



Contents lists available at ScienceDirect

# Journal of Oral and Maxillofacial Surgery, Medicine, and Pathology

journal homepage: [www.elsevier.com/locate/jomsmmp](http://www.elsevier.com/locate/jomsmmp)

## Case Report

# Effect of motivational interviewing on medication non-adherence for patients with chronic intraoral pain



Takuya Naganawa<sup>a,\*</sup>, Eiko Naganawa<sup>b</sup>, Abhishek Kumar<sup>c,d</sup>, Hitoshi Sato<sup>e,f</sup>, Takashi Iida<sup>g</sup>, Seigo Morita<sup>a</sup>, Akihiro Suzuki<sup>a</sup>, Toshihiro Okamoto<sup>a</sup>, Tomohiro Ando<sup>a</sup>

<sup>a</sup> Department of Oral and Maxillofacial Surgery, Tokyo Women's Medical University, School of Medicine, Tokyo, Japan

<sup>b</sup> Department of Psychiatry, Tokyo Women's Medical University, School of Medicine, Tokyo, Japan

<sup>c</sup> Section of Clinical Oral Physiology, Department of Dentistry, Aarhus University, Aarhus C, Denmark

<sup>d</sup> Scandinavian Center for Orofacial Neuroscience (SCON), Sweden

<sup>e</sup> Department of Dentistry & Oral Surgery, School of Medicine, Keio University, Tokyo, Japan

<sup>f</sup> Department of Dentistry & Oral Surgery, Kawasaki Municipal Kawasaki Hospital, Kanagawa, Japan

<sup>g</sup> Department of Oral Function and Rehabilitation, Nihon University School of Dentistry at Matsudo, Chiba, Japan

## ARTICLE INFO

### Article history:

Received 25 December 2014

Received in revised form 23 June 2015

Accepted 18 August 2015

Available online 16 September 2015

### Keywords:

Motivational interviewing

Medication non-adherence

Intraoral

Pain management

Burning mouth syndrome

## ABSTRACT

Motivational interviewing (MI) is a technique for helping clients to recognize and address their problems. This approach is useful for clients who are reluctant to change or who are ambivalent about changing their behaviors. We describe a case of medication non-adherence in a patient with chronic intraoral neuropathic pain. A 54-year-old man visited the Tokyo Women's Medical University Hospital with spontaneous pain on the gingiva and tongue. Although, pharmacotherapy was initiated, pain management was inadequate. The patient was unwilling to take any more medications (medication non-adherence) because of his previous experience, where the medications prescribed were non-effective in controlling his pain. MI was performed for his ambivalent condition (unwilling to take medicine vs. willing to achieve pain relief). The patient's behavior changed after three MI sessions, and then 2 weeks of pharmacotherapy (amitriptyline, 10 mg/day) decreased the pain score from 8 to 4 on the numerical rating scale (0–10). Another 8 weeks on amitriptyline at 20 mg/day further improved pain score from 4 to 0. MI may be effective as a psychological approach for addressing non-adherence to medication in the management of chronic intraoral pain.

© 2015 Asian AOMS, ASOMP, JSOP, JSOMS, JSOM, and JAMI. Published by Elsevier Ltd. All rights reserved. <sup>\*</sup>

## 1. Introduction

Motivational interviewing (MI) is a structured intervention designed to motivate the patient in the treatment of alcoholism, smoking, diet and other disorders requiring motivation for continued treatment [1–6]. MI was first described by Miller in 1983 and can be defined as a client-centered, directive method for enhancing intrinsic motivation to change by exploring and resolving issues of ambivalence [1]. MI is also reported to be useful for patients

with diabetes or psychiatric issues showing non-adherence to medication [7,8]. This approach offers a particular way of helping the patients to recognize and do something about their current or potential problems, and is viewed as being particularly useful for clients who are reluctant to change or who are ambivalent about changing their behaviors [2].

It has been proposed that orofacial pain patients with atypical facial pain, atypical odontalgia, and burning mouth syndrome (BMS) may have some neuropathic pain aspects as the pathophysiology [9]. Indeed, patients with orofacial pain often show somatosensory changes such as hyperalgesia and dynamic mechanical allodynia [10,11], and quantitative sensory testing (QST) can be used to outline such changes [12–16]. Besides, some researchers have reported the morphological and functional changes in peripheral [17–20] or central nervous systems [21–23] would be associated with the pain perceptions of primary BMS patients who are not accompanied by clinical lesions or systemic disease [24]. However, the underlying mechanisms and optimal

<sup>\*</sup> Asian AOMS: Asian Association of Oral and Maxillofacial Surgeons; ASOMP: Asian Society of Oral and Maxillofacial Pathology; JSOP: Japanese Society of Oral Pathology; JSOMS: Japanese Society of Oral and Maxillofacial Surgeons; JSOM: Japanese Society of Oral Medicine; JAMI: Japanese Academy of Maxillofacial Implants.

\* Corresponding author at: Department of Oral and Maxillofacial Surgery, Tokyo Women's Medical University, School of Medicine, 8-1 Kawada-cho, Shinjuku-ku, Tokyo 162-8666, Japan. Tel.: +81 333538111; fax: +81 52692367.

