

Insights into etiopathogenic and clinical features in 3RU oral diseases: an interesting and challenging research focus.

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Conflict of interests: None.

Acknowledgements: To the Chilean National Commission for Scientific and Technological Research (CONICYT) Becas-Chile scholarship for Ph.D. students, No. 8540/2014.

Cite as: Rivera C. Insights into etiopathogenic and clinical features in 3RU oral diseases: an interesting and challenging research focus. *J Oral Res* 2017; 6(2):35. doi:[10.17126/joralres.2017.012](https://doi.org/10.17126/joralres.2017.012)

Many research groups and different interventions are trying to address challenges in oral medicine. How can we collaborate in these efforts? We could try to understand - at local and national level - which are the most relevant oral diseases in our population. Measuring the frequency of a disease or others health outcomes in a population and identifying how the disease frequency may differ over time are important steps to discover etiological agents and determining effective methods for treatment.¹

The second step needed to move forward would be to check the amount of information available concerning each of these relevant oral diseases. A tool that works in this regard is SciCurve, a search engine that transforms a systematic literature review into an interactive environment.² Nevertheless, if the focus is to work with frequent but poorly studied diseases, a good alternative is the web site of the Genetics and Rare Diseases Information Center (GARD).

By combining these two first steps, we could investigate relevant (frequent) and rare oral diseases in our population. This research focus can become more attractive considering the clinical course of a particular condition. Grouping diseases with recurrent episodes (repeated relapses, with periods of remission in between) and unclear etiopathogenic processes (key aspects to be revealed), a highly problematic pathology group can be configured: The 3RU oral diseases (or simply, 3RUs).

3RUs are epidemiologically relevant (R), rare (R), recurrent (R) and unknown (U). The large number of open questions - about their etiopathogenic and clinical course - allows many opportunities to communicate results. This concept can be adapted to different geographic regions and combined with different variables. For example, diseases such as oral lichen planus, burning mouth syndrome and recurrent aphthous stomatitis could be fall within this group. These diseases represent a challenge to oral medicine -and most importantly- a problem to our clinical services and patients.

Limited knowledge about the mechanisms of this oral disease subgroup is possibly the greatest obstacle in understanding its causes and can explain the failure to identify specific therapies such conditions. Work with recurrent pathologies allows us the opportunity of regular check-ups, using each patient as a matched control and to define clinical profiles based on the disease activity and response to therapy. Identifying the 3RU oral diseases can help to solve important problems to the population along with revealing certain mysteries that dental science is still not deciphering.

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