

Letter to the Editor

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Vitamin B1, B6 and B12 injections relieve symptoms of burning mouth syndrome

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Dear Editor,

Burning mouth syndrome is a diagnosis that is usually difficult for patients to accept. Clinical examination reveals no changes of the oral mucosa, but the patients have pain or burning symptoms. These symptoms are usually long-term and often reduce quality of life. The prevalence of this condition varies between 0.7 per cent and 4.5 per cent, depending on the observed population. The diagnosis of burning mouth syndrome is established after detailed oral examination and after exclusion of possible local and systemic factors¹. Psychological problems can sometimes be observed in this group of patients, such as anxiety, depression and personality changes. The evidence points out that the condition is neuropathic, but the exact cause is not yet clarified. Different treatment modalities have been applied in practice, such as antifungal therapy, stimulation of salivary flow, topically applied local anaesthetics, antiepileptics, oral mucosa protectors or capsaicin. Avoiding oral parafunctions, systemic medication therapy, hormone replacement therapy or cognitive therapy¹ have also been used, but none have been shown to be superior and effective in all patients. Patient often make laboratory tests like complete blood count, blood glucose, serum iron and examinations by different specialist until the diagnosis is established. Lack of adequate therapy is often a problem in clinical work, when communicating a diagnosis to a patient. It is vitally important to explain to the patient that the exact aetiology of symptoms is still unknown and that only symptomatic therapy is available. We are very aware that primary burning mouth syndrome (BMS) is not connected to vitamin B deficiency; however, as it is neuropathy in origin we assumed that the vitamin B injections would help. Initially we treated 91 patients with vitamin B1, B6 and B12 injections. Solution for injection contains 100mg of vitamin

B1 and B6 and 1mg of vitamin B12. Patients were prescribed nine vitamin B injections, which were given every other day into gluteal muscle (i.m.). Prior to the study no laboratory vitamin B tests were performed as they are quite expensive. Our results are partially in concordance with Lin et al.² who found vitamin B12 deficiency, but not folic acid deficiency in BMS patients. Vitamin B12 deficiency was also confirmed by the findings of De Giuseppe et al.³ and Field et al.⁴ in patients with symptoms of burning mouth. Contrary to these findings Hugoson et al.⁵ reported that vitamin B replacement therapy did not have any influence on BMS, although most of the patients (15 out of 16) had low thiamine (B1) and/or riboflavin (B2) levels. Furthermore, the same authors stated⁵ that the levels of pyridoxine (B6) were normal in their patients. In this study, 91 patients with BMS were treated with vitamin B injections and in 75 patients there was complete remission of the burning mouth syndrome, whereas 16 patients were given clonazepam 0.5mg twice a day after therapy with vitamin B injections was finished. Taking into account the low price and potential benefit of the drug, we do support use of vitamin B1, B6 and B12 in patients with burning mouth syndrome as it is a cheap therapy with no unwanted side-effects.

Sincerely,

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