have inherited a p53 mutation. Reassuring anxious family members who prove not to have the mutation will be possible, but that information cannot be gained without the risk of finding others who have. For these others, until effective screening or treatment is available, the knowledge of risk is likely to be unhelpful, producing anxiety as well as practical problems with employment and insurance.

The new results are exciting because they are the first substantial successes with the hitherto intractable problem of inherited breast cancer. The two genes recognised so far probably account for only a minority of familial breast cancers, and other genes are likely to be found. So long as an unproved and probably imperfect screening test or a prophylactic operation are all that we have to offer women at risk, however, the clinical impact of these discoveries is bound to be limited.

Familial cases make up only a small proportion of all breast cancers. In the longer term we can hope that knowledge of how the mutated genes predispose to breast cancer will lead to a better understanding of both familial and sporadic breast cancers and ultimately to more widely applicable methods of prevention and treatment.

B A J PONDER

Director,
Cancer Research Campaign Human Cancer Genetics Research Group,
Department of Pathology, University of Cambridge,
Cambridge CB2 1QP
On behalf of the Cancer Families Study Group*

1 Hall JM, Lee MK, Newman B, *et al*. Linkage of early onset familial breast cancer to chromosome 17q21. *Science* 1990;**250**:1684-9.
2 Malkin D, Li FP, Strong LC, *et al*. Germline p53 mutations in a familial syndrome of breast cancer, sarcomas and other neoplasms. *Science* 1990;**250**:1233-8.
3 Srivastava S, Zou Z, Pirollo K, Blattner W, Chang E. Germline transmission of a mutated p53 gene in a cancer-prone family with Li-Fraumeni syndrome. *Nature* 1990;**338**:737-9.
4 Li FP, Fraumeni JF Jr. Soft tissue sarcomas, breast cancer, and other neoplasms: a familial syndrome? *Ann Intern Med* 1969;**71**:737-51.
5 Newman B, Austin MA, Lee M, King M-C. Inheritance of human breast cancer: evidence for autosomal dominant transmission in high-risk families. *Proc Natl Acad Sci USA* 1988;**85**:3033-8.

* The Cancer Families Study Group is a national collaborative group which includes scientists and clinicians from CRC (Cambridge, Manchester, Sutton), ICRF (London, Leeds), MRC (Edinburgh), and many university departments and hospitals and participants from several European centres. The group was set up some years ago to coordinate studies of familial cancer in the United Kingdom. Members are currently evaluating the new findings in breast cancer in families from the United Kingdom. For further information contact Miss Caroline Jenkinson, Imperial Cancer Research Fund, 3K Springfield House, Hyde Terrace, Leeds LS2 9LU.

Through American eyes

They see the NHS from both sides

Given the nature of the NHS reforms introduced on 1 April, it is perhaps unsurprising to find that many American doctors are keenly interested in them. After all, American health economist, Alain Enthoven, is credited with being the original architect of the reforms, and many commentators on both sides of the Atlantic maintain that the effect of the reforms will be to make British medicine more like that practised in America. It is therefore interesting to compare the views of two American doctors who have recently turned their attention to this subject.

Donald Light, who is a professor and consultant in health policy at the University of Medicine and Dentistry in New Jersey, and John Roberts, an American internist formerly at Chapel Hill, recently wrote a series of articles in the *Health Service Journal* and the *BMJ*, respectively.[1-9] In different ways they addressed broadly the same two questions—namely, "When compared with health care in the United States, what are the strengths and weaknesses of the NHS?" and "What impact are the reforms likely to have on these strengths and weaknesses?".

Roberts explicitly and Light by implication agree that the NHS has strengths that most informed Americans admire. High on the list of strengths is primary care and, in particular, general practice; as Roberts puts it, "For an American visitor general practice represents the best of British medicine. The list system ensures that all get a doctor. Vulnerable patients... are seen regularly, often in their homes. The referral system ensures that specialty services are not overused."[7] For most Americans engaged in health care, these kinds of achievements remain distant aspirations. Between them the two authors highlight several other strengths which typically impress Americans. For example, they point out that the NHS is very good value for money (even though about one in five Americans get little or no medical care, the United States spends three times as much on health care); that the NHS spends very little on administration per capita; that, unlike their American counterparts, NHS doctors tend not to "overtreat"; and so on.

