

- 270 (IQR 96–457) at 2 years. In controls ($n = 45$) the values were 367 (230–475) at baseline and 345 (IQR 245–455) at 2 years. The difference in median levels at 2 years was statistically significant ($P = 0.03$).
5. The difference in fibre intake shown in Table 2 is not statistically significant. However, in the trial as a whole, when the difference in fibre intake is the same but the number of subjects is of course much larger, the difference between intervention and control groups is highly significant.

We thus find no evidence to support the suggestion that a higher proportion of the intervention group was entering menopause at baseline. However, it does seem that the main effect of the dietary intervention on oestradiol levels may be in women over 45 years, although this conclusion is based on small numbers and is obviously preliminary.

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Basal cell carcinoma of the face: surgery or radiotherapy? Results of a randomized study

Sir,

I read with interest the recent paper by Avril et al (1997) describing the results of a prospective study comparing surgery and radiotherapy in the management of basal cell carcinomas (BCCs) of the face in 347 patients. Because both tumour recurrence rates and cosmesis were found to be significantly better in the surgically managed group, the authors concluded that surgery should be considered as the first-line treatment of choice for facial BCCs less than 4 cm in diameter.

While there is undoubtedly a need for good randomized prospective trials comparing the effectiveness of the two treatment options, this study did not address the issues of management as they are commonly encountered in current clinical practice. In the study, the authors compared the treatment modalities in patients with a wide range of clinical presentations. The size of tumours, for example, ranged from 3–5 mm (10%) to 31–40 mm (0.9%) in diameter, with 57% of tumours < 10 mm and 93% < 20 mm. Most lesions were non-ulcerated nodules clinically, with a smaller number of superficial (22%) and morphoeic-type BCCs (4%). The affected sites included the forehead, cheeks, chin, ears and nose.

It is perhaps these broad inclusion criteria that weakened the overall value of the trial. One of the fundamental principles of skin cancer management is, when possible, to completely remove tumours (Fleming et al. 1995). In practice, most dermatologists would opt for excision of lesions if it were both technically possible and likely to give good cosmetic results. As the majority of BCCs in both treatment groups were < 1 cm in diameter, it

seems likely that many of these tumours would have been amenable to simple surgical excision with primary closure. In those cases treated with radiotherapy, surgical intervention would not only have avoided multiple outpatient visits, or even lengthy inpatient stays, but would have permitted histological assessment of resection margins.

In their conclusions, the authors stated that, for facial BCCs less than 4 cm in diameter, surgery is the treatment of choice. It is well recognized that radiotherapy has a valuable role in the management of particular clinical problems, such as tumours affecting cartilaginous areas and the treatment of large ulcerated lesions often encountered in elderly patients (Fleming et al. 1995). This conclusion, while undoubtedly true for small lesions amenable to excision, disregards the usefulness of radiotherapy in the management of larger and more awkwardly situated lesions.

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REFERENCES

- Avril MF, Auperin A, Margulis A et al (1997) Basal cell carcinoma of the face: surgery or radiotherapy? Results of a randomized study. *Br J Cancer* **76**: 100–106
- Fleming ID, Amonette R, Monaghan T and Fleming MD (1995) Principles of management of basal and squamous cell carcinoma of the skin. *Cancer* **75**: 699–704

Expression of *bcl-2* protein in follicular lymphomas: a report from a south Indian hospital

Sir,

The t(14;18) translocation juxtaposes part of the immunoglobulin heavy-chain gene on chromosome 14 with the *bcl-2* gene on chromosome 18. This translocation was discovered in most follicular-centre cell lymphoma. The prevalence of t(14;18) shows a geographical predilection, being highest in the USA and lowest in Japan (Isaacson, 1991). The *bcl-2* oncoprotein can be easily localized using immunohistochemical staining, and this has been

studied in follicular lymphomas occurring in the West. We assessed the frequency of *bcl-2* expression in follicular lymphomas in 51 subjects from the Indian subcontinent.

