants that are processed in a special way using traditional methods. This results in a herbal oil that helps the healing process and is safe and comfortable to use daily. This oil is made from natural active ingredients such as neem leaves, purwoceng, ashitaba, star anise, and others, which are believed to have benefits in reducing pain and also providing a relaxing effect.[18] This paper aims to explain the treatment of temporomandibular joint disorder disc displacement with reduction using stabilization splint and acupressure with gua sha accompanied with massage therapy with kutus-kutus oil.

Case Report

A 35-year-old male patient came to the Prosthodontics clinic of RSGM USU with a complaint of a sore right jaw and sometimes felt pain in the front of the ear. The pain was felt when stressed and too much activity in the past 6 months. The patient said that he had a habit of grinding his teeth when stressed and focused and slept on one side with his cheek on his hand. The patient felt a sound when opening his jaw. On clinical examination, the patient was instructed to open and close his mouth slowly to detect clicking sounds with palpation in the preauricular area. The clicking sound was detected by a stethoscope on the right jaw joint when opening and closing the mouth. The mouth opening was recorded by measuring the distance between the left side of the upper and lower central incisors, and the mouth opening distance without pain was 34 mm, with pain 42 mm, and assisted opening 56 mm.

Figure 2. Intraoral examinations

Figure 3 Panoramic radiography

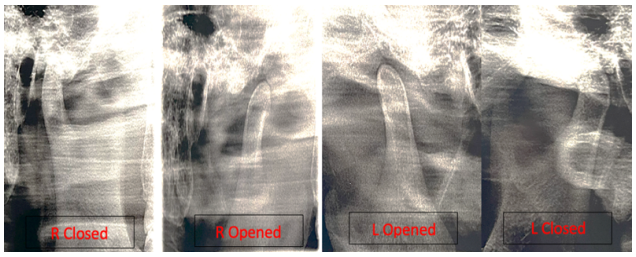

Figure 4. TMJ radiography image

Figure 5. Stabilization splint placement

Several questions were directed to the patient based on the Diagnostic Criteria for Temporo-Mandibular Disorders (DC/TMD) to gather the temporomandibular joint (TMJ) health history with the aim of assisting in classifying the type of temporomandibular disorder (TMD) during examination of the muscles around the face, neck, and TMJ. Extraoral examination showed symmetry in facial shape figure 1. In Axis I examination, palpation was performed on extraoral and intraoral muscles. Palpation was done on extraoral muscles (such as masseter, temporal, sternocleidomastoid, posterior stylohyoid, medial/suprahyoid/digastric anterior pterygoid, splenius capitis, and trapezius) and intraoral muscles (such as temporal tendon, and lateral pterygoid area) related to TMD, noting scores according to DC/TMD criteria (0: no pain; 1: mild pain; 2: moderate pain; 3: severe pain). Additionally, various vertical movements were examined (such as maximum mouth opening with and without assisted pain, and without pain; lateral left and right excursive movements; protrusive movements; and examination of the lower jaw median line and mouth opening pattern). Palpation examination for TMJ pain was also conducted, including intra-auricular and extra-auricular palpation, as well as joint sound examination. Based on Axis II examination, the Anxiety questionnaire yielded a score of 7, indicating moderate anxiety (scores 6-9). The patient's health questionnaire with physical symptoms yielded a score of 11, indicating moderate physical symptoms (scores 10-15). Meanwhile, the Oral Cavity Behavior questionnaire yielded a score of 18, indicating the presence of bad habits in TMD patients (scores 17-24).

Intraoral examination figure 2 and panoramic radiographic analysis figure 3 revealed the following dental findings: teeth 13-12, 11-21: diastema; teeth 11, 21, 31, 41: distolabiotorsiversi; tooth 42: lingioversi; tooth 32: mesiolinguotorsiversi; teeth 36, 46: composite

Table 2. Acupressure points to be targeted

Location	Point	Anatomical Position	Indications
Facial	Jiache (ST6)	On the cheek, 1 cun higher than the anterior angle and above the mandible, on the prominence of the masseter muscle	Relaxation of facial muscles, facilitating jaw movement
	Xianguan (ST7)	Distal part of the zygomatic bone, anterior side of the mandibular condyle process, at the posterior border of the masseter muscle	Improvement of hearing function and TMJ. Reduction of muscle spasms and pain
	Tinggong (SI19)	In the anatomical depression formed when opening the mouth, located anterior to the tragus, between the TMJ and tragus	Reduction of pain, muscle spasms, trismus, TMJ motor disorders, and toothache
	Ermen (TE21)	Superior part of the cavity before the tragus and above the mandibular condyle when the mouth is open	Toothache and pain, TMJ arthritis, headache
	Yintang	Midline of the face, midpoint between the eyebrows	An extra point that calms the mind
	Trigger Points	Trigger points in any palpable area of the body	Relaxation and pain reduction

