

EDITORIAL

REACTIONS TO LOCAL ANESTHETICS

Few studies have tried to determine the true incidence of adverse reactions to local anesthetics, possibly because these agents are generally well tolerated. Professionals who habitually use anesthetics, anesthesiologists and especially dentists, very occasionally need to resolve a serious problem arising from their use. However, fear of a reaction of any type or intensity is felt when patients report that they are allergic to anesthetics or drugs in general or when a professional who treated a patient who experienced a reaction has to administer a new anesthetic. Even so, as revealed by Fisher and Bowey (1) in a study of 208 patients with a history of allergy to local anesthesia referred over a twenty-year period, allergic reactions are rarely confirmed. When progressive challenge was used, sensitization was found in only eight patients (4 immediate and 4 delayed reactions) and in 39 patients, a possible adverse response to additives in anesthetic solutions could not be excluded.

In general, anesthesiologists get a bad press. Hence many patients insist on receiving full information on the possible risks of being anesthetized and are sometimes more worried about this than about the intervention itself. Dentists are perhaps those who are most frequently questioned by their patients when these have to undergo even the smallest of procedures since many people (and not just children) are already nervous about any manipulation in their mouths and are even more so when a local anesthetic is required.

Dentists know from experience that the risk of an adverse reaction is minimal. However, the occasional court ruling in favor of patients who suffered adverse reactions after the dentist failed to test for allergy to the anesthetic used (2) have spread alarm among professionals, prompting them to request routine allergological studies before all interventions. The same has occurred with other drugs and devices used in surgical procedures carrying a higher risk. These requests are, in the opinion of allergists, evidently inappropriate (3).

*The study by Baluga et al, which appears in the present edition of *Allergología et Immunopatología*, should reassure dentists. These authors present a prospective study, performed over three years, with the participation of dentists and allergists, in which 5,018 patients undergoing oral interventions under anesthesia were included (4). This is possibly the epidemiological study with the greatest number of interventions and once again it shows how rare adverse reactions to local anesthetics are. Such reactions were observed in only 25 patients (17 of them women) and no allergic etiology was found in*

any of the patients since the reactions were vasovagal or psychogenic. The study does not mention whether the possibility of reactions to additives such as parabens, metabisulfite or sodium bisulfite were considered. These substances are capable of inducing the production of specific IgE but because *in vivo* and *in vitro* diagnostic techniques have not been standardized, their detection is problematical (5).

In conclusion, providing patients with full information is perhaps the best way to prevent these reactions, which are mainly psychogenic, thus gaining the trust of patients by assuring them of the good tolerability of anesthetics and the slight probability that they will provoke an allergic reaction. However, it is also advisable to give written information, signed by the patient or by relatives in the case of children.

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