Out of a total of 406 cases of non-Hodgkin's lymphoma diagnosed from 1 March 1995 to 30 September 1997, 55 were follicular lymphoma (13.5%). Formalin-fixed paraffin-embedded tissue samples for immunohistochemistry were available in only 51 of these cases. Immunohistochemical analysis was performed on

deparaffinized sections using the avidin–biotin peroxidase technique and developed with diaminobenzidine (DAB) using a monoclonal antibody to the *bcl-2* protein (Dako, Glostrup, Denmark). The histological breakup of these 51 cases according to the Working Formulation is as follows: 35 (68.6%) were small cleaved-cell type, ten (19.6%) were mixed small- and large-cell type and six (11.7%) large-cell type. *bcl-2* reactivity was noticed in 88.2% of all cases of follicular lymphomas. The breakup of cases according to the histological subtype and the *bcl-2* reactivity is given in Table 1.

The incidence of follicular lymphoma is lower in the East ranging from 7.4% in Taiwan to 13% in Hong Kong. Our incidence of 13.5% is similar to these values.

According to Western literature, approximately 85% of all follicular lymphomas are immunohistochemically positive for *bcl-2* protein (Ngan et al, 1988; Warnke et al, 1991; Gaulard et al, 1992; Utz and Swerdlow, 1993). In the present study, 88.2% of all follicular lymphomas were immunohistochemically positive for the *bcl-2* protein. Among the histological subtypes of follicular lymphomas, *bcl-2* positivity in small cleaved-cell type has been reported as being 100% (Gaulard et al, 1992) compared with 91.4% in our study. Actual numbers for *bcl-2* reactivity in the other two subtypes, mixed small- and large-cell and large-cell type were too small to be compared with other studies.

Table 1 Results of *bcl-2* reactivity in the histological subtypes of follicular lymphoma

| Histological type | Positive cases/number studied |
|--------------------|-------------------------------|
| Small cleaved cell | 32/35 (91.4) |
| Mixed | 8/10 (80) |
| Large cell | 5/6 (83.8) |
| Total | 45/51 (88.2) |

Numbers in parentheses are percentages

Rearrangements of the *bcl-2* gene have been studied in follicular lymphoma in various countries. The incidence of this rearrangement in patients with follicular lymphoma is higher in the USA (60%), Taiwan (52.9%) and other Western countries, but is lower in Japan (33%) and Hong Kong (Chen et al, 1993). Future studies detecting the presence of this gene rearrangement in follicular lymphomas in India are required.

In conclusion, the frequency of *bcl-2* protein expression in follicular lymphomas in India is similar to that of other Western studies.

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REFERENCES

- Chen PM, Lin SH, Seto M, Chao SC, Chiou TJ, Hsieh RK, Lin CZ, Fan S, Tzeng CH, Ueda R and Liu JH (1993) Rearrangement of *bcl-2* genes in malignant lymphomas in Chinese patients. *Cancer* **72**: 3701–3706
- Gaulard P, d'Agay M-F, Peuchmaur M, Brousse N, Gisselbrecht C, Solal-Celigny P, Diebold J and Mason DY (1992) Expression of the *bcl-2* gene product in follicular lymphoma. *Am J Pathol* **140**: 1089–1095
- Isaacson PG (1991) Recent advances in the biology of lymphomas. *Eur J Cancer* **27**: 795–802
- Ngan BY, Chen-Levy Z, Weiss LM, Warnke RA and Cleary ML (1988) Expression in non-Hodgkin's lymphoma of the *bcl-2* protein associated with the t(14;18) chromosomal translocation. *N Engl J Med* **318**: 1638–1644
- Utz GL and Swerdlow SH (1993) Distinction of follicular hyperplasia from follicular lymphoma in B5-fixed tissues: comparison of MT2 and *bcl-2* antibodies. *Hum Pathol* **24**: 1155–1158
- Warnke RA, Weiss LM, Chan JKC, Cleary ML and Dorfman RF (1995) Malignant lymphoma follicular. In *Tumours of the Lymph Nodes and Spleen. Atlas of Tumour Pathology*, 3rd series, fascicle 14, pp. 63–118. Armed Forces Institute of Pathology: Washington, DC