ELSEVIER

Journal of Psychosomatic Research 67 (2009) 443 – 448

Journal of Psychosomatic Research

Group psychotherapy: An additional approach to burning mouth syndrome☆

Ivan Dieb Miziara[a,*], Bernardo Cunha Araújo Filho[a], Rigoberto Oliveira[a], Rosa Maria Rodrigues dos Santos[b]

[a]*ENT Department, São Paulo University Medical School, São Paulo, Brazil*
[b]*Division of Psychology, ENT Department, São Paulo University Medical School, São Paulo, Brazil*

Received 5 October 2007; received in revised form 19 December 2008; accepted 28 January 2009

Abstract

Introduction: Glossodynia or burning mouth syndrome (BMS) is a common and poorly understood disorder. Its treatment is uncertain. Otherwise, there is some evidence of the importance of psychological factors in the genesis of this disease. **Objectives:** Verify the usefulness of group psychotherapy as an adjuvant therapeutic method in the treatment of BMS. **Casuistics and Methods:** The study group consisted of 64 consecutive patients with a clinical diagnosis of BMS seen at the Stomatology Outpatient Clinic, ENT Department, Sao Paulo University Medical School, between May 2002 and May 2007. All the patients were submitted to physical examination, laboratorial screening tests, psychological assessment (Crown-Crisp Experimental Inventory), and answered a short form of the McGill Pain Questionnaire. Only 44 patients who did not show any abnormality in the protocol exams entered the study. Twenty-four of them underwent group psychotherapy. Twenty patients received placebo. Chi-square test was applied to compare the results of treatment with or without psychotherapy. **Results:** There were 15 men and 29 women in the study group. Tongue burning was the main complaint of the patients. Improvement of symptoms was reported by 17 (70.8%) of the patients undergoing psychotherapy, while among those who did not eight (40%) had improvement of symptoms (P=.04). **Conclusion:** Psychological assessment demonstrated a close correlation between symptoms and psychological factors, suggesting that group psychotherapy is an important alternative to conventional treatment methods.

Keywords: Burning mouth syndrome; Burning tongue; Diagnosis; Etiology; Glossodynia; Psychotherapy

Introduction

Burning mouth syndrome (BMS) is an important and poorly understood disorder that affects more than 1 million people in the United States [1], with predominance in women (7:1).

BMS is characterized by a burning sensation and chronic pain in the oral mucosa, particularly in the anterior portion of the tongue and lips [2], in the presence of an apparently healthy oral mucosa.

The burning symptom can be the result of organic manifestations which can be divided into local factors (candidosis, gingival, and oral diseases, etc.), systemic factors (hormonal and immunological disturbances, drug use, etc.), and, finally, psychogenic factors characterized by various psychological disturbances [2]. Patients also could present other symptoms like dysgeusia, xerostomia, and other sensory or chemosensory alterations of the buccal mucosa [3].

Scala et al. [3] have proposed that BMS be classified into two clinical forms: "primary BMS" or essential/

☆ The study was carried out at the Division of Otorhinolaryngology, University Hospital of the Faculty of Medicine, University of São Paulo, São Paulo – SP – Brazil.

* Corresponding author. Av. Eneas de Carvalho Aguiar 155, 6th Floor, c-6 CEP: 05403-010, São Paulo, SP, Brazil.
E-mail address: miz@uol.com.br (I.D. Miziara).

0022-3999/09/$ – see front matter © 2009 Elsevier Inc. All rights reserved.
doi:10.1016/j.jpsychores.2009.01.013

idiopathic BMS for which organic local or systemic causes cannot be identified and a neuropathological cause is likely; and "secondary BMS," which would be the variant that resulted from local or systemic pathological conditions [4].

Treatment of BMS is still uncertain and controversial, and includes a great variety of drugs [5]. The outcome of these treatments shows wide variation, but is generally poor in most patients, especially those with prevalent psychological factors. These patients suffer from signs and symptoms of important chronic pain which are difficult to control, measure, and follow up [6].

