“Clonazepam; only ¼ of tablet, as a management of burning mouth syndrome (BMS)” (report of 2 cases)

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ABSTRACT

Burning mouth syndrome is a kind of burning sensation without any clinical or laboratory finding. The burning is annoyance and sometimes the degree of discomfort is comparable with tooth ache. There have been several studies of causes of the burning and many of them declare that the disorder is related to psychology and mostly to anxiety and depression. So, anti-anxiety and anti-depression therapy can be used to abolish severity of the burning.

Key words: Here is two cases of “BMS” whose burning has been managed by an anxiolytic agent, clonazepam.

Introduction

Burning sensation of oral mucosa can be seen in a variety of inflammatory disorders which may accompany with mucosal ulcers or not. (Lynch, M., et al., 2003)

It can also be a symptom of a systemic diseases such as iron, folic acid or vit B12 deficiencies, diabetic neuropathies, gastrointestinal disease, immunologic or hormonal disorders, allergy and decreased salivary flow, dermatologic disease, AIDS (Lynch, M., et al., 2003; Bonfilis, P., et al., 2005) and psychiatric disorders (Trikkas, G., D. Nikolatou, C. Samara, et al., 1996; Grinspan, D., et al., 1995; Vander, Bijl. P., 1995) or even can be as a part of a syndrome with an unknown etiology. (Craddock, H.L., et al., 2005) But when we use the statement of “Burning mouth syndrome” (BMS), it means that there is no clinical nor laboratory findings to cause burning. (Santoro, V., G. Caputo, F. Peluso, 2005; Neville, B., D. Damm, C. Allen, 2002; Nagler, R.M., O. Hershkovich, 2005; Grushka, M., et al., 2002)

Prevalence of BMS has a range of 0.7% (Zakrzewska, J.M., I.M. Glenmv, H. Forssell, 2001; Witt, E., S. Palla, 2002; Campisi, G., Di, 2003) to 19% (Elad, S., R. Czeminski, E. Eliay, 2002) in different studies, but almost all of them declare that the syndrome is 3-16 folds more, in women. (Grushka, M., V. Ching, 2005)

The patients may also complain about variety of sensory disorders, including altered taste and xerostomia, as are the most commons. (Bergdhi, J., G. Anneroth, 1993; Hugoson, A., B. Thorstensson, 1991; Grasky, M., S.J. Silverman, H. Chin, 1991; Lowentalu, pisantis, 1978; Ferguson, N.M., J. Carter, Boyle, etc, 1980; Grushka, M., B.J. Sessle, R. Miller, 1987; Borwning, S., S. Hislop, C. Scully, 1987)


But most authors agree on complexion of the treatment procedure (Campisi, G., Di, 2003) and there is not a definitive treatment yet, although several ways have been suggested. (Grinspan, D., et al., 1995; palacios, Sandhez. M.F., et al., 2005), benzodiazepins and anticonvalecents (Grushka, M., et al., 2002) have been reported to be usefull in treating BMS.

“Case Report”

Case 1:

A 50 years old man, suffering from burning of mouth for 3 months, had been reffered to Oral Medicine Department of Shiraz Dental faculty. He was a military officer and married.
His tongue was the most burning site. He also complained about expansion of his mandible, close to right premolars. An internist had examined him but there wasn’t any underlying systemic disease. Specialists in oral medicine didn’t find any pathologic lesion such as ulcer, erythema and atrophy. In his oral mucosa. No expansion was detected in extra and intra oral examination.

To exclude susceptible systemic diseases laboratory tests were performed including CBC, FBS, SI, Plasma transferin level, vit B12 & folic acid. We examined his salivary glands and ordered a periapical radiography to assess the premolars’ region. All of tests were normal and no abnormality was detected in the radiograph.

According to the complete history of present illness, the burning sensation worsened when he becomes angry even at night. His occupational stress was so much and mouth burning level lowered in holidays.

The diagnosis was “BMS”. The intensity of burning was measured by visual analog scale (VAS) and it was 4 in the first visit (Maximum of VAS is 10). According to stress, his treatment procedure started just with ¼ of clonazepam tablet (1mg) at night, and recall after a week to assess effects and also probable side effects.

At first follow up visit, the patient declared a partial relief of burning (VAS=2) but no changes in mandibular expansion. There was no drug side effect. So he was advised to continue the tablet in previous regimen. At second recall, after two weeks, the patient was very satisfied, because of the complete relief of burning (VAS=0) and expansion.

It seems that clonazepam as a shortacting anxiolythic agent, could play a significant role in treatment of BMS in this case.

Ofcource, while his stressors exist if we discontinue the drug, symptoms may relaps, so the definitive treatment is changing his life style.

Case 2:

A 67 years old man, suffering from mouth burning and facial pain for 2 months was referred to Oral Medicine Department of Shiraz Dental faculty. He was a clerk and married. Burning sensation was in all oral mucosa; but mostly in the tongue. Pain distributed over left side of his face without following any certain neural direction. Burning and pain started together 2 months ago, sometimes fluctuating in level but never disappear in this period of time. He had been visited by an internist, specialist in infectious disease and neurologist but non of them found any systemic disorder. Using Acetaminophen, NSAIDS and some herbaceous drugs, didn’t have a significant effect on his symptoms.

A specialist in oral medicine examined him but no pathologic lesion in his oral mucosa was found and no any trigger point for the pain was detected.

To exclude susceptible systemic disease, laboratory tests were performed including CBC, FBS, SI, Plasma Transferrin level, vit B12 & folic acid. We also examined his salivary glands, But found nothing abnormal. The intensity of burning and pain was measured by visual analog scale (VAS) and both was 5 . In an interview we got that he was concerned about retirement and its economic consequences, and about his children and their job. Thinking about these things worsen the pain & burning. The pain did not interfere with eating and sleeping.

The diagnosis was BMS and atypical facial pain. The treatment procedure started just with ¼ of clonazepam tablet (1mg) at night. At first follow up visit, after one week, it seemed that he was better and visual analog scale confirmed that. VAS for pain was 3 and for burning was 2. We continued the treatment as it was.

At the next recall, after one month, there was no pain and no burning sensation (VAS=0). No adverse effect was seen because of the drug in both visits.

It seems, anxiety management of the patients can be usefull in the treatment of burning mouth syndrome.

Discussion:

Bergdahl and (1999) studied on the prevalence of BMS in different age groups. They found that BMS does not occur in men before 40-49 years and after 50 it’s prevalence becomes 0.7-3.6%. Both of our cases were in the older group.

Authors agree on tongue to be the most common site of burning in BMS patients (Zakrzeswska, J.M., I.M. Glenmv, H. Forssell, 2001; Elad, S., R. Czerninski, E. Eliay, 2002; Lamey, P.J., A.B. lamb, 1988; Basker, R.M., D.W. Sturdee, 1978; Vander waal I., 1990) and in our cases it was the same.


Although the most common symptoms in BMS are xerostomia and altered taste (Bergdhi, J., G. Anneroth, 1993; Hugoson, A., B. Thorstensson, 1991; Grasky, M., S.j. Silverman, H. Chin, 1991; Lowentalu, pisantis, 1978; Ferguson, N.M., et al., 1980; Grushka, M., B.J. Sessle, R. Miller, 1987)1, they were not seen in our cases.

According to the results of Grushka’s study, low dose benzodiazipines can be useful in treatment of BMS (Grushika, M., et al., 2002) as it was useful in treatment of our cases.

Reference


Santoro, V., G. Caputo, F. Peluso, 2005. clinical and therapeutic experience in 28 patients with BMS.Minerva Stomaol., 54(9): 489-496


