families.¹⁶ The relevance of the mutation to the senile form that makes up most of Alzheimer's disease is also unclear, as this form may well be determined polygenically or environmentally, and there is no linkage to chromosome 21.¹⁸ One way to reconcile the various data is to postulate that an abnormality in the functioning of the β amyloid precursor protein is common to the pathogenesis of all forms of the disease; in at least some familial cases it is due to a mutation in the gene, while in other cases it may result from various influences that affect the synthesis or metabolism of the protein.

Several areas of investigation will now be stimulated. Firstly, researchers will want to sequence the β amyloid precursor protein gene fully in many families with Alzheimer's disease as a variety of mutations within one gene may underlie a single neurodegenerative disorder.¹⁹ This work will also establish the proportion of patients with Alzheimer's disease associated with the documented mutation—as well as help to exclude the slim possibility that it is merely a rare gene polymorphism. The polymerase chain reaction makes such large scale sequencing feasible, although the gene is large and complex (18 exons and 170 000 bases²⁰).

It will also be necessary to establish how the activities of the abnormal β amyloid precursor protein differ from those of its normal counterpart. Some of the diverse functions of the protein and its derivatives have been established—for example, the β amyloid precursor protein is probably a transmembrane receptor,⁸ while fragments of it can be neurotrophic or neurotoxic²¹—but more needs to be known of the roles of β amyloid precursor protein gene products in the healthy brain to appreciate the pathogenic effects of a mutation. An initial prediction is that the amino acid substitution identified by Goate *et al* will increase the affinity of the β amyloid precursor protein for the cell membrane¹⁶; this might affect the characteristics of the protein as a receptor or impair the formation of functional peptide derivatives and promote production of the insoluble β /A4. It will be interesting to see whether transgenic mice containing the mutation show deposition of β /A4 or develop the other pathological hallmarks

of Alzheimer's disease. Finally, even if variations in the β amyloid precursor protein gene prove to account for only a small fraction of cases of Alzheimer's disease the potential for a diagnostic test will not have escaped the notice of interested parties.

PAUL J HARRISON

Lecturer
University Department of Psychiatry,
Warneford Hospital,
Oxford OX3 7JX

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Consultants, contracts, and fundholders

Clinical need remains paramount

Of all the ingredients in the government's formula for transforming the NHS, the one that has really caused the mixture to fizz and pop has been general practice fundholding. A spate of headlines about a "two tier service" quickly followed the start of the scheme on 1 April, based on examples of contracts that gave preferential treatment to fundholders' patients over those of other general practitioners. Such contracts posed a dilemma to hospital consultants, raising issues of clinical judgment, clinical responsibility, and equity. Attempting to resolve these dilemmas, the Joint Consultants Committee and the Department of Health have produced guidelines on how the scheme is intended to work and how consultants should respond to the issues that it raises.¹ These will be sent to all consultants shortly.

Those who read the department's early guidance on the fundholding scheme^{2,3} were not surprised by the emergence of different contract conditions for fundholders; indeed, the guidance seemed to encourage such differences. Like much of the documentation put together to implement the NHS and Community Care Act, the guidance put more emphasis on

administrative rules governing the exchange of money than on the practical issues facing those who actually treat patients. Representatives of hospital medicine had not been consulted over how the scheme might affect their practice, and it was hard to avoid the impression that fundholding was seen by some cavaliers in the department as an exciting new weapon whose effects were unpredictable but bound to be dramatic.

As soon as it was launched the fundholding scheme brought the issues raised by the internal market into sharp focus because negotiations over contracts between hospitals and fundholders differed from those with health authority purchasers. These were no paper transactions, no "steady state" smooth take offs based on existing practice. For general practitioners the negotiations concerned real patients for whom they felt a personal responsibility to secure improvements, and they concerned real money, with incentives for practices to secure the lowest possible prices.

For hospital consultants the outcome of these negotiations often came as a shock. The extent to which consultants have

taken part in discussions with fundholders over contracts has varied widely, depending on local relationships between consultants and general practitioners, relationships between consultants and managers, and, most importantly, the participation of consultants in clinical directorates or equivalent structures. Often consultants have been presented by managers with an ultimatum: "Either we sign up to these specifications or the fundholder will take his business elsewhere and our gynaecology/ENT/rheumatology service will no longer be viable, with all the knock on effects that that entails for recognition of training posts and integration of services." The dilemma for consultants was that sometimes the fundholders' specifications were unrealistic in terms of the level of service provided by the department as a whole or would place consultants in a professionally improper position by asking them to give preferential treatment to one group of NHS patients over another.

