We present a 54-year-old woman who suffered eczematous eruptions on her face after the administration of lidocaine and mepivacaine for dental surgeries. Patch tests showed delayed-type hypersensitivity to the amide local anesthetics lidocaine and mepivacaine with cross reaction to other aminoacylderivatives (prilocaine, bupivacaine) but not articaine.

**Key words:** Local anesthetics. Delayed-type hypersensitivity. Cross reactions. Lidocaine. Mepivacaine. Articaine.

**CASE REPORT**

A 54-year-old woman started a course of dental treatment in September 2002. Forty eight hours after local anesthesia with Scandibsa (mepivacaine 2%, ClNa, NaOH, water) she developed swelling of the soft tissues over the left zygoma and an eczematous eruption of her left cheek. She was treated with oral and topical steroids, clearing the lesions in seven days. One month later, 24 hours after the use of lidocaine (lidocaine 2%, ClNa, NaOH, water) for a new dental surgery a similar acute dermatitis occurred. She had previously undergone dental anesthesia with lidocaine and mepivacaine without incident. Patch tests with the European Stadard series were negative. Patch tests with the following local...
anesthetics were also performed: lidocaine (2 % aq), mepivacaine (2 % aq), bupivacaine (0.5 % aq), prilocaine (5 % aq), and articaine (4 % aq). They were evaluated at 48 h and 96 h according to the recommendations of I.R.C.G. Positive reactions were observed to lidocaine (+++), mepivacaine (+++), bupivacaine (+ +), and prilocaine (+ +) at days 2 and 4, but negative to articaine. Tests in ten controls were negative.

**DISCUSSION**

This case demonstrates delayed-type hypersensitivity to lidocaine and mepivacaine with cross-reaction to other aminoacylderivatives (prilocaine, bupivacaine) but not with articaine. Anesthetics used were preservative-free so allergy to preservatives was excluded.

Although contact allergy to amide local anaesthetics is uncommon, there are some publications about it. We have found cross-reactivity between the members of the group (there was no evidence that prilocaine or bupivacaine were previously used in this patient) as previous reports have described. It is interesting that there has not been reaction to articaine. This may be explained by its different chemical structure: all aminoacylamides have a methylated phenyl ring with the exception of articaine, which has a substituted thiophen ring. Bircher et al. describe a similar case of tolerance to articaine in a patient with delayed hypersensitivity to local amide anaesthetics.

When allergy to an amide local anaesthetic is suspected, we suggest testing other members of the group as well, including articaine.

**REFERENCES**