Figure 6. Gua Sha image

restorations; teeth 13, 23: attrition. The patient's periodontal condition was good. Based on the panoramic radiograph, the condyle size on the left side was equal to that on the right side, with no impacted teeth, no pathological abnormalities, and a curved antegonial line suggestive of clenching habit figure 3. From the TMJ radiographic images figure 4, it was observed that during mouth closure, both the right and left mandibular condyles were positioned within the glenoid fossa. During mouth opening, both the right and left mandibular condyles were located anterior to the articular tuberculum. Based on the occlusal classification, molar relationship on the right and left sides was Angle Class I; canine relationship on the right and left sides was Angle Class I; with an overbite of 2 mm and an overjet of 3 mm. Deviation to the right occurred during mouth opening. The results of the aforementioned examinations are presented in table 1.

Based on the examination results above, the patient's diagnosis is Disc displacement with reduction (DDWR) accompanied by myofascial pain and arthralgia et causa due to bad habits of clenching and sleeping facing only one side. On palpation of the masticatory muscles, there was pain in the intraoral muscles (lateral pterygoid) on the right side, masseter, temporalis and temporalis tendon. On palpation of the extraoral muscles, there was pain in the sternocleidomastoid muscle in the posterior ear and cervical neck area on the right side. At the time of palpation of the extra-auricular area on the right side, there was pain. On opening the mouth, there was a clicking sound on the right TMJ. There was a consistent deviation to the right when opening and closing the mouth. The first treatment, called phase one treatment, performed on the patient includes: Communication: discuss the anatomy related to the clicking sound so that the patient is not anxious and the patient experiences a reversible disorder that may be related to bad habits such as clenching, and sleeping facing one side and supporting the cheek on the hand; Physical therapy: Reduce bad habits such as clenching that are often done by patients. Physical therapy in the form of acupressure using gua sha and massage with kutus-kutus oil with kneading, friction, stretching movements; Occlusal splint use: in this case, the stabilization splint is the choice of phase I treatment because there is no limitation of mouth opening and locking of the jaw when opening and closing the mouth.

The benefits of using a stabilization splint are: Reducing the TMJ load when functioning; Repositioning the lower jaw to the normal position; Restoring the balance of the tone of the chewing muscles; Eliminating clicking; Eliminating various complaints and symptoms of TMJ joint dysfunction.

The procedure for making a stabilization splint is as follows: Taking a working bite with an increased vertical dimension during centric relation position; Surveying on the model to obtain the height of tooth contour that will be waxed up and determining the areas that need blocking out; Mounting the model accompanied by increasing the working bite on a semi-adjustable articulator; Waxing up is done on the upper jaw model covering the height of the tooth contour surface according to the survey results to make it more aesthetic and retentive, without exceeding the gingival margin as it may cause irritation, and the splint surface is made flat; Processing the stabilization splint using clear heat-polymerized acrylic resin; Placing the stabilization splint with attention to adaptation and retention; the thickness of the splint must match the freeway space; occlusal contact in centric relation position and canine guidance occlusal scheme; instructing the patient to wear the splint for 24 hours. The stabilization splint is

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Figure 7. Acupressure procedure using gua sha: A. ST7 point, B. SI 19 point, C. ST 6 point, D. Yintang point, E. TE21 point, F. Trigger point

Figure 8. Massage procedure: A. Application of Kutus-Kutus oil, B. Kneading, C. Friction, D. Stretching, E. Stretching on the neck area, F. Cross stretching

used for a minimum of 2 months and worn at all times except during meals figure 5; The patient is instructed to attend a follow-up appointment one week after splint insertion, and an examination is conducted to determine post-placement complaints including: Examination of complaints regarding splint insertion, whether there is traumatic occlusion on the stabilization splint using articulating paper; Examination of clicking sounds; Examination of deviation during mouth opening and closing; Follow-up appointment 2 weeks after placement to reassess complaints from the first appointment and subsequent appointments until patient complaints disappear.

