ORAL DISEASES

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ORAL MYTH SERIES

Urban legends: facts and myths in oral diseases

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In the last 20 years we have observed incredible developments in Medicine and Dentistry owing to the proliferation of journals and a huge increase in the information available for any single topic. In particular, Internet access dramatically changed the availability of medical information, and the patients use this as one of their primary sources of healthcare information. These two developments have culminated in the increasing importance of so-called Evidence-based Medicine/Dentistry (EBM/D) (Sackett *et al*, 1996). The essence of the evidence-based approach is to use the evidence from all sources to provide the best outcome for the patient. Nevertheless, some evidence is better, stronger, or more valid than the rest (Richards, 2003), and yet, only a minority of decisions made in health services are based on good evidence. Conversely, consistent amounts of knowledge that we generally assume to be trustworthy or robust are not supported by strong scientific data. These common beliefs are almost always plausible, often even attractive, and repetitions in articles and textbooks increase their importance and credibility, just like urban legends.

Urban Legends or Myths are indeed not uncommon in rigorous disciplines such as both science at large and medicine and dentistry in particular (Galler, 2006; Conn, 2008; Koretz, 2008; Sansone and Sansone, 2008; Francl, 2010). Medical/dental urban legends are typically triggered by an article or meeting report, or sometimes, they arise from apparently common clinical experiences (Galler, 2006). These legends may be related to old information trusted by default and never reviewed in depth. They may have some kernel of truth to them, but the ability to rapidly disseminate information to vast numbers of people via Internet has drastically shortened the time it takes for unproven observations to become urban legends (Conn, 2008).Although patients may be more keen than health care workers to entrust medical urban legends, these can also spread among 'specialists'. An example of medical urban legend was the belief that measles, mumps, and rubella (MMR) vaccination or excessive thimerosal (which is an ethyl mercury–containing preservative used in selected vaccines in the 1990s) exposure may be causally linked to the occurrence of autism (Shevell and Fombonne, 2006; Fitzpatrick, 2007; Scahill and Bearss, 2009). A similar 'mercury poisoning' hypothesis has linked amalgam restorations to disorders such as Alzheimer's disease or multiple sclerosis (Wahl,2001; Aminzadeh and Etminan, 2007). However, medical/dental urban legends are sometimes more subtle and difficult to be recognized but when identified, they can ultimately inspire us to improve (Francl, 2010).

Indeed, one of the fundamental steps in the EBM/D process is the identification of clinical problems. Unfortunately, the vast majority of published reviews are poorly focused on addressing specific queries or are mainly devoted to therapeutic issues. With this in mind, *Oral Diseases* will present a series of critical reviews in oral medicine aimed at distinguishing between *Facts* (based on the best available evidence) and *Myths* (based on personal opinion, outdated/distorted information or no data at all). The first step of this process was to find general topics routinely encountered by oral medicine and oral pathology specialists. The chosen topics are the following:

1 recurrent aphthous stomatitis
2 Sjogren's syndrome
3 pemphigus vulgaris
4 candidosis
5 oral leukoplakia
6 lichen planus
7 mucous membrane pemphigoid
8 orofacial granulomatosis
9 HIV infection

Afterward, specific questions regarding each topic were identified. While specific to oral medicine and oral pathology, some of the topics are clinically common for dermatologists, otolaryngologists, general physicians, gastroenterologists, rheumatologists, and infectious diseases specialists. The reviews are especially focused on controversial topics or established knowledge that has a

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paucity of solid evidence that could have strong clinical implications in the daily practice.

To achieve the very ambitious above-mentioned aims, several well-renowned specialists from the fields of medicine and dentistry from all over the world were invited to prepare nine state of-the-art articles. Each team was generally composed of at least one dentist and one or more medical specialists who addressed 4–5 queries, grading the evidence whenever possible, following the method suggested by Richards, (2003).

I had the great privilege of working as guest editor for this series and enjoyed being involved in the preparation of these outstanding papers. I would also take this occasion to thank all the colleagues who accepted to work on this project for their invaluable efforts. We hope that these articles will provide objective information that can positively influence clinical activity and drive future important research.

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