Both writers also draw attention to a number of weaknesses. Near the top of the list, of course, are NHS waiting lists—something that always surprises Americans because the United States has no such lists. Waiting lists are closely followed by inefficiency. Light identifies examples of what he calls waste and inefficiency in the NHS, including inefficiencies due to underfunding and idle resources; wasted bed days; unnecessary bed days; underused theatre time; underuse of the general practitioner network; and high staff turnover.

Other weaknesses identified by the two writers include the poor state of the NHS's capital stock and the "paternalism" of British medicine and of British doctors in particular. While not necessarily implying that it is a weakness, Roberts also highlights the "austerity" of the NHS—a term he uses to draw attention to the fact that by comparison with their American counterparts, NHS doctors see very little of, and do very little to, their patients.

Although neither writer attempts to reach an overall judgment as to the relative merits of the two systems, it is clear that both feel that the NHS has much to recommend it. Roberts comes closest to making an overall judgment: "But this austere, inefficient [NHS] system is fair. Everyone gets a doctor free of charge, and nearly everyone stands in the same queue. British doctors claim it is a safe system: financial constraints mean that needless tests are avoided, often because the tests are simply not available nearby."[6] Later in the same paragraph he quotes approvingly a British philosophy professor: "In the United States doctors are paid to do more; in England they are paid to do less. I feel safer in England."

So what then do Light and Roberts make of the reforms? The short answer is that both are clearly worried. Light in particular is worried by the idea of an internal market, competition between health care providers, and the administrative bureaucracy he is convinced that this will engender. "The Conservatives have been seriously misled by advisors advocating competition, not because of any inherent weaknesses of competition as a strategy, but because it works badly in health care"[1] and "People who think bureaucracy is bad and markets are good should take a look at the bureaucracy and regulations needed to set up a medical market."[2]

Roberts, while worried about many of the same issues, fears that the reforms may "depoliticise" and therefore weaken the NHS: "The fact that the government takes a position at all is exactly what makes medicine in the United Kingdom so different from that in America. The United States government avoids dealing with medical care as much as possible, recognising that whatever policies are instituted some major constituency will be offended... in the last presidential election neither George Bush nor Michael Dukakis offered a specific statement on health care.... The great gap is not between Americanisation and socialised medicine. It is between a system run by business versus one run by politics, by the standards of the market versus those of public discourse."[6] As someone who has spent about a quarter of a century in each country, I would find it hard to disagree.

GORDON BEST

King's Fund College, London W2 4HS

1 Light D. Learning from their mistakes? *Health Service Journal* 1990;**100**:1470-2.
2 Light D. Bending the rules. *Health Service Journal* 1990;**100**:1513-5.
3 Light D. Labelling waste as inefficiency. *Health Service Journal* 1990;**100**:1552-3.
4 Light D. Biting hard on the research bit. *Health Service Journal* 1990;**100**:1604-5.
5 Light D. Medical house arrest. *Health Service Journal* 1990;**100**:1648-9.
6 Roberts J. Navigating the seas of change. *BMJ* 1991;**302**:34-7.
7 Roberts J. General practice: feeling fine, getting better. *BMJ* 1991;**302**:97-100.
8 Roberts J. A medical malaise in hospital. *BMJ* 1991;**302**:163-6.
9 Roberts J. Junior doctors' years: training not education. *BMJ* 1991;**302**:225-8.

