Burning Mouth/Tongue Syndrome (Glossodynia/Glossopyrosis)

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Burning mouth syndrome (BMS) is defined by the International Association for the Study of Pain as a burning pain in the tongue or other oral mucous membranes associated with normal signs and laboratory findings. The condition is now thought to be an intraoral form of neuropathic pain.

There is predilection for the condition for females in the menopausal to post-menopausal age group. The prevalence varies from 0.5-15% in this targeted group. Afflicted patients report a constant burning sensation. The preferred site for the pain is the anterior portion of the tongue although the anterior portion of the hard palate and the labial mucosa of the lip region are other common sites of pain.

Causes

- low concentrations of vitamin B complex (notably B12), folic acid and iron that can be identified by blood tests
- oral candidiasis (oral thrush) where small white plaques (specks) are present on the mucosa
- some patients report the onset of BMS after a significant ‘life event’ (e.g. death / separation of spouse or other major emotional shock)
- the majority of BMS patients, however, are idiopathic (unknown cause)

Treatments

- increase dietary intake of vitamin B, folic acid, iron and use of vitamin supplements etc under medical supervision if blood tests confirm low concentrations
- institute topical antifungal therapy if fungal plaques noticed
- psychological counselling for emotional shock
- there are no simple treatments that have proven to be effective in the majority of patients, however, two patient case studies discuss the individual approach taken for each patient

Patient case study 1

A 79 year old female reported a 5 year duration of "stinging and aching" pain situated across the hard palate, tip of the tongue and inside the lower lip. It was medium to severe in pain intensity and varied between 7-8 on the 0-10 pain intensity numerical scale. The cause was unknown (idiopathic) and "it just came on". Wearing her upper denture (false teeth) and eating made the pain worse. Her other medical problems included shingles and diabetes. There was no evidence of oral thrush and her blood tests were normal.

Please describe the pain problem that brings you to the clinic:

My upper gum aches & stings - wearing false teeth + eating makes it worse

She admitted having a lot of stress about her health (three heart attacks in the six months before the pain began). The stress was still present with being physically debilitated, her partner dying, and having to move from her own home into a nursing home. She had a poor sleep pattern and had lost interest in living ("why am I still here").

It was recommended that she focus on positive and realistic goals that she had previously enjoyed such as light gardening when considering her present health limitations. She was also encouraged to ask her remaining family to visit her more at the nursing home and communicate more with her neighbours in the nursing home. She was prescribed a low dose of an antidepressant (25 mg taken at night of amitriptyline) to help her sleep. The benefit of amitriptyline giving an improved sleep outweighed the side effect of a slightly dry mouth.

One year later acting on the advice given, she enjoys gardening, has developed friendships with neighbours, sees more of her family and has a good sleep pattern. She reports to free of pain and reports only mild discomfort when wearing her denture.

Patient case study 2

A 49 year old female reported a 3 month duration of "burning" pain inside the lower lip. It was quite distressing. Blood tests and the oral cavity were normal. She reported no recent significant episodes of stress. Due to the the recent onset of pain the patient was instructed to rinse with a topical anaesthetic mouth rinse for 3 minutes and then apply capsaicin ointment (0.025%) for 3 minutes. This was to be repeated morning and evening for 6 weeks. Capsaicin was chosen as it is a simple, cost-effective topical antineuropathic medication that ideally works best in neuropathic pain of recent onset. At a review 2 months later she reported a major reduction in pain ("more than 60%") and could easily tolerate the remaining mild discomfort.