rate and thus afford equally as good results as for photon therapy in HPO or irradiation with fast neutrons. Such a trial might conflict with the individual preferences of radiotherapists but not with ethical considerations. Also it should be undertaken before less advanced, more curable cancers are submitted to trial by radiotherapeutic management by the techniques of HPO-photon or neutron therapy, whose advantages necessarily remain sub judice for lack of decisive information about optimal fractionation of dose "in air."

This baseline would also greatly assist the experimental radiotherapist, who seeks to apply clinically knowledge derived from laboratory experiment of differential radiosensitisation of tumours by physical and chemical means (including HPO and neutrons). Radiobiologists have provided much useful information which clinicians can tentatively use to plan radiotherapeutic treatments which vary in the number and size of dose fractions. But no amount of further test-tube or animal experimentation will serve to provide a definitive answer to the question of optimal dose fractionation using conventional x- and γ -ray facilities to treat cancers in humans and thus pave the way to the trial of new modalities.

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¹ Churchill-Davidson, I, Sanger, C, and Thomlinson, R H, *Lancet*, 1955, **1**, 1091.

² van den Brenk, H A S, *American Journal of Roentgenology*, 1968, **102**, 8.

Commitment to oncology

SIR,—I am glad Professor K D Bagshawe has written (18 June, p 1597) about the development of "medical oncology." No single specialty either can or should make an exclusive claim to the "control of non-surgical cancer work." Even surgeons themselves do not wish to restrict their work to the operating theatre only. Many in my own specialty, however, naturally feel that many years' whole-time experience of treatment of cancer has some value and that too extreme advocacy of cancer chemotherapy should not be accepted uncritically. There are hawks and doves on both sides, as the correspondence columns show.

British radiotherapy departments have created some of the recent advances in cancer treatment (including some in chemotherapy)—the treatment of lymphoma, testicular tumours, the early introduction of random controlled trials, and technical aspects such as the use of fast neutron therapy and of computers are examples I should not need to quote or amplify. Radiotherapy has achieved this in spite of suffering for too long not only from having a heavy service work load but also from having far too few properly staffed academic university departments. The initiative of the cancer research funds in supporting departments of medical oncology has been of value, but it would also now help if there could be endowment of a few more similar departments of radiation oncology. Many of our best young people also emigrate for lack of opportunities in Britain.

Our training in radiotherapy and oncology has been changing steadily and will continue to do so, both in terms of syllabus and examination content and examination framework, with even greater emphasis on cancer management in general—that is, "oncology." Some medical

oncology trainees themselves have already asked whether they may come to the Royal College of Radiologists' London day release course. No detailed proposals have yet been made for any common pathway for training in medical and radiation oncology, but it would surely be of great value for there to be combined training for at least part of the time. We ought to discuss the idea, with the views of senior and junior oncologists of all disciplines being welcomed. The present training of radiation oncologists lasts as long as that of a medical oncologist. The techniques of radiotherapy and of chemotherapy only take up a part, even though they are very important. The major part for all oncologists should be the clinical care of cancer, its natural history, diagnosis, and management, and the relevant basic sciences, pathology especially in the widest sense, medical statistics, and research aspects.

The number of patients being referred to radiotherapy and oncology departments continues to increase, and chemotherapy so far seems needed not to displace but to supplement either radiation or surgery or both. I do not think many of us will wish to replace radiotherapists with chemotherapists but we will support new posts of any kind in oncology if their value is demonstrated.

May I repeat that collaboration is needed rather than competition? I would personally be extremely glad to receive detailed suggestions from anyone interested.

KEITH HALNAN

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. This correspondence is now closed.—ED, BMJ.

Incidence of animal bites in Leeds

SIR,—Since the publication of my note on this subject (2 July, p 53) it has been pointed out to me that the figure of £2m I quoted as an estimate of the cost of bite injuries in Leeds in a year seemed very high. I must apologise for a misunderstanding here. The figure represents my best, admittedly very rough, estimate of all costs to the Leeds metropolitan community, direct and indirect, arising from bites and not, as the article suggested, direct costs alone.

I would recall that it was clear from inquiry that bites treated in hospital are only a fraction of the total. Considerable general practitioner work is also involved; bites caused time lost from work; dogs wasted school-teachers' time and in a number of ways gave rise to calls on the public services. Nevertheless I regret the misleading impression. Direct costs to the hospital services would be about £30 000 for the year investigated.

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Impacting the wax

SIR,—May I use a short space in your columns to condemn the use of cotton-tipped "buds" in ears?

My experience in conducting busy otological clinics has impressed me with the increasing number of patients who have wax impacted in the deeper part of their bony meatuses. They have admitted to using cotton-tipped "buds"

which are sold over the counter in chemist's shops or in supermarkets. Many of them have followed advice passed on from previous generations of the importance of cleaning the ears thoroughly. This advice has been given without the knowledge that the meatal skin has the natural tendency to extrude the wax as part of the self-cleansing mechanism. A cotton-tipped "bud" acts as a plunger and pushes the wax into the deeper part of the body canal, making removal by direct vision very difficult. I have also had to deal with ear drums that have been damaged when the patient has been cleaning the ear with such a "bud" but has had to answer a telephone call without removing the "bud" and then pushed the probe against the wall and consequently through the drum.

In order to avoid such further problems, I would suggest that a warning notice be printed on each packet restricting the use to the orifice of the external canal. I personally have advised all my patients against them and hope that their use in the future will be seriously discouraged.

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Schistosomal myelopathy

SIR,—The evidence presented by Dr J Cohen and others (14 May, p 1258) on the acute necrotising schistosomal myelitis of their Greek patient being "partly mediated by the immune response to either worm or ova antigen or both" did not convince me. With regard to diagnosis as well as prognosis I found the term "necrotising" especially disturbing. We should not speak of a "necrotising" process unless we have seen the histological evidence. I understand that the patient is still alive. I wonder also if the term "ascending myeloradiculopathy" would have described the clinical picture more accurately as compared with "transverse myelitis."

A single negative myelogram never proves that a granulomatous schistosomal lesion of the spinal cord is lacking. A negative myelogram may become positive in the course of time.¹ Neither does a positive myelogram exclude myelitis. The article does not make it clear how the authors came to the conclusion that the IgG of the CSF included antibodies to *Schistosoma mansoni* ova and worms.

I beg to disagree with the authors on the relevance of their citations of the literature. (1) The article by Phillips and Draper² deals only with immune complexes, which were not found to be present in this patient. (2) The article by Wakefield *et al*³ has been wrongly cited: "the characteristic findings in the CSF of lymphocytic pleocytosis with raised protein concentrations. . . ." But Wakefield *et al* wrote: "we feel that the important finding in our cases was the presence of eosinophilia in the spinal fluid. . . ." (3) The article by Bird⁴ has been wrongly quoted: "The importance of the individual allergic response to acute infestation with *S. mansoni* has long been recognised. . . ." But Dr Bird writes: "it would appear that direct invasion by worms is more likely to occur within the spine than within other organs because of the venous anastomoses referred to. The distribution of the lesions in the lower parts of the cord, not only in our cases but also in all those referred to in the literature, tends to confirm this hypothesis. . . ."

(4) It remains unproved that the myeloradiculopathy in this patient was in fact due to an allergic process alone. It may be more logical to assume that the myeloradiculopathy in this patient was the result of direct invasion by ova or worm or both.³ (5) Long before the claim of Cohen *et al* to priority