

may also be referred to the Health Committee where, during the course of disciplinary action by the Council, it appears that the doctor's fitness to practise may be seriously impaired.

The Health Committee is elected annually by the Council and comprises a Chairman, Deputy Chairman, nine other members of the Council and one lay member. It meets in private and the principal evidence is in the form of medical reports and other documents about the sick doctor's health. While the Committee's proceedings are of a judicial nature, regulated by rules laid down by Parliament, the Committee sees its role as essentially therapeutic, and it aims to conduct its business compassionately.

A legal assessor advises the Committee on points of law, and the expert medical assessors advise on the medical significance of the information received. One medical assessor is chosen having regard to the doctor's alleged condition; the other is from the same branch of medicine as the doctor. Additional assessors may advise, where appropriate, in cases of female or overseas-qualified doctors.

The Health Committee's function is to decide whether a doctor's fitness to practise is seriously impaired and, if so, to determine the action to be taken. If the Committee decides that the doctor's fitness to practise is not seriously impaired, the case is concluded forthwith and no further action is taken by the Council. The Committee may adjourn in order to seek further medical evidence in a developing situation, or it may postpone judgement on the basis of undertakings given by the doctor. If the Committee finds the doctor's fitness to practise seriously impaired, it must then decide whether it is sufficient to impose conditions on his registration. Such conditions may apply for a period of up to three years, and may include, for example, restriction of prescribing rights or a requirement to work only within certain grades and specialties. Conditions are usually also imposed, if the doctor agrees, concerning the future management of the case, and may include requirements to

submit to medical supervision, to abstain from alcohol or to refrain from self-medication. Where the Committee is not satisfied that conditional registration will be sufficient to secure the safety of patients and aid the doctor's rehabilitation, it must direct that the doctor's registration be suspended. Such suspension may run for a maximum of 12 months. The Committee has no power to direct the erasure of the sick doctor's name from the Register. Wherever conditions have been imposed or registration has been suspended the Committee must review the case before the end of the relevant period.

Cases reaching the Health Committee inevitably pose difficulties. Most reach the Committee only because the doctor has failed to respond to informal attempts to help and where it appears that only the threat of formal action will persuade him to co-operate and to try to rehabilitate himself. Nonetheless, while there have been repeated hearings of some cases, with little sign of improvement, in others the Committee has been encouraged to notice a significant improvement in the doctor's state of health and his attitude towards medical treatment. In several cases doctors have been able to resume medical practice in a supportive environment and have found themselves better able to cope with the stresses of professional life. But this is rarely achieved unless the sick doctor receives a significant degree of support from professional colleagues. Such support, sadly, is not always forthcoming, and the sick doctor may find himself isolated, unable to make progress purely by his own efforts, exposed to the stress of having no regular employment and increasingly out of touch with developments in medical practice. The Committee feel strongly that doctors must become aware of the needs of sick colleagues and be prepared to help them to recover some of their confidence and once again make a useful contribution to the provision of health care.

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the General Medical Council*

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## Management of the solitary thyroid nodule

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Thyroid nodules are common occurring in 4.2% of a population of 5000 aged 30-59 years living in a non-goitrous area<sup>1</sup>. An even higher incidence might be expected in an iodine-deficient region and therefore it is not surprising that the thyroid nodule is the most frequent indication for thyroidectomy. Much interest has been focused on the management of the solitary nodule because of its increased risk of malignancy

compared with that found in multinodular goitre and the issue has remained controversial with some advocating surgical excision of all solitary nodules<sup>2</sup> whilst others have favoured a non-operative conservative approach<sup>3</sup>. The optimum treatment clearly falls between these two extremes.

Although most thyroid nodules are benign and thyroid cancer is comparatively rare with an incidence in the UK and USA of 3.7-4.7 per 100 000 per annum, it is nevertheless true that the fundamental problem facing the surgeon is the identification of the malignant lesion. A large group of patients with

benign nodules will also come to surgery because of local mechanical and pressure effects of the enlarged thyroid.

