Registers based in general practice are essential in long term surveillance

EDITOR,—The consensus statement for good practice and audit measures in the management of hypothyroidism and hyperthyroidism recommends surveillance of patients at high risk of iatrogenic hypothyroidism and suggests this as a point for future audit.¹ We have recently audited the follow up of thyrotoxicosis and thyroidectomy in a general practice population of 10 761 patients. Previously we did not have a systematic method of surveillance for such patients but checked their thyroid function opportunistically. Our audit criterion was that all patients at risk of late hypothyroidism should have been monitored within the previous two years.

Patients with a history of either thyrotoxicosis or thyroid surgery were identified from our recently updated computerised practice records. The medical notes of all those not taking thyroxine were searched manually; patients with no record of their thyroid function within the previous two years were invited for a blood test. Altogether 133 patients (15 male and 118 female) had a recorded history of thyrotoxicosis or thyroid surgery. Twenty six had received radioiodine. Thirty seven were already taking thyroxine. Only five patients were receiving long term follow up in secondary care. Under half of those at risk of hypothyroidism had had their thyroid function measured within the previous two years. The remaining 49 patients (table 1) were invited for a blood test; 47 attended. One was found to be thyrotoxic, five were subclinically hypothyroid, and eight were hypothyroid. The median age of the hypothyroid patients was 62 years (range 35-79) and the median time from their initial diagnosis was 23 years (3-37). The cost per case detected was about £60.

Table 1—Thyroid status of 133 patients with recorded history of thyrotoxicosis or thyroid surgery before and after audit

Thyroid status	Baseline	After audit
Hypothyroid	37	50
Euthyroid	47	80
Thyrotoxic	0	1
Unknown	49	2

The cumulative rate of hypothyroidism among our patients (38%) is similar to that shown in prospective follow up studies,^{2,3} which suggests that we have identified most, if not all, of those at risk. If our findings are generalised to the whole of Britain then there are an estimated 65 000 patients (95% confidence interval 30 000 to 102 000) with undiagnosed late hypothyroidism. Few of these patients would be detected by follow up based in secondary care. We believe that thyroid follow up registers based in general practice are an essential component of comprehensive long term surveillance after thyrotoxicosis or thyroidectomy.

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- 1 Vanderpump MPJ, Ahlquist JAO, Franklyn JA, Clayton RN. Consensus statement for good practice and audit measures in the management of hypothyroidism and hyperthyroidism. *BMJ* 1996;313:539-44. (31 August.)
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Thyroxine concentrations should be at upper end of reference range

EDITOR,—The consensus statement on the management of hypothyroidism and hyperthyroidism is so admirable that it is unlikely to incite much debate.¹ One point could be emphasised in the section about the treatment of hypothyroidism: "The correct dose [of thyroxine] is that which restores the euthyroid state and relieves symptoms. In most patients these will be achieved by a dose of thyroxine resulting in a normal or slightly raised serum thyroxine concentration...."

A survey of the correspondence from 174 hypothyroid patients who wrote to the British Thyroid Foundation showed that 26 had not improved to the extent that they had hoped or the foundation might have expected.² Some of these patients had not been taking treatment long enough to experience the full benefit, others had some additional disease, but most were being undertreated. Patients with hypothyroidism usually feel at their best when the serum total thyroxine or free thyroxine concentration is towards the upper end of the reference range or even slightly above it, as is the consensus view. It is important to emphasise this because a serum total thyroxine or free thyroxine concentration towards the lower end or middle of the reference range does not necessarily indicate that the patient is in a euthyroid state.

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- 1 Vanderpump MPJ, Ahlquist JAO, Franklyn JA, Clayton RN. Consensus statement for good practice and audit measures in the management of hypothyroidism and hyperthyroidism. *BMJ* 1996;313:539-44. (31 August.)
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People with Down's syndrome should be screened

EDITOR,—The consensus statement for good practice and audit measures in the management of hypothyroidism and hyperthyroidism makes no reference to screening for thyroid dysfunction in people with Down's syndrome.¹ This is surprising given the reported high prevalence of acquired hypothyroidism in both children and adults with the syndrome and the complication of the overlap in clinical features seen in both conditions.^{2,3}

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Role of animal experiments in assessing drug safety needs clarification

EDITOR,—R J Powell's editorial on thalidomide highlights the misleading role of animal experiments in assessments of the safety of drugs for human use: "[Thalidomide] was considered a particularly safe drug, as even massive doses ... failed to kill laboratory rodents."¹ Yet Powell also says that "Studies of thalidomide in people with proliferative retinopathy are awaited, but animal

studies have shown no benefit." If they have shown no benefit then why go on to human studies? Or if animal studies are not relevant to human disease then why do them?

It seems that the error that led to the thalidomide tragedy—relying on animal experiments—is still with us today.

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Patients should not be discouraged from entering trials

EDITOR,—Charlotte Williamson's editorial highlights the benefits of involving patients in decisions about their treatment and of patients' participation in research.¹ Two years ago I was diagnosed as having breast cancer. I had recently started a PhD investigating the application of randomised controlled trial methods to my specialty and had just returned from a course at which the ethics surrounding a randomised controlled trial in breast cancer were discussed.

I had decided, before I was told my diagnosis, that if my lump was malignant I wanted to be entered into a trial if I was eligible for one. On receiving my diagnosis I told my consultant that I would like to be considered for a trial. The reply was, "You mustn't let academic niceties get in the way of the best treatment for you." I already knew the uncertainties surrounding treatment for breast cancer and the academic arguments in favour of and against randomised controlled trials, and I felt belittled by this statement. I was fortunate in being able to have my care transferred to an academic unit, where my request to enter a trial was welcomed. The trial was discussed at length, and I was informed of the short term and long term implications, benefits, and risks of the treatments in each arm.

Since then I have been invited to join the Consumers' Advisory Group for Clinical Trials, which aims to bridge the gap between consumers, clinicians, and researchers. It was established after recognition by the medical profession of the value of the patients' role in research (H Thornton, *Lancet* conference, Bruges, 1994). Unfortunately, some randomised controlled trials have been threatened by poor accrual,² and it is hoped that involving patients in the planning of clinical trials will increase participation because the patients will perceive the questions asked by the trials to be relevant and the methods used to be acceptable.

I also believe that prior knowledge of the rationale for randomised controlled trials helped me tremendously at the time of my diagnosis. As Baum advocates,³ perhaps consumer groups could help educate healthy women about the need for and importance of such trials to assess new and existing treatments; then those women who went on to develop cancer would not have to face the difficult problem of understanding clinical trials as well as their treatments at the time of diagnosis.

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