Tuberculosis is known to be common in new Asian immigrants, but less well known is the continuing high risk in British-born Asians and immigrants of 15 years’ standing. One possible explanation is that immigrants may return to their home countries for visits in a state of relatively low resistance. West Indians and Asians born in Britain develop asthma more frequently and at an earlier age than those born in their country of origin. S Jackson (Birmingham) analysed Hospital Activity Analysis returns and showed that bronchitis and bronchial carcinoma are under-represented among West Indians despite similar smoking habits. According to D Addy (Birmingham), while tuberculosis may occur after a long interval in Britain, malaria in Asian children is confined to those who have entered the country within the previous 12 months. In children the clinical features of malaria, such as fever and pallor, are often not dramatic and may easily be missed. Perinatal morbidity and mortality are greater among Asians than whites and appear to be associated with a lower birth weight, but attempts to identify those mothers particularly likely to produce high-risk babies have not been altogether successful. The high rate of increase in self-poisoning in both immigrant groups, but particularly West Indians, presumably reflects the stresses of these communities in adjusting to life in Birmingham.

Chronic idiopathic thrombocytopenic purpura

The standard treatment for the immunological disorder chronic idiopathic thrombocytopenic purpura includes splenectomy, corticosteroids, and the more recent immunosuppressive cytotoxic drugs. In many cases splenectomy alone results in a complete sustained remission. Some patients, however, derive little or no lasting benefit from this procedure. In 1960 Doan et al. reported a 15% failure rate in 331 patients observed for 28 years, and later reports from various centres gave failure rates of 5-10%. The rate appears to be higher in adults than in children; and in one recent study of 38 adults who had been followed up for 12 years or longer, 15 showed no increase in the number of platelets after splenectomy or had a later recurrence of thrombocytopenia. These patients later received immunosuppressive treatment, mainly azathioprine. Unexpectedly, over half the patients remained thrombocytopenic during this phase but showed a spontaneous recovery with normal platelet counts when the immunosuppressive treatment was stopped. These results highlight the difficulties, firstly, of selecting the patients likely to benefit from splenectomy and, secondly, of assessing the value of immunosuppressive treatment in those patients who fail to respond to surgery.

No clinical or haematological features have emerged that enable those who will respond to splenectomy to be discriminated from the non-responders. During the past decade several attempts have been made to use radioactive isotope studies for identifying patients with spleens playing a major part in platelet destruction. The initial studies were based on labelling platelets with chromium-51, measuring their survival in the circulation, and, by surface counting, assessing the extent to which those platelets with a shortened life span were sequestered in the spleen. The results were confounding. In some of the studies all patients with idiopathic thrombocytopenic purpura were shown to have splenic sequestration and in a few there was liver sequestration as well. The conclusion was that splenic reticuloendothelial tissue is invariably active against immunologically damaged platelets, while sequestration in the liver was thought to show that the platelets had been especially severely damaged by the immune process. This led some workers to conclude that splenectomy would always result in at least some benefit, even when platelets were also sequestered in the liver. Contrary findings, however, were reported by Najean and Ardaillou in a study of 575 patients with idiopathic thrombocytopenic purpura: they found remission after splenectomy in over 90% of the patients in whom the spleen was the major site of isotope accumulation but no response to splenectomy in any cases where the isotope had accumulated in the liver. As only 60% of their patients showed isotope accumulation exclusively or predominantly in the spleen, this would suggest a potential failure rate of 40%, if all patients, without selection, were subjected to splenectomy.

There are several possible explanations for the apparent discrepancies in these results. The labelling technique itself results in damage to platelets as an artefact, while the physical characteristics of the isotope used make it unreliable for external localisation of organs. Furthermore, the procedure requires relatively large numbers of platelets and is impracticable in patients with very low platelet counts. These limitations can be largely overcome by using indium-111 hydroxyquinoline (indium-111 oxine) as the platelet label. The cyclotron-produced isotope labels platelets with remarkable efficiency, so that studies can be carried out even in patients with severe thrombocytopenia; while its physical characteristics are such that reliable quantitative imaging can be performed by a gammacamera or rectilinear scanner.

These procedures are already providing a better insight into platelet kinetics. The circulating platelets have been shown to pool transiently in the spleen in normal people; some of the platelets are temporarily sequestered there without detriment to their viability, while at the end of their life span platelets are destroyed by the reticuloendothelial tissue of spleen and bone marrow. There have been only limited studies in idiopathic thrombocytopenic purpura but the potential value of this technique is that it can distinguish platelet pooling and temporary sequestration from actual destruction in the spleen, and it thus should provide quantitative measurements of the fractional destruction of platelets both there and elsewhere. There is no proof, however, of the practical value of indium labelling in providing reliable information on which to base decisions about the management of patients with idiopathic thrombocytopenic purpura. As with the earlier studies, a limitation in using this procedure for prediction is that it does not take account of the part played by the spleen as a site of synthesis of platelet antibodies in addition to its role in destroying the immunologically damaged cells.