A process of selection for surgery based on clinical evaluation alone has major limitations. A wide range of investigations has traditionally been employed, but few are able to influence either the diagnosis or management. Although the majority of patients with malignancy are euthyroid, occasionally a nodule may be malignant in the presence of thyroiditis or thyrotoxicosis. It is, however, most unusual for a malignant lesion to cause thyrotoxicosis. Positive thyroid antibody titres although usually indicative of thyroiditis are often raised in malignancy. Measurement of serum thyroglobulin is useful in the detection of residual or recurrent disease after total thyroidectomy for differentiated thyroid cancer, but is of no value in the initial detection of the primary malignancy. Calcitonin is not routinely measured in the patient with a solitary thyroid nodule, unless there is other evidence such as a positive family history to suggest medullary carcinoma.

Few investigations have been misapplied more often than thyroid scintigraphy. Radionuclide scanning with  $^{123}\text{I}$ ,  $^{131}\text{I}$  or  $^{99\text{Tc}^{\text{m}}}$  will identify the cold nodule, but does not assist in the identification of cancer. Most thyroid cancers are cold, but only 10-20% of cold nodules overall are found to be malignant. The isotope scan is therefore virtually useless in the distinction of the benign from malignant lesion and should now be regarded as an outmoded, unnecessary investigation in the assessment of the euthyroid patient with a solitary nodule.

Fluorescent scanning which permits an *in vivo* determination of thyroid gland iodine content may prove to be a more useful investigation but requires further evaluation.

Ultrasound scanning with B mode gray scale will distinguish between the cystic and solid thyroid lesion with 95% accuracy, but contributes very little to the management of a solitary nodule and the identification of cancer. Insertion of a needle into a thyroid cyst can give precisely the same information as ultrasound, with much less expense and inconvenience.

Preliminary observations with duplex ultrasound scanning<sup>4</sup> of the thyroid have shown a characteristic Doppler shift signal in the malignant lesion which may prove to be helpful in its identification.

The limitations of clinical examination and the investigations discussed so far are self evident. Needle biopsy, in marked contrast, is a tested and valuable diagnostic technique capable of making an enormous impact on the management of the solitary thyroid nodule.

Tru-cut large bore needle biopsy provides a core of tissue suitable for histology, is highly accurate but may cause patient discomfort and occasional haemorrhage. Needle tract seeding of tumour has proved to be an insignificant risk. The alternative and much more acceptable needle biopsy technique is that of fine needle aspiration (FNA) or aspiration biopsy cytology (ABC) developed and popularized in Scandinavia<sup>5</sup>. This is a cytological assessment, painless, absolutely complication free and of similar accuracy to that of large bore needle biopsy. Colloid nodules, thyroiditis, lymphoma, papillary, medullary, anaplastic and secondary cancer are all within the diagnostic scope of ABC. A major limitation is its inability to

distinguish between follicular adenoma and carcinoma, this requiring histological not cytological criteria. ABC has the ability to significantly influence clinical practice permitting the selection for surgery of patients with malignant disease and often sparing those patients with a benign condition an unnecessary operation. As a result, the incidence of malignancy in several series of patients undergoing surgery for nodular thyroid disease has risen from 10 to 50%<sup>6</sup>, with a fall in the overall number of patients coming to operation reflecting better selection for surgery rather than any true increase in the incidence of malignancy.

Surgery for the solitary nodule is safe with an extremely low risk of parathyroid or recurrent laryngeal nerve damage. The time-honoured procedure of unilateral subtotal lobectomy is rarely appropriate, the minimum satisfactory procedure being a total lobectomy on the side of the lesion with inclusion of the isthmus. This permits a full histological examination with virtually no risk of tumour seeding and further surgery, often difficult and hazardous, to remove the posterior remnant left *in situ* after sub-total lobectomy is not needed. A frozen section taken immediately is extremely helpful, with a skilled pathologist able to make a correct diagnosis in the majority of cases, permitting a correct operative strategy which may involve total thyroidectomy in many cases of cancer. The follicular lesion with minimal capsular invasion is not readily diagnosed on frozen section, but a simple lobectomy is invariably sufficient. If the definitive histology should later reveal an invasive follicular carcinoma after only a lobectomy has been performed, removal of the remaining lobe and completion of the total thyroidectomy can easily be carried out in a few days and subsequent radioiodine scanning performed.

It is strongly advised that all patients with a solitary thyroid nodule should enjoy the benefits of a precise cytological diagnosis so that safe, effective surgery can be offered to those who really require it and an unnecessary operation be avoided in the remainder.

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