The physical therapy performed involves acupressure using gua sha. Gua sha acupressure is conducted using a special stone or tool called a gua sha tool. The special gua sha stone, typically made of porcelain, is gently rubbed on the area around the face down to the neck. Figure 6 The technique of rubbing or massaging the facial area with the gua sha tool is aimed at promoting blood flow and energy circulation, known as "chi" in Chinese culture.

The massage technique with Kutus-Kutus oil involves the following steps:[17] figure 7 the massage is performed in a quiet room, positioning the patient in a supine position to ensure comfort; The area to be massaged is cleaned with 70% alcohol to reduce skin oiliness; The massage techniques include effleurage, kneading, friction, and stretching; Kutus-Kutus oil is applied to the area being massaged; Starting with effleurage and kneading movements, use the second and third fingers to perform circular motions on the masseter muscle region to stimulate muscle relaxation and warm-up the muscle area; Then, perform an intraoral massage with light pressure followed by friction and stretching movements for 8 seconds, with a 2-second rest phase for each muscle during the massage. This procedure is repeated 5 times for each muscle to reduce muscle tension and achieve relief at trigger point areas; The massage is carried out on the myofascial region, neck, face or head; Extramuscular and intramuscular techniques are applied to these regions, performing 3-5 release techniques at each location; Instruct the patient to practice diaphragmatic breathing for relaxation, reducing the sympathetic nervous system effects during the massage procedure.

The examination results after 2 weeks showed that, based on subjective assessment, there was a decrease in pain in the jaw joint area, and upon waking, the patient no longer felt stiffness. The habit of teeth clenching was obstructed by the use of a stabilization splint, making the patient consciously remember not to engage in such behavior. According to objective examination, mouth opening without pain increased, from 34 mm before treatment to 46 mm at the 8-week check-up after the splint was applied. This indicates the effectiveness of using the stabilization splint along with gua sha acupressure and massage with Kutus-Kutus oil in reducing pain in Temporomandibular Disorder (TMD) cases.

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Discussion

The main purpose of a stabilization splint is to normalize the tone of the masticatory muscles and at the same time distribute occlusal forces evenly. The principle of the stabilization splint is to increase patient awareness and relax the muscles. Alternative names for the stabilization splint include the superior repositioning splint, the Tanner appliance, the Michigan splint, the Fox appliance, or the centric relation appliance. The stabilization splint is a hard acrylic splint that plays a role in reducing abnormal muscle activity and achieving neuromuscular balance.[2,12,19] The stabilization splint is effectively used to protect teeth from abrasion due to parafunctional activities such as bruxism and clenching, eliminate occlusal disturbances, stabilize the relationship between teeth and the jaw joint, restore vertical dimension, reduce the load on the temporomandibular joint, and distribute the load in cases of clenching which significantly affects the reduction of pain.[12]

There are about 74 publications on the use of acupressure in dentistry, and 17 of them are randomized controlled trials (RCTs). Nine trials reached this level; of these, four investigated the use of acupuncture in postoperative pain management and four in temporomandibular disorders (TMD). The four trials that included TMD demonstrated some benefits comparable to occlusal splints. Three of the postoperative pain management trials found that acupressure was effective.[9] According to Naik et al., acupressure can be used to manage various disorders in dentistry. It can offer new hope for patients suffering from conditions that cannot be managed with conventional treatment modalities. Some conditions where acupressure can be effectively used include toothache and gag reflex, jaw joint pain, TMJ clicking and locking, chronic muscle pain or spasms, facial pain, headaches (migraine, tension headaches), and xerostomia (dry mouth).[9]

Chapman and his team have found that the pain threshold for toothache in response to acupressure significantly increases. This method can alleviate tooth pain by stimulating nerves located in the muscles, leading to the release of endorphins and other neurohumoral factors (e.g., neuropeptide Y, serotonin). It changes the perception and processing of pain in the brain and spinal cord, reduces cardiovascular reflexes induced by tooth pain (associated with the adrenergic system), increases the release of adenosine, which has antinociceptive properties, affects the activity of the limbic-paralimbic-neocortical tissue, reduces inflammation by promoting the release of immunomodulators and vascular factors, and improves local microcirculation, which helps to dissolve swelling.[16]

