
WHY NOT?

Why not explore a possible link between psoriasis and cancer?

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THE incidence of skin cancer in patients with psoriasis seems to be low despite repeated use of known carcinogens in treating the disorder; Shuster and colleagues (1979) suggest that there may be a reduced capacity of psoriatic skin to metabolize pre-carcinogens because of impaired aryl hydrocarbon hydroxylase (AHH) activity. If this hypothesis is correct, and if impaired AHH activity in psoriatic skin is shared by other tissues in addition to skin (Chapman *et al.*, 1980), the incidence of cancers associated with environmental carcinogens may also be reduced in patients with psoriasis.

A recent edition of the BBC programme *Tomorrow's World*, in featuring this hypothesis, may have given the impression that there are no further questions to be asked—but this is not the case. If AHH activity is important in determining other cancers, such as bronchial carcinoma among smokers, it would be worth while investigating whether the incidence of lung cancer is lower among patients with psoriasis who have a comparable history of smoking. Were this relationship to be established, the incidence of other cancers associated with environmental carcinogens in patients with psoriasis would be worth investigating. Another issue requiring investigation could be the familial pattern of psoriasis and the occurrence of evidence of lack of AHH activity.

A practice of average size might have up to 20 patients with psoriasis, and establishing a comparison group is relatively straightforward using the ordinary NHS alphabetical file of practice records. From such data it would be possible to produce some facts.

The sort of information required includes psoriatic patients' year of birth, the length of time they have been with the practice and any diagnosed malignancy, with date of diagnosis. The control patient is the next in the

alphabetical file who has the same sex and year of birth, matched for length of time in the practice; if this is impossible, a note is made of length of time in the practice. Again, any malignancy is recorded. Further background facts and figures might also be required, but the exercise should not be a large undertaking for the individual doctor.

A problem might lie in identifying psoriatic patients in the first place, but throughout the UK a number of practices have disease registers. If all such practices were to pool the information available in their notes and hospital letters, it should be possible to answer questions about the occurrence of skin and bronchial carcinoma in psoriatic and comparison groups, and from this to examine further possible links between impaired AHH activity and malignant diseases.

If you are interested, why not contact the Scottish General Practitioner Research Support Unit, and take the idea one step further?

Enquiries should be addressed to: The Director, Scottish General Practitioner Research Support Unit, West Gate Health Centre, Charleston Drive, Dundee DD2 4AD.

References

- Chapman, P. H., Kersey, P. J., Keys, B. *et al.* (1980). Generalised tissue abnormality of aryl hydrocarbon hydroxylase in psoriasis. *British Medical Journal*, **281**, 1315-1316.
- Shuster, S., Chapman, P. H. & Rawlins, M. D. (1979). Psoriasis and cancer. *British Medical Journal*, **1**, 941-942.

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