Multiple primary melanoma: risk factors and prognostic implications

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Patients who have had one cutaneous melanoma are at increased risk of developing a second primary melanoma. Previous studies may have overestimated this risk as they have been of patients from specialist referral centres and so are subject to selection bias.¹⁻⁴ We report the risk of and mortality from multiple primary melanoma in a well defined, geographically based group of British patients with primary melanoma.

Patients, methods, and results

The Scottish Melanoma Group maintains a well validated database of all cases of melanoma diagnosed in Scotland.⁵ We studied 3818 patients (from a population of 3 907 300) who had been registered with the group as having primary melanoma between 1979 and 1991.

Forty five patients developed more than one histologically confirmed invasive primary melanoma, giving a prevalence of multiple melanoma of 1.2% (95% confidence interval 0.8% to 1.5%). We estimated that the risk of patients with a single melanoma developing a second primary melanoma during the period of the study was increased roughly 200-fold. Thirty eight patients developed two melanomas and five patients three; two patients developed five and six melanomas. In 12 patients the first two melanomas were synchronous and in 33 the second melanoma was diagnosed within two years of the first. The mean Breslow thickness of the first melanoma was 2.1 mm, but the second melanoma was significantly thinner at 1.2 mm. This was the only difference between patients with multiple melanoma and those with a single melanoma.

We carried out a case comparison study of mortality from melanoma in which each patient with multiple melanoma was randomly matched with a patient with a single melanoma in terms of age, sex, Breslow thickness, and body site. The figure shows the survival curves of the two groups. The apparent survival advantage in those with multiple melanoma was not significant when the two groups were analysed as two independent samples (log rank test: $P=0.058$).

In a second case comparison study 21 patients with multiple melanoma and 21 controls (selected as above)

were questioned about known risk factors for melanoma; the skin was examined and a mole count performed. We found that a family history of melanoma and the presence of one or more naevi with histological features of atypia were each independently associated with a significantly increased risk of multiple primary melanoma. There was an excess of benign naevi and non-melanoma skin cancer in the patients with multiple melanoma, but this did not reach significance. None of the other risk factors studied was significantly associated with multiple melanoma.

Comment

The prognosis for patients with multiple primary melanoma seems slightly better than that for those with a single melanoma. This is unexplained because the patients with multiple melanoma in this study did not differ from those with a single melanoma in any of the known prognostic factors for melanoma, other than Breslow thickness, which was controlled for. This finding is reminiscent of the survival pattern of female patients with melanoma: women have a higher incidence of melanoma than men but a better prognosis.

Patients who have already had one primary cutaneous melanoma have a substantially increased risk of developing further primary melanomas, which should be borne in mind when making follow up arrangements. A family history of melanoma and the presence of atypical naevi are risk factors for multiple melanoma but would not predict most cases if used to direct surveillance. Most second melanomas in this study occurred within two years of the first, and in over a quarter of cases they occurred synchronously. All patients with melanoma should be educated about the early clinical features of primary melanoma. At diagnosis and at follow up visits the whole skin should be examined, not only the original site and draining lymph node basin.

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Comparative survival curves in 38 matched patients with single and multiple primary melanomas

Survey of general practitioners' prehospital management of suspected acute myocardial infarction

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The effectiveness of thrombolysis in acute myocardial infarction is greater the shorter the time between onset of symptoms and administration of thrombolysis.¹ Recent guidelines for the British Heart Foundation suggest that thrombolysis should be given within 90 minutes.² Debate continues, however, about the best way to give thrombolysis and about the role of general

practitioners.^{3,4} We studied general practitioners' knowledge of and attitudes and behaviour towards patients with suspected acute myocardial infarction and considered the relevance of our findings to the development of district policies.

Subjects, methods, and results

Between June and August 1992 we sent a questionnaire to all general practitioners ($n=205$) who refer patients to Plymouth's coronary care unit, where all hospital thrombolysis for myocardial infarction in Plymouth district is given. The district is clearly divided into rural and urban areas, with 143 urban and 62 rural general practitioners and longer times for travelling to hospital from the rural areas. We asked about the doctors' knowledge of thrombolysis; attitudes to aspirin; administration of thrombolysis and

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