BMJ

Drug points: Dysgeusia and burning mouth syndrome by eprosartan

Xavier Castells, Isidre Rodoreda, Consuelo Pedrós, Gloria Cereza and Joan-Ramon Laporte

BMJ 2002;325;1277-
doi:10.1136/bmj.325.7375.1277

(P=0.008). Statistical significance was lost when adjustment was made for ulceration and then for maximum diameter. We found no evidence that surgeons in any of the three categories who performed more than six primary melanoma excisions annually had better outcomes than those who performed fewer excisions.

Comment

Survival of melanoma patients does not depend on the surgical background of the person removing the primary tumour. The object of this study was to provide an evidence base for primary care guidelines on appropriate specialist referral. The data show that the growth in dermatological surgeons excising primary melanomas has had no adverse affect on patient outcome. We found no evidence that any type of surgeon performing excisions of primary melanomas regularly had a better outcome than those who carried out fewer excisions, possibly because wide local excision is a relatively simple procedure. We therefore provide an evidence base to recommend referral of suspected primary melanomas to the dermatological, plastic surgery, or general surgical service with the shortest surgical waiting time.

Contributors: RMM collected the data, wrote the paper, and is the guarantor for the study. CAB and DJH analysed the data.

Funding: The Scottish Melanoma Group is funded by NHS Scotland. RMM receives financial support from the Leverhulme Trust.

Conflicts of interest: None declared.

1 MacKie RM, Hole DJ, Hunter JAA, Rankin R, Evans A, McLaren K, et al. Cutaneous malignant melanoma in Scotland: incidence, survival, and mortality 1979-94. *BMJ* 1997;315:1117-21.
2 Veronesi U, Cascinelli N, Adamus J, Balch C, Bandiera D, Barchuk A, et al. Thin stage I primary cutaneous malignant melanoma: comparison of excision with margins of 1 or 3 cm. *N Engl J Med* 1988;318:1159-62.
3 Balch CM, Urist MM, Karakousis CP, Smith TJ, Temple WJ, Drzewiecki K, et al. Efficacy of 2-cm surgical margins for intermediate thickness melanomas (1 to 4 mm): Results of a multi-institutional randomized surgical trial. *Ann Surg* 1993;218:262-8.
4 Sainsbury R, Haward B, Rider L, Johnston C, Round C. Influence of clinician workload and patterns of treatment on survival from breast cancer. *Lancet* 1995;345:1265-70.
5 Cox DR. Regression models and life tables. *J R Stat Soc* (B)1972;34:187-220.

(Accepted 17 April 2002)

Drug points

Dysgeusia and burning mouth syndrome by eprosartan

Xavier Castells, Isidre Rodoreda, Consuelo Pedrós, Gloria Cereza, Joan-Ramon Laporte

Eprosartan is an angiotensin II receptor antagonist. Dysgeusia and burning mouth syndrome attributed to angiotensin converting enzyme inhibitors have been reported.[1] Several case reports related to angiotensin II receptor antagonists have also been published. We report the case of a patient in whom oral eprosartan induced reversible taste disturbance and burning mouth sensation on two occasions. This case was reported to the Catalan pharmacovigilance centre.

A 48 year old woman with a 10 year history of essential hypertension was being treated with valsartan 160 mg daily. She had no other medical condition and was not taking any other drugs. She started taking eprosartan 600 mg daily because her blood pressure remained uncontrolled with valsartan. Three weeks later she complained of a metallic taste and a burning sensation in her mouth. The oral cavity was normal and no underlying medical causes were identified. She stopped taking eprosartan and one week later her taste had returned to normal. The dysgeusia was not attributed to eprosartan and she started taking the drug again. A few days later, dysgeusia and the burning sensation in her mouth returned. She stopped taking eprosartan and her taste recovered in two days.

Taste disorders related to angiotensin II receptor antagonists had not been described in clinical trials,[2] but several cases of dysgeusia have been reported in patients treated with losartan[3–5] and with valsartan.[6] To our knowledge, this is the first reported case of dysgeusia induced by eprosartan and the first case of dysgeusia induced by angiotensin II receptor antagonists with positive rechallenge. Dysgeusia with losartan but not with angiotensin converting enzyme inhibitors has been reported to occur in the same patient, suggesting that angiotensin converting enzyme inhibitors or angiotensin II receptor antagonists produce this effect by acting through different mechanisms.[5] Because the incidence of dysgeusia in patients treated with drugs from these two therapeutic groups is low,[1 2] it is possible that this adverse effect appears only in patients with some predisposing condition.

In our case report, the temporal sequence of events—and, in particular, positive rechallenge—and the lack of underlying concomitant diseases or other drugs strongly suggest that the association between dysgeusia, burning mouth syndrome, and eprosartan was causal. Because these effects occurred with eprosartan but not with valsartan at equivalent doses, however, our observation does not favour the theory of an effect due to the angiotensin II receptor antagonist class of drug. Factors predisposing to this adverse effect remain to be identified and the mechanism remains to be elucidated.

Funding: Departament de Sanitat i Seguretat Social, Generalitat de Catalunya.

Competing interests: None declared.

1 Henkin RI. Drug-induced taste and smell disorders. Incidence, mechanisms and management related primarly to treatment of sensory receptor dysfunction. *Drug Saf* 1994;11:318-77.
2 Mazzolai L, Burnier M. Comparative safety and tolerability of angiotensin II-receptor antagonists. *Drug Saf* 1999;21:23-33.
3 Malnick SD, Becker S. Dysgeusia by losartan in a patient intolerant of captopril. *Med Gen Med* 1999;4:E33.
4 Schlienger RG, Saxer MS, Haefeli WE. Reversible dysgeusia associated with losartan. *Lancet* 1996;347:471-2.
5 Heeringa M, van Puijenbroek EP. Reversible dysgeusia attributed to losartan. *Ann Intern Med* 1998;129:72.
6 Stroeder D, Zessig, I Heath R. Angiotensin-II antagonist cGP 48933 (Valsartan). Ergebnisse einer doppelblinden, plazebo-kontrolierten Multicenter-studie. *Nieren Hochdruckkrankheiten* 1994;23:217-20.

Fundació Institut Català de Farmacologia, Servei de Farmacologia Clínica, Hospital Universitari Vall d'Hebron, 08035-Barcelona, Spain
Xavier Castells
Consuelo Pedrós
Gloria Cereza
Joan-Ramon Laporte
Àrea Bàsica de Salut Pla d'Urgell, Mollerusa, Lleida, Spain
Isidre Rodoreda
Correspondence to: J-R Laporte jrl@icf.uab.es

BMJ 2002;325:1277