agencies, ineffective interventions, and a lack of policies despite general agreement that they were needed and that elder abuse was important.[11]

Fisk has suggested that physicians and psychiatrists for elderly people (as well as social workers, primary health care teams, and the police) are especially well placed to detect elder abuse. A lower threshold for suspicion, despite the abused person's denials, may be required than has prevailed up till now. Once abuse has been confirmed the priorities for action are, firstly, the safety of the victim; secondly, the physical and psychological health of the victim; thirdly, the physical and psychological health of the abuser; and, fourthly, a plan to prevent recurrence of the abuse. Preventive measures might include information packs on caring for elderly people; support groups—self help or supervised; financial support for carers; physical, psychological, and financial support for elderly people; and specialist teams (from health authorities and social services) to detect, intervene in, and prevent elder abuse. Legislation may be needed to provide for mandatory reporting of abuse and protection for vulnerable elderly people.

Some may be sanguine about the effects of the implementa- struggling to assess priorities for scant resources—when the needs of many old people and their carers will not be met. An audit of elder abuse, using the baseline now offered by Ogg and Bennett, should be required by potential purchasers. It may help to give some political ammunition to those who insist that worthy intentions must be seen to work.

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Corticosteroids in advanced cancer

If they are not working stop them

Systemic corticosteroids are used for their specific and general effects in patients with advanced cancer.[1] For their specific anti-inflammatory effects they are used in raised intracranial pressure, compression of the spinal cord, and obstruction of the superior vena cava or other hollow organ.[2-4] In addition, in one third of elderly patients with breast cancer corticosteroids result in regression or cessation of progression of their cancer for as long as one year.[5] Patients with prostatic cancer may obtain similar benefit.[6]

The general effects of corticosteroids include improved appetite, mood, and strength. In a controlled trial of methylprednisolone 32 mg a day for two weeks in 40 patients with terminal cancer, appetite increased in 77%, mood in 71%, and activity in 68%.[7] Consumption of analgesics decreased in 71%. All patients continued taking methylprednisolone for a further 20 days; most measures had worsened by the end of this time, although there was still significant benefit compared with baseline values. This worsening could reflect either the loss of effect of the drug or the progression of disease, or both.

Another controlled trial also found that the effects diminished with time.[8] In this trial dexamethasone 3 mg and 6 mg daily were compared with placebo—the higher dose being comparable with methylprednisolone 32 mg. Subjective improvement in appetite and strength was noted after two weeks but had disappeared by four weeks.

The benefits seen in time limited trials are much better than those reported in this issue of the journal by Needham *et al* (p 999).[9] These authors surveyed corticosteroid use by 100 patients admitted to a hospice for terminal care. On admission 33 patients were taking corticosteroids, and seven had done so in the past. Of the 28 patients who completed the questionnaire, only eight said that they had benefited; nine were undecided and 11 said that they had not benefited. Five of the 11 who said that they had not benefited had started treatment more than one month before; among those who were undecided was a woman who had been taking prednisolone 30 mg daily for two years. Patients who had taken corticosteroids were more likely to complain of anorexia, weight loss, or weakness than those who had not.

Needham *et al* initiated their survey after three patients had been admitted within a month with severe adverse effects from corticosteroids (proximal myopathy, excessive weight gain, and skin changes). Other reports have also highlighted proximal myopathy and, less commonly, avascular necrosis of bone.[10 11] Furthermore, in a prospective survey of several hundred patients with advanced cancer who received corticosteroids nearly one third developed oral candidiasis, accounting for four fifths of all such cases in that unit.[1] One in 10 experienced hypomania, agitation, hyperkinesia, or insomnia, and in one in 20 treatment with corticosteroids was stopped because of unacceptable adverse effects.[1]

Peptic ulceration may occur,[12] although the concurrent use of non-steroidal anti-inflammatory drugs may be responsible.[13] Necropsy studies in patients with cancer have shown that death may be precipitated by complications of peptic ulceration (such as bleeding or perforation) in 5% of patients receiving corticosteroids compared with 1% of others.[12] Although a risk of this order is acceptable in patients with a specific need for corticosteroids, it cannot be ignored in other circumstances.