A strong psychological component in BMS has been clearly identified in the last decade. It has been suggested that somatic complaints from unfavorable life experiences associated with chronic pain may influence both individual personality and mood changes [7].

Literature on BMS explicitly mentions the influence of psychological characteristics, emphasizing depression, anxiety, somatization, and phobias, and also demonstrates the importance of mental health care workers in the psychological or psychiatric investigation of these patients [8–10].

Firas [11] used the revised personality inventory (NEO PI-R) to measure the five major domains of personality, namely, neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness, in BMS patients comparing them with matched control subjects. The author found highly significant differences in some personality factors, such as neuroticism and all its facets—anxiety, angry hostility, depression, self-consciousness, impulsiveness, and vulnerability—in the BMS group [11].

Bergdahl et al. [12] studied the effect of cognitive therapy (CT) on resistant BMS. Their patients were randomly divided into two equal groups: a therapy group (TG) was treated with CT and an attention/placebo group served as a control group. The authors used a visual analogue scale to estimate the intensity of BMS, and they found it is significantly reduced in the TG group after CT was completed (12–15 sessions lasting for 1 h once a week) [12].

Otherwise, cognitive-behavioral and psychodynamic group psychotherapy have been used with success in the treatment of geriatric depression and other aging and mental disorders by many authors [13–15]. "'Besides, group therapy rather than individual therapy has been advocated for elderly patients, both for its cost-effectiveness and for counteracting the isolation and loneliness presumed to be common in old age, as in the majority of BMS patients. On the other hand, some studies suggest that group psychotherapy is efficacious in reducing depressive symptoms among some cohorts like HIV-infected individuals [16].

Thus, the aim of the present study was to identify psychological factors in patients with BMS and also to verify the usefulness of group psychotherapy as a new, easy, and important approach in the treatment of the disease.

Patients and methods

The study group consisted of 64 consecutive patients with a clinical diagnosis of BMS seen at the Stomatology Outpatient Unit of the ENT Division of Hospital das Clinicas, São Paulo University Medical School, between May 2002 and May 2007. They entered the study in a prospective form.

Inclusion criteria:

1. Patients with BMS, without any other symptoms of systemic disease, e.g., primary BMS,
2. Patients followed up at least for 3 months,
3. Patients who have signed an informed consent form and have accepted to undergo a psychotherapy group session if necessary.

Exclusion criteria:

1. Patients with a doubtful diagnosis,
2. Patients followed up for less than 3 months, and
3. Patients who did not agree with the treatment protocol.

The study was approved by the Ethics Committee of the Hospital, and the patients signed an informed consent agreeing with the study procedures.

All patients were submitted to the following exams: complete otorhinolaryngological assessment, complete blood count, biochemical tests (determination of sodium, potassium, urea, and creatinine), metabolic tests (fasting glycemia, total cholesterol and cholesterol fractions, triglycerides, and uric acid), determination of female sex hormones (estrogen and progesterone), thyroid status, rheumatological examination (rheumatoid factor, antinuclear factor, and anti-Ro factor), estimation of saliva secretion rate, candidal investigation, and upper digestive endoscopy.

Only individuals without any alterations on complimentary exams entered the study. Thus, 20 patients with secondary BMS were excluded from the study. The other 44 patients with primary BMS were randomized and distributed into two groups. Group 1 received placebo pills (one capsule a day during a 30-day treatment). Group 2 were submitted to a preliminary psychological assessment.

This evaluation was always performed by the same examiner (RMRS), who was blind to the clinical procedures, and consisted of psychological interviews for the diagnosis, screening, and referral of patients to group therapy.

In addition, prior to group psychotherapy, the Crown-Crisp Experimental Inventory [17], an instrument that assigns scores for anxiety, phobia, obsession, hysteria, somatization, and depression, was collectively applied to patients of Group 2.

Group psychotherapy in Group 2 was conducted by the same psychologist (RMRS), one of the authors of this study, with sessions once a week for 3 months. Each group was composed of four patients.