Burning Mouth Syndrome in Psychiatric Patients: Three challenging case-reports

J. Reis (1); S. Henriques (2); I. Coelho (2); A. Baptista (2)

(1) Centro Hospitalar e Universitário do Algarve, Department of Psychiatry, Faro, Portugal
(2) Centro Hospitalar Psiquiátrico de Lisboa, Lisboa, Portugal

Purpose: To present three case reports of BMS followed in Psychiatry outpatient clinic at Centro Hospitalar Psiquiátrico de Lisboa.

Methods:
- Patients were evaluated in Psychiatry outpatient clinic, being applied Hamilton Depression Scale (HDS) and Hamilton Anxiety Scale (HAS).
- They were evaluated by other medical specialties to clarify about organic problems (Stomatology, Gastroenterology, Neurology and, in one case, by Dermatology and Rheumatology).
- They had Computerized Tomography (CT) of the brain, Orthopantomography and blood tests including complete blood count (CBC), erythrocyte sedimentation rate (ESR), C-reactive protein (CRP), glucose levels, folic acid, vitamin B12, thyroid function, antinuclear antibody (ANA) titer and rheumatoid factor (RF) screening.
- In one case, upper gastrointestinal (UGI) endoscopy was performed for gastric reflux study, and, in other case, a biopsy of the salivary glands in order to rule out Sjögren Syndrome.

Results:
- All case reports refer to female patients, with mild-old age, in agreement with the epidemiological data presented in literature.
- There are several local, systemic and/or psychological factors involved such as:
  * Gastroesophageal reflux disease (GERD)
  * Endocrine changes (hypothyroidism, diabetes, menopause)
  * Nutritional deficiencies (Vitamin B12)
  * Psychiatric medication (SSRIs, benzodiazepines, neuroleptics)
  * Antihypertensive therapy
- Sjögren Syndrome was excluded in one of the patients.
- Several therapeutic attempts have been made in all patients, with only partial or temporary improvement of the symptoms.

<table>
<thead>
<tr>
<th>Case report 1</th>
<th>Case report 2</th>
<th>Case report 3</th>
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</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>64 years old</td>
<td>77 years old</td>
</tr>
<tr>
<td>Evolution</td>
<td>4 years</td>
<td>4 years</td>
</tr>
<tr>
<td>Psychiatric diagnosis</td>
<td>HDS 19 HAS 18</td>
<td>HDS 32 HAS 20</td>
</tr>
</tbody>
</table>
| Medical history | - Cerebrovascular accident
  - Dyslipidemia
  - GERD
| - Type 2 diabetes
  - Arterial hypertension
  - Dyslipidemia
  - Vertiginous syndrome
  - Hypothyroidism |
| Alters in complementary diagnostic tests | None | UGI endoscopy: chronic gastritis (H. pylori) | Blood tests: vitamin B12 deficiency Brain CT: schwannoma |
| Relief factors | Ice, Chew Eucalyptus tablets
  Switch SSRIs (sertraline) to SNRI (venlafaxine) | Alpha-Lipoic Acid
  Sucralfate
  Diclofenac (oral solution) | Dextpanthenol/chlorhexidine/chitosan gel
  Sodium bicarbonate |

Background: The Burning Mouth Syndrome (BMS), chiefly affecting the middle or old age women, refers to chronic orofacial pain. It is characterized by an intense burning or stinging sensation, preferentially involving the tongue or other areas of the oral mucosa, without any visible mucosal change, lesions or laboratory findings. The exact etiopathogenesis of this condition remains unclear and it’s presumed to be multifactorial, involving the interaction between neurophysiologic mechanisms and psychological factors.

Conclusion:
- Psychiatric patients are at particular risk for BMS, since there is a strong link between this condition and the psychic status.
- The cause-and-effect relationship between depression, anxiety or neuroticism, and BMS is not clear as the psychopathology may be either causative of or consequential to the oral symptoms.
- Moreover, some psychiatric drugs have been related to burning sensation in the mouth.
- Investigation of novel pharmacological interventions is required, since current treatment approaches reveal unsatisfactory.

References:

Author’s contact: joreis@chalgarve.min-saude.pt