New findings on characteristics of Burning Mouth Syndrome

The picture is becoming clearer regarding the chronic oral pain condition known as Burning Mouth Syndrome, or BMS, which mainly affects women who are middle-aged and older. In a dissertation at Sahlgrenska Academy, additional steps are being taken toward better diagnosis and treatment.

"Our hope is that the new findings will contribute to the development of objective diagnostic criteria and effective individualized treatment both that are currently lacking," says Shikha Acharya, who has a PhD in oral microbiology and immunology at the Institute of Odontology.

Burning Mouth Syndrome (BMS) is a chronic pain syndrome in the oral cavity that affects approximately 4% of the Swedish population. This chronic condition mainly affects middle-aged and elderly women.

The pain is experienced as burning or stinging. The tongue is most often afflicted, but the palate, lips and gums also may be affected. Other common symptoms include dry mouth and altered taste sensation, such as a bitter or metallic taste in the mouth.

BMS is a challenge for health care providers, particularly in dental care, and a debilitating condition for many of the patients. When they estimate their problem on a visual analogue scale (VAS) where 0 is "not at all difficult" and 100 is "unbearable," the average response is 66, the dissertation indicates. The findings came from 56 women with BMS.

In her work Shikha Acharya also connected clinical findings and self-reported reported findings from questionnaires from patients with BMS about their symptoms and background (other diseases, use of medications, etc.) along with saliva-related factors. The results have been compared with a gender- and age-matched control group.

It turns out that 45 percent of the BMS patients reported to have altered taste sensations. A total of 73 percent experienced pain that was burning or...
stinging or a combination of the two, but stinging and numbness also occurred.

In addition to BMS, they have a higher incidence of other types of diseases, use more medications, are more prone to grinding their teeth and report more allergies than the control group. However, more advanced analyses show that BMS was strongly associated to self-reported skin diseases and subjective oral dryness.

The fact that the BMS patients, compared with people in the control group, report that they suffer considerably more from skin diseases and skin problems is a new discovery. Similarly, that the mucin proteins in BMS patients' saliva are altered and contain lower amounts of carbohydrate structures that affect the oral cavity's immune system.

Analysis of inflammatory constituents in saliva shows complex relationship between BMS and background inflammation, with some of the BMS patients having higher levels of inflammation than the control group while others had lower.

The dissertation work is part of a larger project aimed at finding a model for BMS that can facilitate diagnosis and treatment in the future. The new pieces of the puzzle are helping to characterize the disease and the persistent mouth pain associated with it.

"It's important because the afflicted patients often feel that their surroundings and health care professionals doubt their ailment," says Shikha.

**Source:**