The issues resolved themselves into two main conflicts. The first is conflict between an individual consultant's clinical judgment and the content of contracts: can a consultant override clauses in contracts when faced with a patient whose clinical needs dictate something different? Consultants would of course argue that they must or their ultimate clinical responsibility becomes meaningless. The second conflict is between the content of different contracts covering the same service: when the contract for the patients of a particular fundholder specifies a normal waiting time for admission of six weeks and the contract for other patients from the same district specifies six months (or does not specify at all) is it ethical to advance the fundholders' patients up the waiting list, thus delaying admission for the other patients? Again, consultants would wish to resist being part of such a system.

The guidance that has now been drawn up by the Joint Consultants Committee and the department should go a long way towards resolving the most acute problems. Perhaps more importantly, when contracts are renegotiated for next year the existence of agreed principles will help consultants, general practitioners, and managers to prevent the problems from arising at all. The guidelines deal with the fundholding

scheme in some detail (p 1486), but several important principles are worth highlighting.

Firstly, the guidelines emphasise the need for consultants to participate in all discussions leading up to contract agreements, as this above all will prevent the inclusion of unreasonable or impracticable stipulations. Secondly, the timing of consultations or treatment for individual patients must be based on clinical need, and judgment on the relativities of clinical need must rest with individual consultants. Provider units should offer waiting times that take these relativities into account. Thirdly, provider units are not to offer contracts to one purchaser that would disadvantage the patients of other purchasers.

Finally, the guidelines cover the situation where a fundholder may want to make contractual arrangements that benefit his or her patients by creating additional capacity in the hospital—for example, by providing finance that would enable the establishment of a new outpatient clinic or the reopening of a closed theatre. This is permissible, but it would also bring advantages to other purchasers' patients by offering faster throughput. Again, the basis on which patients would be seen or treated in such circumstances would be clinical need.

The Joint Consultants Committee has been encouraged by the department's willingness to discuss these issues and welcomes the guidelines as a constructive attempt to face some of the problems that have arisen. It will continue to monitor the impact of fundholding on hospital medicine and will consider issuing further guidance if necessary. In the mean time consultants who believe that the principles embodied in these guidelines are not being adhered to should notify the secretariat of the Joint Consultants Committee.

A P J ROSS

Chairman,
Joint Consultants Committee,
London WC1H 9JP

1 NHS Management Executive/Joint Consultants Committee. *Joint guidance to hospital consultants on GP fundholding*. London: NHS Management Executive, June 1991.

2 Department of Health. *Funding general practice*. London: DoH, December 1989.

3 Department of Health. *Guidance on contracting by fundholders*. London: DoH, September 1990.

Baby stealing

Too little known about diagnosis and treatment

Stealing a baby, one of the most distressing crimes, is rare. Of all "violent offences against the person" recorded by the Home Office, only about 0.08%—about 120 a year—come under the category of child abduction.¹ This term also covers two other offences: abduction by a parent—as in a custody dispute—and abduction of an older child, often by a man with a sexual motive.² Compared with other offences, the stealing of young children is unusual in that those who carry it out are almost always women who show evidence of mental disturbance.^{3,4} Despite this psychiatric context and the attention that each case attracts,⁵ the subject is virtually untouched by research. Little is therefore known about the mental state of those who commit the offence and less about the crucial medicolegal questions of disposal, outcome, and repetition.

D'Orban divided women who had stolen babies into three categories according to diagnosis and motive after interviewing them on their arrival in prison.⁴ In his "comforting offence" the woman abducts a baby or young child to satisfy her own emotional need. Her background is one of delinquency and emotional deprivation, her diagnosis is often personality

disorder, and hysterical or immature personality traits are prominent. In the "manipulative offence" the offender also has a personality disorder, but previous social adjustment is better and the baby is stolen for a specific purpose—for example, to keep a boyfriend by claiming that the child is his. The "impulsive psychotic" offence is carried out during an acute relapse of psychotic illness, usually schizophrenia.

But the presumed aetiology and the need for treatment based on it are less clear than such a typology implies. Categories based on a combination of diagnosis and motive are bound to overlap—as these do—and are therefore of low validity. And personality disorder itself has been criticised for lacking precision⁶ and for leading to rejection from treatment even when superimposed disorders, such as depression, are present.⁷⁻⁹

Accordingly, among d'Orban's women those with a diagnosis of psychosis or subnormality would receive treatment, some as a result of treatment orders, while those considered to have a disordered personality could find themselves either in hospital or in prison. The latter group