It is disturbing, therefore, that Needham *et al* found that more than half of the patients receiving corticosteroids did not know why they were taking the drug or how long they were meant to continue taking it. More than two thirds did not have a steroid card, and a similar proportion did not know that long term corticosteroid treatment should not be stopped suddenly. If this sample is representative it seems that, once started, corticosteroids are stopped only rarely and that the impact of the treatment is not adequately monitored. Needham *et al* conclude that many doctors do not exercise the same care with

As an essential safeguard, therefore, doctors should state clearly in their notes why a corticosteroid is being prescribed and tell their patients why. Except where the aim is to control the tumour, the corticosteroid should be prescribed initially on a trial basis for no more than a week: the chances of obtaining a better response after this time are poor.[7] Treatment should be continued only if subjective or objective benefit occurs. Using corticosteroids for their general effects (those on appetite, mood, and strength) should be avoided as far as possible in anxious patients and in patients with diabetes because of the risk of worsening the associated condition.

Stopping corticosteroids abruptly after a week is safe if no more than prednisolone 40 mg a day or its equivalent (methylprednisolone 32 mg or dexamethasone 6 mg a day), has been taken.[14] Short courses of larger doses and longer courses of lower doses will suppress the hypothalamic-pituitary-adrenal axis for prolonged periods, and doses must be tapered off over several days or weeks according to circumstances.

Needham *et al* also point out that advanced cancer and polypharmacy tend to go hand in hand. Stopping drugs that are not yielding benefit will therefore help to ease the patients' burden of tablet taking and may improve compliance with other drugs. Furthermore, because the biological half lives of corticosteroids are relatively long (for example, 18-36 hours for prednisolone and 36-54 hours for methylprednisolone)[15] they should be taken once a day unless the number of tablets precludes this.

An important unresolved question is the choice of dose; in controlled trials to treat anorexia the dose has varied between the equivalent of 15 mg and 40 mg of prednisolone a day.[7 8 16 17] It may be better to start with a relatively high dose in order not to miss an effect of treatment and then to reduce to a lower maintenance dose if treatment is to continue beyond seven days. In patients receiving anticonvulsants such as phenytoin corticosteroids.

Finally, well documented alternatives for treating anorexia exist. For example, many patients benefit from megestrol acetate, and the effect is still detectable after two months.[19 20] Megestrol is, however, considerably more expensive. Given the 50% response to placebo,[16] the best initial step may well be dietary advice with or without multivitamin tablets.

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Pet birds and lung cancer

Smoking is still a confounder

Cigarette smoking accounts for about 80% of Britain's 40 000 deaths from lung cancer each year.[1] The contribution of other causes of deaths from lung cancer in the general population is thus small. It may, however, be increasing,[2 3] and natural radiation, occupational exposures, dietary intake of vitamin A, and familial predisposition have all been implicated.[4-7] A more recent hypothesis, advanced and tested by Holst *et al* in 1988,[8] is that some cases of lung cancer may be caused by exposure to pet birds. This hypothesis is independently tested in two studies published in this issue (pp 986-9, 989-92).[9 10]

The original study by Holst *et al* compared 49 patients with lung cancer with 98 randomly selected community controls.[8] With adjustment for smoking the relative risk of lung cancer from exposure to any pet bird five to 14 years before diagnosis was estimated at 6·7 (95% confidence interval 2·2 to 20·0). The two studies published in this issue are both larger but arrive at smaller estimates of risk: Kohlmeier *et al* report an adjusted odds ratio of 2·12, which was significant,[9] and Gardiner *et al* an unadjusted value of 1·58, which was not.[10] Gardiner *et al*, however, also analysed the effects of exposure to individual bird species and, though cautious about the validity of this subgroup analysis, found a significant fourfold increase in risk associated with exposure to pigeons. Thus there are now at least three independent reports describing an increased risk of cancer associated with exposure to pet birds. How likely is it that these findings are valid?

This will depend on the extent to which the investigators have eliminated bias and controlled for confounding in their study design and analysis. In case-control studies bias arises principally from the methods by which cases and controls are selected and exposure is measured, and once present it is difficult to remove. Confounding by factors that are related to both the exposure and the disease can be dealt with in the analysis so long as the confounding exposure is recognised and measured. The main potential source of confounding in studies of the aetiology of lung cancer is smoking, and, because both smoking and the keeping of pet birds tend to occur in lower socioeconomic groups, confounding of these effects is inherently likely.

Controlling successfully for confounding by smoking requires either that cases and controls are closely matched for