Another common benign mammary lesion is the fibroadenoma. It occurs predominantly in young women and is seen from time to time in adolescent girls. Clinically it presents as a firm, painless, mobile mass which may, especially in youth, attain giant proportions. Histologically there is a combined proliferation of atypical ducts and connective tissue. The connective-tissue element usually predominates, and it surrounds small ducts in the pericanalicular variety of fibroadenoma, while it invaginates the ducts into elongated, slitlike channels in the intracanalicular variety. The connective tissue is loose, cellular, and sometimes myxomatous in the more florid types of lesions.

A much less common benign tumour is the intraductal papilloma, which occurs most frequently in middle-aged women and presents itself clinically with a serous or bloodstained discharge from the nipple. A small tumour can often be detected in the area of the areola by careful palpation. Histologically there is a proliferation of duct epithelium supported on vascular stalks projecting outwards into a dilated lumen. It is usually a solitary lesion, but occasionally multiple papillomata are present in the smaller ducts.

The relation of these benign lesions to cancer is important. While mammary dysplasia is not precancerous, carcinoma is several times commoner in women with the condition but does not appear to arise especially from the dysplastic tissue.1 Fibroadenoma is seldom associated with carcinoma. The rapidly growing giant fibroadenoma closely simulates cancer, but is not malignant. There is a rare condition called cytosarcoma phyllodes, which resembles a giant fibroadenoma clinically and macroscopically and has the histological features of a very exuberant intracanalicular fibroadenoma, but the stroma is hypercellular and shows pleomorphism and mitotic activity sufficient to suggest sarcomatous change. Nevertheless, most of these tumours behave benignly and the invasive and metastasising character of a sarcoma is not present. Nevertheless, several cases do proceed rapidly to sarcomatous change; one in a young girl has recently been reported,2 and the condition must be treated with concern. The intraductal papilloma is not precancerous, but the much less common multiple lesion not infrequently proceeds to a special type of intraductal carcinoma.1

Though undoubtedly mammary dysplasia is benign, the lesion has the histologically disconcerting tendency to invade normal structures in some cases. Thus perineural and neural invasion has been described on several occasions, especially in sclerosing adenosis,3 4 and recently Eusebi and Azzopardi encountered infiltration of the walls of blood vessels in two cases of sclerosing adenosis. This discovery prompted them to survey a series of cases of sclerosing adenosis and severe epitheliosis, and they found a 10% incidence of vascular infiltration. Usually a single vein was affected, but in one case there was infiltration of two veins and an artery. Since infiltration of surrounding structures is accepted as a cardinal histological criterion for diagnosing cancer, evidently great caution is needed before mammary dysplasia is suspected of undergoing malignant change. In this case the cellular and architectural regularity should preclude such an error being made, but the principle remains that diffuse benign epithelial lesions of the breast may show surprising invasive properties.

Antibiotics again

One of the paradoxical results of the proliferation of medical journals is that important papers may fail to reach their most appropriate audience. The modern doctor must now not only sample from a general journal for breadth of interest but also read one or more specialist journals for the necessary depth; and a judicious selection has also to be made from books, government and Health Service pamphlets, advertising literature, and medical newspapers.

A recent issue of the New England Journal of Medicine¹ carried a possibly overlooked report of the results of a national televised self-assessment test for doctors on the diagnosis and treatment of infectious diseases. The project—the National Antibiotic Therapy Test-attracted a participant audience of 4500 doctors, representing a wide cross-section of professional interests. The test was based on simulated patient problems and was presented to viewers in three parts. A 10-question pretest was followed by a 25-question teaching test in which the clinical illustrations used formed the basis for subsequent teaching by a panel of experts. A final 15-question test was based on the information given during the teaching session. The mean score of 55% on the pretest improved to 68% and 71% on the teaching session and the final test respectively. Only two physicians scored full marks; and one unfortunate recorded only eight correct answers—below par for guessing. An interesting analysis showed the proportion of doctors in different groups achieving a mark of 80% or better for the complete test. As one might expect, specialists in infectious diseases scored best (83% achieving this target); specialists in internal medicine and paediatrics did less well, 38% and 24% respectively meeting the target, but better than family practitioners (15%) and surgeons (10%). Ability to score well deteriorated rather than increased with time since qualification.

High marks might represent only ability to play the game; but the lack of factual knowledge suggested by low marks is likely to be reflected in the realities of patient care. Some of the common difficulties encountered in the test make salutary reading. Only 26% of doctors knew that penicillin prophylaxis should be started only on the day of dental surgery in a patient at risk to bacterial endocarditis. Only 3% of doctors were prepared to offer ampicillin but 36% would offer cloxacillin to patients allergic to penicillin. Other problems included a lack of awareness of drug interactions relating to sulphonamide use, of probable causative organisms in infection after caesarean section, and about the indications for using chloramphenicol. Weakness in knowledge of how to use the laboratory was apparent, and there was clear evidence of lack of knowledge of basic bacteriology—14% of doctors identified a Gram-negative bacillus as Streptococcus faecalis or Staphylococcus aureus.

While similar tests of the ability of British specialists and general practitioners would be of interest, anecdotal evidence suggests that many of the problems are common to practice on both sides of the Atlantic Ocean. NHS prescribing statistics from general practice show that antibiotics continue to be used for diarrhoeal illness against the available evidence, that chloramphenicol continues to be prescribed for illnesses other than typhoid fever, and that children and pregnant mothers still receive tetracycline. In addition to wrong use there is the issue of over-use; hospital staff-for some reason exempt from the cost accountability that general practitioners experience must accept substantial responsibility for using or recommending inappropriately expensive treatment on many occasions when bacteriological and clinical indications are, at best, borderline.