E-mail address: [tanaganawa@gmail.com](mailto:tanaganawa@gmail.com) (T. Naganawa).

methods of treatment for the intraoral pain conditions related to the neuroplasticity of peripheral or central nervous systems remain unclear. Therefore pain management tends to become difficult and prolonged, in such patients. Chronic pain patients are often reported to be associated with psychological conditions such as depression [25–31]. Previous studies have suggested that MI may be useful in the psychological management of patients with low back pain and in enhancing motivation toward treatment [25,26,32]. However, the role of MI in the management of orofacial pain is seldom reported in the literature. Therefore, we report a case of a patient with chronic intraoral neuropathic pain, and medication non-adherence due to distrust of the pain medications and further effective management through MI.

## 2. Case report

### 2.1. Management of intraoral pain condition

A 54-year-old man visited the Department of Dermatology at Tokyo Women's Medical Hospital in August 2012 with chief complaints of dysesthesia affecting the skin of the whole body and spontaneous pain in the gingiva and tongue. Laboratory findings and radiographic examination showed no obvious causes of these symptoms. The diagnosis was unclear (somatic symptoms and related disorder), hence, the patient was prescribed prednisolone at 10 mg/day. The patient did not report any significant reduction in the perception of dysesthesia or pain intensity after about 2 weeks of medication. Quetiapine (100 mg/day), pregabalin (300 mg/day) and clonazepam (0.5 mg/day) were prescribed by the psychiatrist for pain relief. However, there was still no marked change in the magnitude of pain intensity after about 16 weeks.

In April 2013, the patient visited an oral and maxillofacial surgeon with spontaneous pain of the gingiva and tongue. The patient reported pain of 8/10 on the numerical rating scale (NRS), where 0 is defined as “no pain at all”, 5 as “just barely painful”, and 10 as “most pain imaginable” [11,33]. After dental, bacteriological and radiographic examinations, possible causes of symptoms like infection by *Candida albicans* and other structural changes were ruled out, with the exception of calculus deposition and without symptoms associated with dental caries (Figs. 1 and 2). Intracranial computed tomography (CT) and magnetic resonance imaging (MRI) showed no evidence of tumor or nerve dislocation. Periodontal treatment (scaling and root planing) was therefore performed to exclude any possible causes such as swelling and pain associated with periodontal disease. One and a half years after dental treatment (scaling and root planing) and pharmacotherapy, intraoral pain involving the gingiva and tongue persisted, but pain management had become difficult due to non-adherence to medication and unwillingness of the patient to try different medications.

In April 2014, the patient was introduced to the orofacial pain center at Tokyo Women's Medical University Hospital. Intraoral qualitative sensory testing demonstrated spontaneous burning pain on the tongue and gingiva, mechanical allodynia and cold hyperesthesia on the gingiva. The plaque control record (PCR) was 67% due to difficulties with brushing because of the mechanical allodynia and cold hyperesthesia of the gingiva. Moreover, the Hamilton depression rating scale score was 19 [34].

To change the behavior of the patient in terms of non-adherence to medication, MI was performed twice a month for about 20 min a session by a dentist (T.N.). In the initial MI session, ambivalence about changing his behaviors (unwillingness to take medicine vs. willingness to achieve a pain-free state) was identified. After three MI sessions targeting this ambivalent condition, the patient spontaneously agreed to take additional medication (see below). As a result, amitriptyline was prescribed at 10 mg/day, taken before bed.



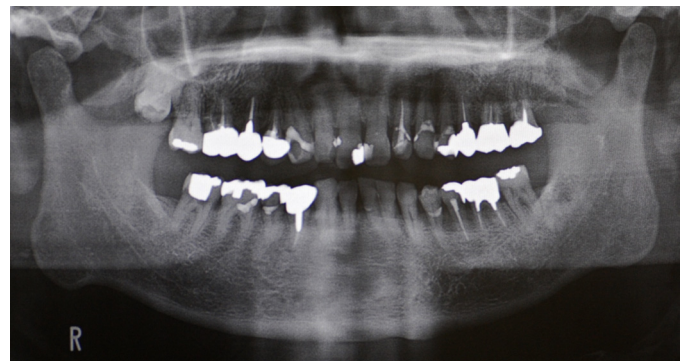
**Fig. 1.** Initial photo of intraoral gingiva and tongue at the orofacial pain center. Dental plaque is observed without symptoms associated with dental caries. There is no evidence of the infection by *Candida albicans*, inflammation or tumor-like disease.

After 2 weeks of this regimen, a marked improvement in spontaneous pain (gingiva and tongue) was seen according to NRS score, decreasing from 8 to 4. The dose of amitriptyline was then increased to 20 mg/day, achieving a reduction in pain score from 4 to 0 after 8 weeks of medication. Mechanical allodynia and cold hyperesthesia of the gingiva were also resolved. Hamilton depression rating scale score declined from 19 to 7 and PCR improved from 67% to 30% (Fig. 3).

### 2.2. Motivational interviewing

#### 2.2.1. Strategies and techniques

MI is a focused and goal oriented technique with the aim to get individuals to resolve their ambivalence about changing



**Fig. 2.** Initial panoramic radiography of a 54-year-old patient. Panoramic radiography shows several dental caries and deposition of dental calculus. There is no evidence of tumor. The shape of the temporomandibular joint is normal.

Download English Version:

<https://daneshyari.com/en/article/3159377>

Download Persian Version:

<https://daneshyari.com/article/3159377>

[Daneshyari.com](https://daneshyari.com)