Physical signs of sexual abuse in children

Skill and experience needed to find and interpret

Many sexually abused children show no physical signs, and even when signs believed to be indicative of sexual abuse are present the diagnosis should very rarely be made on these alone. Confirmation depends on multidisciplinary investigation. The most important single feature, if it is available, is a statement by the child; this may be supported by medical and forensic evidence, an admission by the abuser, and comprehensive assessment of the child, family, and social background. All are fallible guides to diagnosis, which should be approached with caution and humility, knowing the serious consequences of diagnostic error in either direction.

Though physical signs are only one part of the evidence in cases of possible child sexual abuse, they have been a controversial part, particularly the significance of anal findings. Following the Cleveland controversy and the Butler-Sloss report,[1] the Royal College of Physicians of London set up a working party to consider these physical signs—their terminology, how they should be elicited, and what was known of their significance. Its report, published this week, shows the relatively subsidiary role of physical signs in this diagnosis.[2] The report sets out in detail how the anogenital region should be examined and by whom and discusses the significance of the appearances that may be seen and the varying degrees of confidence with which they may be regarded as signs of abuse.

Some children have evidence of both sexual and other physical abuse; violent sexual abuse may be associated with bruising around the knees, thighs, and genitalia. The report concentrates, however, on signs present in the genital area in girls and the anal region in both sexes. A detailed examination of these regions has not been part of the training of most paediatricians, and skill and experience are needed both to avoid further trauma to the child and to make accurate observations and interpret them correctly. The working party therefore recommends that a few doctors in each district should be trained and should see enough children to acquire these skills.

Anal and genital appearances change with the position of the child and the technique of examination, and the report's second practical recommendation is that these should be standardised. The place and circumstances of the examination, the approach to the child, and the methods used should be designed to reassure the child and to prevent unnecessary distress, and of course no force or restraint should be used. The anogenital examination should be done as part of a full general examination, and usually towards the end of the examination.

The structure and appearances in girls of the external genitalia, particularly the hymen, vary, and the report has useful diagrams and descriptions. The only signs considered diagnostic of abuse are laceration or scars of the hymen and attenuation of the hymen with loss of tissue. Other signs, such as an enlarged hymenal opening (more than 1 cm in horizontal diameter in a prepubertal girl), notches or bumps in the hymen, or localised erythema or oedema, may support the diagnosis of sexual abuse. All these signs need to be interpreted with caution in the light of normal variation.

Interpreting anal signs that may indicate anal penetration has been even more difficult and controversial. The report has a glossary of 18 terms used to describe presumed anal signs of child sexual abuse. It tries to establish a more uniform nomenclature and to indicate the possible significance of each sign, which is uncertain for most of them. The report concludes that the only absolute indicator of anal abuse is a laceration or healed scar extending beyond the anal mucosa on to the perianal skin in the absence of a reasonable alternative explanation such as major trauma. Signs supportive but not diagnostic of anal abuse are anal laxity without other explanation, "reflex anal dilatation" of more than 1 cm, erythema, swelling, fissures, venous congestion, and bruising.

Reflex anal dilatation has been the most controversial single sign in discussions of child sexual abuse. This is relaxation of both the external and internal anal sphincters on separating the buttocks, so that the anus presents a cylindrical hole with a clear view into the rectum. The technique of examination is especially important—the longer the buttocks are separated to view the anus, the more likely it is to gape open, and the working party recommends an observation period no longer than 30 seconds. The argument has been whether reflex anal dilatation is usually a sign of repeated anal penetration or whether it occurs normally (studies quote incidences of 4% to 15%) or as a result of conditions such as chronic constipation and Crohn's disease. The evidence reviewed by the working party is highly conflicting, and the working party understandably seems to have had difficulty reaching a definite conclusion. It believes that reflex anal dilatation of more than 2 cm is more likely than not to be associated with abuse, while dilatation of more than 1 cm is a possible supporting sign.

The physical signs attributed to sexual abuse are not unique in requiring experience to elicit and interpret them and in having limited sensitivity and specificity for the conditions they are meant to help diagnose. Making a diagnosis on the basis of a single physical sign is very rarely possible in