¹ Haagensen, C D, Diseases of the Breast, 2nd edn. Philadelphia, Saunders,

² Hoover, H C, Trestioreanu, A, and Ketcham, A S, Annals of Surgery,

<sup>1975, 181, 279.

3</sup> Davies, J D, Journal of Pathology, 1973, 109, 225.

4 Taylor, H B, and Norris, H J, Cancer, 1967, 20, 2245.

⁵ Eusebi, V, and Azzopardi, J G, Journal of Pathology, 1976, 118, 9.

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The National Antibiotic Therapy Test also deserves commendation as a technique of postgraduate education—a subject recently reviewed.² Both television and simulation have been used in Britain more extensively than they have been evaluated and reported. Projects developing the ideas used in the NATT may offer an opportunity to combine specialist and generalist education; to reduce the costs of duplicating programmes; and to introduce a mechanism of continuing and private self-assessment which might be acceptable to both the hawks and doves of medical audit. Postgraduate education has been fortunate in being able to recruit many able and imaginative staff; but legitimate concern over its running expenses and "cost-effectiveness" are creating pressures for reducing instead of expanding these interests. Sadly, a British programme of this type might be difficult to finance.

Devolution and the NHS

If the case for devolution hinged on the experience of the National Health Service it is unlikely that the issue would have become of any political importance. But now that the bandwagon has started rolling—some, indeed, would say that it is out of the control of the political parties at Westminster—decisions about devolution inevitably have implications for the NHS and for the medical profession. For that reason before the publication of the White Paper¹ the BMJ decided to organise a conference of individual doctors on devolution as part of its series of meetings concerned with questions crucial to the Service and to the profession. In the event, the conference was held after the White Paper and full comments from the BMA² had been published. The discussion papers and the report of the conference appears at p 1127.

In the past the tendency has been to discuss devolution in general political terms rather than in the context of the specific requirements of particular services. Neither the majority³ nor minority⁴ reports of the 1973 Royal Commission on the Constitution, for example, had much to say about the problems of the NHS or any other public service. There is therefore a danger that Mr Michael Foot (who has now inherited minissterial responsibility for devolution and is revising the policy proposals in last November's White Paper) may believe that this relative lack of concern is evidence that he need not take much account of the special interests of the NHS and of the medical profession.

That would be a mistake. As the full reports by the Scottish and Welsh Councils and the conference discussion show, devolution does raise some very important, and contentious, issues. The participants varied in their attitudes towards devolution—some were committed advocates, others were agnostic sceptics—and there was substantial disagreement on many questions. Even so, some clear-cut conclusions emerged. Firstly, it became apparent that the reason devolution had excited so little passion in the specific context of the NHS has

been that in Scotland (though not in Wales) administrative devolution already exists and has indeed existed for many years. Many of the much-admired qualities of the Health Service in Scotland reflect the fact that decisions are taken in Edinburgh by a small group of people, doctors and administrators, who can cut through the formalities of the bureaucratic system and short-circuit the kind of long-distance negotiations characteristic of England and Wales. To this extent the Scottish experience suggests that there is a case for allowing more freedom in decision-making to those actually running the health services in Wales and the English regions. Such a change could well yield considerable gains in terms of flexibility, informality, and the ability to improvise.

But, secondly, the Scottish experience also carries a warning. Administrative devolution there has reinforced, not silenced, the demands for political devolution—the transfer of power to a locally elected assembly. And there is, indeed, an element of logic about such demands. Political accountability is the Siamese-twin of administrative responsibility for spending public money; if the responsibility is devolved, so also must be the accountability, since otherwise devolution would lead to a total loss of political control over the taxpayer's money. So it is not surprising that the BMA should have expressed fears lest devolution should lead to an intensification, rather than a diminution, of political influence in Health Service matters.² If devolution is about anything it is about the distribution of political power.

A positive case may, of course, be made for increased political influence and interest in NHS matters. For example, it was argued at the conference that one reason for the Service's financial plight is its comparative insulation from politics. If raising more money is to be made politically more attractive then health policy may well have to become more political. But here again the experience in Scotland carries a warning. On a per caput basis more is spent on health in Scotland than in either England or Wales-some English regions now have a greater unmet need for resources than any other parts of Britain.⁵ If political devolution were to come to Scotland then the pressure might well be to cut rather than to increase spending on health: one of the Scottish participants at the conference did indeed argue in favour of diverting resources to other social services in Scotland. And, even allowing for social conditions in Scotland, the fact that these services are of low quality is a poor advertisement for devolved political control—in this case local authority control over housing (where Scotland's record has long been notoriously inadequate) and over the personal social services.

These are only some of the specific health issues relevant to the debate about devolution. There are others. Any proposal for less bureaucracy which saves time and money for the NHS must be examined carefully: but a proposal such as the devolution of health might well lead to a fragmented profession working in a segmented Health Service and it ought to be opposed.

¹ Neu, H C, and Howrey, S P, New England Journal of Medicine, 1975, 293, 1291.

² British Journal of Medical Education, 1974, 8, 84.

Our Changing Democracy. Devolution to Scotland and Wales. London, HMSO, 1975.

² British Medical Journal, 1976, 1, 724.

³ Royal Commission on the Constitution Volume I. Report. London, HMSO, 1973.

⁴ Royal Commission on the Constitution Volume II. Memorandum of Dissent. London, HMSO, 1973.

⁵ Godber, G, Change in Medicine, London, Nuffield Provincial Hospitals Trust, 1975.