# Comparison of patients' and providers' severity evaluation of oral mucosal conditions

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***Background:*** In dental diseases, significant discrepancies were observed in the oral health-related quality of life evaluation between patients and providers. Few studies have been performed specifically on the impact of oral mucosal diseases on patients' health.

***Objective:*** We sought to compare the evaluation of the severity of oral mucosal conditions in providers and patients.

***Methods:*** Patients with an oral mucosal condition were recruited at the oral health care unit of a dermatologic hospital. Severity was evaluated both by the physician and by the patient, using a global severity assessment score on a 5-point scale. The 14-item Oral Health Impact Profile was used to evaluate oral health-related quality of life, the 12-item General Health Questionnaire for psychologic problems, and the 20-item Toronto Alexithymia Scale for alexithymia (ie, the difficulty in identifying and expressing feelings).

***Results:*** Data were complete for 206 patients. The agreement between patients' and providers' evaluation was very low (Cohen $\kappa$ = 0.18). Severity was particularly underestimated by the physician in patients with alexithymia (43% compared with 25% of patients with no alexithymia) and with psychologic problems (44% vs 25%).

***Limitations:*** Because of the high number of different conditions, and thus the small figures in each group, it was not possible to analyze the concordance between patient and provider in each single condition.

***Conclusion:*** Even in the severity assessment of his or her own disease, it is plausible that a patient does not provide a simple clinical evaluation, but includes subjective aspects. It is important for the physician to take into account the severity the patient perceives in making treatment decisions, and in evaluating clinical improvement. ( J Am Acad Dermatol 2011;65:69-76.)

***Key words:*** alexithymia; communication patient-provider; 14-item Oral Health Impact Profile; oral mucosal conditions; Physician Global Assessment; quality of life; severity.

The importance for providers of communicating with patients to understand their perception of disease is widely advocated. This may have important consequences in clinical practice: in dermatologic patients, for example, the lowest level of satisfaction with care was found among patients whose symptom-related quality of life was worse than the clinical severity rated by the dermatologist.[1]

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Oral health is an important component of general health, and has bidirectional and complex interactions with systemic health.[2] Dental caries and periodontal diseases have historically been considered the most important oral health burdens. However, oral mucosal lesions and oral cancer may have an important impact on patients' health.[3] Oral mucosal lesions mainly include aphthous stomatitis, gingivitis, candidiasis, leukoplakia, glossitis, burning mouth syndrome (BMS), papilloma, geographic tongue, hairy tongue, fissured tongue, oral lichen planus (OLP), frictional keratosis, herpes, and pigmented lesions. Lesions can be the predominant or minor manifestation of a given disease. They are observed commonly in autoimmune blistering skin diseases (eg, pemphigus vulgaris), and as a consequence of diseases, such as diabetes, HIV/AIDS, and chronic graft-versus-host disease.

**CAPSULE SUMMARY**

- We observed a very low agreement between patients' and providers' evaluation of severity in oral mucosal conditions.
- The low agreement was observed in conditions with both symptoms and clinical signs, and in absence of them.
- It is plausible that a patient does not provide a simple clinical evaluation, but includes subjective aspects.
- It is important for the physician to take into account patients' subjective aspects in evaluating clinical improvement.

The aim of this study was to compare the evaluation of the severity of different oral mucosal diseases by providers and by the patients themselves. The underlying hypothesis was that, even in the severity assessment of his or her own disease, it is plausible that a patient does not provide a simple clinical evaluation, but includes subjective aspects, which contribute to the burden of a disease.

Few studies have been performed on the impact of oral mucosal diseases on patients' health, and they mainly concerned oral cancer.[4-6] In a previous study,[7] 206 patients with a wide range of oral mucosal diseases reported a high impact of the disease on their oral health-related quality of life (OHRQoL). In the current study, by comparing the disease severity assessment by patients and providers, we aimed to analyze the possible discrepancies between them, and their possible determinants. In particular, we investigated if psychologic problems of patients, such as depression, anxiety, and alexithymia (ie, difficulty in identifying and describing feelings), could be associated with a different perception of disease severity between providers and patients.

## METHODS

### Study population and data collection

The study population consisted of patients referred to the oral health care unit of a dermatologic hospital in Rome, Italy, from April 2005 to November 2006, and from February to July 2009. Inclusion criteria were: diagnosis of an oral mucosal condition, age 18 years or older, ability to understand and read Italian, and absence of cutaneous involvement. Patients who signed an informed consent were enrolled in the study. The study was approved by the institutional ethical committee.

### Diagnosis

The diagnosis was based on clinical examination. Oral biopsies were performed when necessary (eg, for OLP).

Oral conditions were operationally grouped by a senior dermatologist into 7 categories: (1) recurrent aphthous stomatitis (RAS); (2) BMS; (3) nonmalignant lesions, including fibroma, papilloma, leukoplakia, and epithelial hyperplasia; (4) bacterial and fungal diseases, including candidiasis and sialoadenitis; (5) morphology and color changes of tongue, including geographic and hairy tongue; (6) OLP; and (7) oral pemphigus. Diseases that were not frequent enough to constitute a group (eg, angular cheilitis or xerostomia) were included in the "other" group. The conditions were further grouped into two categories: (1) having both clinical and subjective findings; and (2) not having both clinical and subjective findings. In the first group we included recurrent aphthous stomatitis, nonmalignant lesions, bacterial and fungal diseases, OLP, and oral pemphigus. In the second group, BMS and morphology and color changes of the tongue were included.

### Outcome measures

For each patient, we obtained the Physician Global Assessment (PGA) and the Patient Global Assessment (PtGA), consisting of the questions "In your opinion, compared to other patients with the same condition, how severe is the disease of patient X?" and "In your experience, how severe is your disease?" respectively. Answers were given on a 5-point scale: very mild, mild, moderate, severe, and very severe.

OHRQoL was measured with the 14-item Oral Health Impact Profile (OHIP-14) questionnaire.[8] The questions concern 7 dimensions, based on the conceptual model of oral health developed by Locker[9]: functional limitation, physical pain, psychologic