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Letter to the Editor: Attitudes among Spanish general dentists in relation to burning mouth syndrome: Results of a national survey

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Dear Editor,

Burning mouth syndrome (BMS) is a complex and multifactorial clinical disorder characterized by a continuous burning and itching sensation in the absence of oral lesions that would account for the discomfort. (1) The estimated prevalence is 0.7-4.5%. (1,2) While BMS can affect many areas in the mouth, the tongue is the most commonly affected area.(1) Almost 90% of affected patients are women in the aged 50-70 years. (1,2) The etiopathogenesis is not known, although many studies have related the syndrome with pharmacotherapy (3), and proposed treatments have been aimed at hypothetical etiological factors, or simply intended to lessen or eliminate the symptoms. (4-6) Proposed management includes patient information, the correction of habits, protection of the oral mucosa and the prescription of rinses and antiseptic products.(5) Benzylamine (an antiinflammatory and antiseptic drug) in 0.15% solution has also been proposed, but with no significant degree of effectiveness. The same can be said of rinses with local anesthetics such as lidocaine. At present, use is being made of psychoactive drugs such as trazodone, paroxetine and sertraline. Tricyclic antidepressants such as amitriptyline (at a dose of 10-150 mg/day) or nortriptyline; anxiolytics such as diazepam (6-15 mg/day) and other benzodiazepine derivatives such as clonazepam (0.25-1 mg/day) have been shown to be effective. Studies have also demonstrated

some efficacy with alpha-lipoic acid for the treatment of BMS symptoms. (5, 6)

A review of the literature yielded no previous studies of the behavior of dental professionals in relation to BMS. We thus decided to evaluate the knowledge, attitudes and practices among Spanish dentists in relation to suspected BMS, attempting to identify differences in therapeutic practice and the possible influence of the years of professional experience, gender, work setting (private, public) and professional grade (dental surgeons or physicians specialized in dental care). Sampling surveys were used in the study, which was approved by the Ethics Committee of the University of Murcia. The study design was based on the list of the affiliated dentist provided by the General Stomatological and Odontological Council of Spain, 2005. The size of the sample was defined by adopting the random extraction method, assuming a confidence interval of 95%, a maximum variance of $P=Q=50$ and a sampling error of less than 3%. The initial sample was chosen by a stratification process, using individual provinces as strata. The inclusion criterion was general dentist in practice and the exclusion criterion was oral surgeons, orthodontics, etc. Of the 1022 dentists chosen, 840 replied (74%). The study was conducted between January and November 2006, and assurances of anonymity were given. The questionnaire comprised several item blocks and was pre-tested with 30 dentists to improve the validity of responses.

A first item block evaluated socio-demographic aspects

Table I. Statistical significance between the way in which BMS is treated and socio-demographic items.

Treatment alternatives				
	Experience	Gender	Work setting	Grade
Patient information	T=-2.259	X ² =0.475	X ² =7.876	X ² =17.459
	P=0.024*	P=0.491	P=0.019*	P=0.000*
Anxiolytics/antidepressants	T=-4.083	X ² =6.264	X ² =0.645	X ² =18.431
	P=0.000*	P=0.012*	P=0.724	P=0.000*
Chlorhexidine, triclosan, rinses	T=-2,279	X ² =1.290	X ² =3.507	X ² =10.012
	P=0.023*	P=0.256	P=0.173	P=0.002*
Effectiveness of current treatments	T=-0.962	X ² =2.008	X ² =0.794	X ² =5.062
	P=0.337	P=0.366	P=0.939	P=0.080
Other treatments	T=-0.608	X ² =0.097	X ² =5.005	X ² =0.031
	P=0.543	P=0.756	P=0.082	P=0.860

Experience (years of professional experience), gender (males and females), work setting (public private and mixed) and professional grade (odontologist and stomatologist)..

* statistically significant $p < 0.05$

and the years of professional experience, gender, work setting (public and private) and grade (dental surgeons or physicians specialized in dental care). A second item block explored therapeutic attitudes in relation to patients with BMS (patient information on BMS, drug treatment (anxiolytics, antidepressants) and rinses).

Males slightly outnumbered females (50.4% versus 48.1%). The mean age of the global series was 27.99 years, with standard deviation (SD) = 9.967. As to the variable "years of professional experience", the mean was found to be 12.25 (SD = 8.432). Lastly, in relation to the work setting, 97.3% of the interviewed professionals were dedicated to private practice, and 8.8% to public practice. In turn, 67.1% of interviewed professionals had studied dentistry in dental schools, while 32.9% held a degree in medicine, with stomatology as a specialty.

The frequency with which the professionals diagnosed BMS was not influenced ($p=0.195$) by the years of professional experience (12.16 ± 8.35), although it should be noted that a greater number of years in practice led to a higher number of cases being diagnosed on a monthly basis (>3 cases). However there was a significant relation between public and private practice ($p=0.000$).

A high percentage (44.6%) of professionals referred the patients to specialised centres, while those who treated the pathology themselves tended to have more experience ($p=0.02$). There was no relation in this respect with gender or place of work (private or public).

Among the non-exclusive options of treatment and the results should be noted the information given to the patient concerning the illness (53.57%), the use of mouth washes (41.66%) and psychotropic drugs (17.02%), while only 8.57% of dentists affirmed that the treatments available were effective for BMS syndrome.

No significant gender differences were observed regarding

the management of BMS patients, except as refers to the use of systemic drugs (used by 15.2% of the males versus 11.3% of the females; $p=0.01$) ($p < 0.05$). No statistically significant relation was observed between the treatment used and the work setting, although the most experienced dentists ($p=0.024$) opted for systemic treatment.

As regards professional grade, odontologists were more inclined to provide information to the patient (43.7% versus 41.3% among medical doctors specialized in dentistry; $p=0.000$), and to prescribe rinses (e.g., triclosan or chlorhexidine) (34.1% versus 31.9%; $p=0.02$). In contrast, the stomatologists were more inclined to treat glossodynia with anxiolytics or antidepressants (16.2% versus 11.8% among the dental surgeons; $p=0.000$) (see Table I).

We are dealing with a syndrome of diverse etiology and still unknown in many respects. Such a situation requires the use of agreed protocols or guidelines about the treatments available for a disease that Spanish dentists in general practice are increasingly faced with.

References

- Scala A, Checchi L, Montevocchi M, Marini I, Giamberardino MA. Update on burning mouth syndrome: overview and patient management. *Crit Rev Oral Biol Med.* 2003;14(4):275-91.
- Silvestre FJ, Serrano C. Burning mouth syndrome: concepts review and update. *Med Oral.* 1997 Jan;2(1):30-38.
- Salort-Llorca C, Mínguez-Serra MP, Silvestre FJ. Drug-induced burning mouth syndrome: a new etiological diagnosis. *Med Oral Patol Oral Cir Bucal.* 2008 Mar 1;13(3):E167-70.
- Gorsky M, Silverman S Jr, Chinn H. Clinical characteristics and management outcome in the burning mouth syndrome. An open study of 130 patients. *Oral Surg Oral Med Oral Pathol.* 1991 Aug;72(2):192-5.
- Zakrzewska JM, Forssell H, Glennly AM. Interventions for the treatment of burning mouth syndrome: a systematic review. *J Orofac Pain.* 2003 Fall;17(4):293-300.
- Patton LL, Siegel MA, Benoliel R, De Laat A. Management of burning mouth syndrome: systematic review and management recommendations. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod.* 2007 Mar;103 Suppl:S39.e1-13.