A clinical trial conducted by Shen et al evaluated the effectiveness of acupressure for myofascial pain in the jaw muscles. Twenty-eight patients over 18 years old, diagnosed with chronic myofascial pain in the jaw muscles, received pressure therapy. General head and neck pain ratings were collected before and after treatment on a numerical scale. Mechanical pain stimulus on the masseter muscle was given before and after the procedure and assessed on a visual analog scale to measure pain tolerance levels. Patients who received acupressure experienced reduced jaw pain, neck pain, and also an increase in pain tolerance in the masseter muscle.[9]

Gua Sha is a traditional healing technique widely used in Asia, Asian immigrant communities, and by acupuncturists and practitioners of traditional East Asian medicine around the world. Gua Sha is generally considered effective for acute or chronic pain and for mild to severe conditions such as colds, flu, fever, and respiratory issues like asthma, bronchitis, and emphysema; functional internal organ issues, as well as musculoskeletal problems (from fibromyalgia to severe tension, spasms, or injuries), and is indicated for any case of persistent recurring pain. Gua Sha can be used as a form of self-care or family care at home as well as in clinical practice.[20]

Physical therapy and its combinations have been proven effective in reducing pain and improving mandibular function. Temporomandibular Disorders (TMD) are the primary cause of non-dental orofacial pain in patients, with the most common type being myogenous, characterized by myofascial pain. Myofascial pain is a significant symptom presented in more than half of the patients seeking treatment, with a prevalence of 31-76%. To alleviate this pain, massage therapy can be employed because it activates the pain gate mechanism. However, this therapy is less studied despite its promising results.[17]

The Kutus-Kutus oil used in this case is a herbal balm oil produced by PT. Tambar Waras and created by its inventor, S. Bambang Pranoto, from raw materials initially gathered from the kitchen and yard of his home in Gianyar Regency, Bali. The choice of Kutus-Kutus oil for treatment in this case is due to its active ingredients which include:[18] Coconut Oil: This oil has antibacterial, antifungal, and antiviral effects. Moreover, its high emollient or moisturizing content can make the skin moist and more elastic; Ashitaba Leaves: Ashitaba leaves (Angelica keiskei) have long been used by Japanese and Korean communities as an herbal medicine or tea. Some studies have revealed that ashitaba leaves possess anti-inflammatory and antioxidant effects; Agarwood: Agarwood (Aquilaria spp.) is beneficial as an antiallergy, anti-inflammatory, pain reliever, anticancer, and antibacterial agent. This plant also acts as an antioxidant, mosquito repellent, and laxative; Purwoceng: Purwoceng is known for its antibacterial, antifungal, and analgesic properties; Neem Leaves: This herbal plant also has antibacterial, antioxidant, and anti-inflammatory properties, and is capable of inhibiting cancer growth. Neem leaves are also believed to be good for maintaining the health of liver and nerve organs, as well as aiding in the wound healing process; Black Seed (Nigella sativa): Some research indicates it has the potential to address several health issues, such as hypertension, diabetes, asthma, high cholesterol, and cancer. Black seed also has diuretic, antibacterial, anti-inflammatory, and analgesic effects, and is beneficial for boosting immunity and digestive health; Turmeric: Turmeric is known for its anti-inflammatory, antihypertensive, antidiuretic, antifungal, antibacterial, and antioxidant properties. It is also suspected to improve appetite and address disorders of the gallbladder, liver, and digestion; Lemongrass: In traditional medicine, lemongrass is commonly consumed as herbal medicine, applied to the skin, or inhaled as aromatherapy. Lemongrass oil in Kutus Kutus oil is also beneficial as an antifungal and anti-inflammatory agent.

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Conclusion

Dentists should clearly understand that occlusal splints do not cure but rather provide an initial treatment within a comprehensive management approach for Temporomandibular Disorders (TMD). The combination of physical therapy as supportive care can influence the success of the treatment. Acupressure therapy using gua sha and massage with Kutus-Kutus oil can be an alternative supportive treatment option because the treatments offered can produce a relaxation effect and are relatively comfortable for patients.

