

PSYCHOLOGICAL DISTRESS IN BURNING MOUTH SYNDROME

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ABSTRACT. Burning mouth syndrome is a debilitating medical condition. Its common features include a burning painful sensation in the mouth, often associated with xerostomia. This article discusses our current understanding of the psychological distress of burning mouth syndrome.

KEY WORDS: burning mouth syndrome, quality of life (QOL), WHOQOL questionnaire physical health, psychological health.

INTRODUCTION

Burning mouth syndrome is one of the main psychological reasons sought for dental medical care (Bergdahl, 1999).

Burning mouth syndrome is considered a disabling disease that can significantly reduce the quality of life (QOL) of persons affected by it (Grushka, 2000).

Most burning mouth syndrome cases have recurrent episodes, which have the potential to progress to more frequent and severe attack patterns.

These attacks are associated with substantial functional impairments, which may include both physical and psychological effects (Scala, 2003).

Burning mouth syndrome patients with psychological symptoms tend to take pain medications before any symptoms, which contributes to the overuse of these medications.

They also reported lower health-related QOL and psychological condition with burning mouth syndrome.

Measurement of QOL and disability has emerged as an important complementary approach that can aid in the management of burning mouth syndrome.

Assessing a patient's QOL is an effective way of measuring the burden of burning mouth syndrome as it focuses on activity limitations or temporary disabilities.

The World Health Organization QOL (WHOQOL) questionnaire is a simple and fast instrument for the measurement of health-related QOL (2001).

The WHOQOL questionnaire has four domains (physical health, psychological health, social relationships, and environment), whose scores can depict the profile of the QOL of burning mouth syndrome patients.

In this study, we aimed to measure QOL among burning mouth syndrome patients.

METHODS

All burning mouth syndrome patients were identified from our own database over the previous five years.

The inclusion criteria include patients between 16 and 60 years old diagnosed with burning mouth syndrome.

Patients with any neurological diseases or history of trauma were excluded.

The study complies with the Declaration of Helsinki.

After the initial screening process, the patients were verbally informed about the purpose of the study.

All participants were then examined to confirm their burning mouth syndrome diagnosis.

Sociodemographic information was completed by the researcher and the WHOQOL questionnaire was self-administered by the patients.

Total QOL and individual domain scores (physical health, psychological health, social relationships, environment) were calculated as per instructions in the WHOQOL questionnaire.

Higher scores indicate better QOL.

A total of 100 burning mouth syndrome cases and 100 non-burning mouth syndrome volunteers completed the WHOQOL questionnaire.

Independent *t*-tests were used to compare the sociodemographics, overall perception of QOL, and health between the burning mouth syndrome patients and the controls.

For the comparison of the total QOL and individual domain scores using the WHOQOL questionnaire among the burning mouth syndrome patients and the non-burning mouth syndrome controls, analysis of covariance (ANCOVA) was used.

Multiple logistic regression was used to determine the associations of burning mouth syndrome disability with QOL among the burning mouth syndrome patients.

Analysis was performed using IBM SPSS version 20 software (IBM Corporation, New York, USA).

RESULTS

All the subjects successfully completed the WHOQOL questionnaire.

None had any difficulties in understanding or answering any parts of the questionnaire.

No significant difference was found between the burning mouth syndrome patients and the healthy control groups except for duration of school education.

The mean duration of education among the migraine patients was significantly lower ($P < 0.001$) than the healthy controls.

The overall perception score of QOL among the migraine patients was significantly lower (3.5 versus 3.9, $P < 0.001$) than the nonmigraine healthy controls.

Similarly, the overall perception of health among the burning mouth syndrome patients was significantly lower ($P < 0.001$) than the healthy controls.

The mean total QOL scores were significantly lower among the burning mouth syndrome patients than the healthy controls before ($P < 0.001$) and after ($P < 0.001$) adjusting for age and duration of school education.

Similarly, following adjustments for age and duration of education, the burning mouth syndrome patients still had significantly lower physical health ($P < 0.001$) and psychological health scores ($P < 0.001$) than the healthy controls.

The social relationships and environmental domain scores were lower among the burning mouth syndrome patients than the healthy controls, but these differences were not statistically significant.

DISCUSSION

Somatic discomfort and bad prognosis constitute major sources of psychological distress in patients with nonspecific oral pain.

Patients with burning mouth syndrome presents a complex syndrome defined as symptomatic neuroastheniform, anxiety or depression by setting up as the disease has an advanced degree of development (Grushka, 2002).

The importance of psychosocial factors in the development of burning mouth syndrome had been addressed in full in many studies (Schiavone, 2012, Haberland, 1999).

Application of diagnostic criteria is difficult and even hazardous in patients with nonspecific oral pain, due the low specificity and sensitivity of these criteria.

Patients with burning mouth syndrome presents different motivations than those of other oral illnesses

and have a large variety of reactions to the outcome of treatment (Zakrzewska, 2005).

Measurements of QOL and disabilities have emerged as important complementary approaches for the evaluation of the burden of burning mouth syndrome.

This is the first study in our country to compare QOL between burning mouth syndrome sufferers and healthy controls.

The WHOQOL questionnaire was easy to administer and can be completed quickly.

No subjects had any difficulty using the instrument, indicating a good quality of the questionnaire.

In this study, the overall perception score of QOL and health was significantly lower among burning mouth syndrome patients.

The burning mouth syndrome sufferers had substantial and statistically significantly lower total QOL scores and physical health and psychological health domain scores than the healthy control group.

Lower QOL could be attributed to underdiagnosis or underestimation of burning mouth syndrome, lack of awareness and poor management of illness.

Furthermore, the majority of dentists and general practitioners often underestimate the burdens caused by burning mouth syndrome, which in turn may also affect the treatment.

Duration of education was significantly lower among burning mouth syndrome patients than healthy controls.

This may indicate lower self-awareness among burning mouth syndrome patients.

High QOL scores were reported among patients who were cautious about the management of their burning mouth syndrome.

In this study, we did not collect the medication information prescribed to the burning mouth syndrome patients.

Nevertheless, we have utilized multivariate analysis to adjust for duration of education and other variables to minimize this confounding factor.

Increased age can also cause more disability among burning mouth syndrome patients due to decrease in physical strength.

However, there was no significant difference in terms of age between burning mouth syndrome patients and healthy controls in this study.

Further studies are recommended to determine other factors associated with burning mouth syndrome disability.

CONCLUSION

The present study indicates that burning mouth syndrome patients have substantial and statistically significant reductions in physical and psychological QOL in comparison with a contemporaneous control group drawn from a similar population.

Therefore, professionals should routinely evaluate QOL to determine whether patients are receiving effective treatment and whether any additional treatment strategies are warranted to improve QOL.

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