References

1. Baragona PM, Bertrand PM, Black DF, et al. American academy of orofacial pain guidelines for assessment, diagnosis, and management orofacial pain guidelines for assessment, diagnosis, and management fourth edition american academy of orofacial pain. 6th ed. Chicago: Quintessence Publishing So Inc.; 2018 p. 49-73.
2. Okeson JP. Management of temporomandibular disorders and occlusion. 7th Edition. Philadelphia: Mosby Elsevier. 2013:317-348
3. Young AL. Internal derangements of the temporomandibular joint: a Review of the anatomy, diagnosis, and management. The journal of Indian Posthodontic society 2015:15(1):2-7
4. Marpaung C, van Selms MKA, Lobbezoo F. Prevalence and risk indicators of pain-related temporomandibular disorders among Indonesian children and adolescents. Community Dent Oral Epidemiol. 2018;46:400–406.
5. Chisnoiu AM, Picos AM, Popa S, et al. Factors involved in the etiology of temporomandibular disorders - a literature review. Clujul Medical. 2015;88:473–478.
6. Akhter R. Epidemiology of temporomandibular disorder in the general population: a systematic review. Advances in Dentistry & Oral Health. 2019;10(3):1-13
7. Schiffman EL, Ohrbach R, Truelove E, Look J, Anderson G, Goulet JP, et al. Diagnostic Criteria for Temporomandibular Disorders (DC/TMD) for clinical and research applications: Recommendations of the international RDC/TMD consortium network and orofacial pain special interest group. J Oral Facial Pain Headache. 2014;28(1):6–27
8. Rikmasari R, Kusumadewi AN, Damayanti L, Dziab H, Kurnikasari E. The analysis of temporomandibular disorder based on RDC/ TMD axis I revision 2010 in dentistry students. Padjajaran Journal of Dentistry. 2016;28(2):111-120.
9. Dietrich L, Rodrigues IVS, De Assis Costa MDM, Carvalho R, Da Silva G. Acupuncture in temporomandibular disorders painful symptomatology: An evidence-based case report. Eur J Dent 2020;14(14):692–696.
10. Olesen J. Headache classification committee of the international headache society (IHS) the international classification of headache disorders, 3rd ed. Cephalalgia 2018;38(1):1–211.
11. Nawawi AP, Meliawaty F, Putri VW. Differences in symptoms of men and women temporomandibular joint disorders in students of medical faculty Universitas Jenderal Achmad Yani batch 2020. JHDS. 2022:123-131.
12. Chairunnisa R, Kurnikasari E. Tinjauan tentang splin oklusal untuk terapi gangguan sendi temporomandibula A review about occlusal splint as a therapy for temporomandibular disorders. 2013;12(1):38-43.
13. Dental care.com. Huggins KH, Wright EF: The detection and management of temporomandibular disorders in primary dental care [disitasi 2023 May 10]. Diakses dari: https://assets.ctfassets.net/u2qv1tdtdbbu/3slzJtb2lTvikJxeTBb-pyH/a27fd7c6f5f4ae3553772fa4956613f5/ce395.pdf
14. Lee MS, Choi TY, Kim JI, Choi SM. Using Guasha to treat musculoskeletal pain: A systematic review of controlled clinical trials. Chinese Medicine. 2010;5(5):1-5
15. Chu EP, Wong AL, Sim P, Kruger F. Exploring scraping therapy: Contemporary views on an ancient healing – A review. J Family Med Prim Care. 2021;10(8):2757-2762
16. Rohmetra A, Tandon R, Singh K, et al. Acupressure therapy in orthodontics: A review. International Journal of Orthodontic Rehabilitation. 2017;8:26.
17. Benli M, Olson J, Huck O, Ozcan M. A novel treatment modality for myogenous temporomandibular disorders using aromatherapy massage with lavender oil: A randomized controlled clinical trial. Cranio - Journal of Craniomandibular and Sleep Practice 2023;41(1):48–58.
18. Nurrachmania M, Rosalyne I. Identifikasi jenis tanaman obat yang digunakan sebagai bahan pembuatan minyak varash dan minyak kutus-kutus. Jurnal Akar. 2020;2(1):33-45.
19. Tarigan M, Chairunnisa R. Perawatan disc displacement with reduction pada kasus open bite anterior menggunakan splin reposisi anterior. J Syiah Kuala Dent Soc. 2019; 4(2):12-18
20. Nielsen A, Knoblauch NTM, Dobos GJ, Michlsen A, Kaptchuk T. The effect of gua sha treatment on the microcirculation of surface tissue: a pilot study in healthy subjects. Explore: The Journal of Science and Healing 2007;3(5):456–466.