Another unresolved question in idiopathic thrombocytopenic purpura is the use of long-term immunosuppressive treatment. Encouraging results have been reported, though the response rate has varied from 15% to as high as 70%, with complete remissions. Azathioprine and cyclophosphamide have been the drugs most commonly used, but the most favourable results appear to have come from administration of vinblastine-coated platelets. The use of these drugs, however, is not free from risk, and considerable skill is required to select the appropriate drug and the correct dose for the individual patient. Furthermore, the recent report of prolonged remission without treatment highlights the need to keep patients under careful observation with a frequent check on
their platelet count and clinical manifestations of thrombocytopenia: the aim should be to wean them from this form of treatment as soon as possible and so avoid prolonged immunosuppression in patients who have become stabilised and might well manage better without it.


**Postoperative radiotherapy in breast cancer**

Recently almost every aspect of the treatment of breast cancer has come under the spotlight of critical review; and the wide interest in the topic is shown by the correspondence (25 April, p 1392) stimulated by our leader on breast conservation (7 March, p 759). One of the most vexed questions is the value of postoperative radiotherapy with cancerous axillary lymph nodes. 1 Postoperative radiotherapy is time consuming, costly, and not without morbidity; so how good is the case for its routine use after radical surgery in patients with spread to the axillary nodes? The issue is now further complicated by the possible risks of using radiotherapy in conjunction with adjuvant chemotherapy. At present treatment programmes vary from centre to centre, with clinical trials still in progress.

Spread to the axillary lymph nodes certainly carries a bad prognosis—the more nodes affected the worse the outlook—but there is a group of long-term survivors who have diseased nodes at the time of their primary treatment. 2 The available evidence shows that with modern techniques and equipment radiotherapy can stabilise the area of the breast and regional nodes in about 90% of cases without much morbidity. The long-term effects are less certain. Opinion is divided on whether patients with diseased nodes can be cured by radical local treatments or can at least achieve a normal life expectancy. The treatment hawks believe that breast cancer behaves like most other cancers and goes through a longer or shorter stage when it has spread to the regional nodes but has not disseminated. They will practise radical local and regional treatments, usually including postoperative radiotherapy, and will probably also use adjuvant chemotherapy and hormones prophylactically to take care of disseminated disease. The disadvantages of radiotherapy and the risks of associating it with chemotherapy are written off against the chance of a "cure."

The treatment doves believe that the presence of spread to the axillary lymph nodes signifies advanced and disseminated disease, and their therapeutic efforts are directed to establishing local control to prevent the disappointment and misery of local recurrences and to treating disseminated disease symptomatically with chemotherapy or hormones or both.

Clinical trials of postoperative radiotherapy have given conflicting results, and their design has been criticised. 3 The Manchester 4 and the Cancer Research Campaign 5 trials showed no benefit in terms of survival at 10 years for the stage I or stage II patients having radiotherapy routinely postoperatively. They did, however, record an unacceptably high rate (about 45%) of local and regional recurrence in patients with stage II disease. Hast and Brennhovd 6 achieved a small improvement in survival in patients with diseased nodes at five years using cobalt irradiation.

Opinion seems likely to remain divided on the place of postoperative radiotherapy. Though there is little evidence to support radical radiotherapy except to prevent local recurrences, some clinicians will continue to use it after radical or conservative surgery and will cover the breast or pectoral scar and the axillary, supraclavicular, and internal mammary nodes. 7 Others will use radiotherapy only in selected cases with the aim of preventing local recurrence or will withhold routine postoperative treatment and use it only if and when local recurrence develops.

The place of adjuvant chemotherapy has yet to be established in the long term. Originally this treatment was intended to eradicate micrometastases after local radical treatment, and increasingly intensive courses are now being recommended on the basis of Bonadonna's studies. 8 Whether these intensive courses will control "bulk" local and regional disease remains to be seen. If local control can be established and maintained by adjuvant chemotherapy postoperative radiotherapy will no longer be needed, so eliminating the potential risks of combining radiotherapy and chemotherapy.

The main questions being asked by clinicians now—and being put to trial—are not so much which operation, or how much radiotherapy, but which combination of treatment modalities is optimum. A question mark remains over the long-term safety of radiotherapy, though earlier fears that it reduced patients' resistance to the development of metastases has not been confirmed. 9 10 The Breast Cancer Trials Co-ordinating Subcommittee in Britain is organising a meeting this year to pool and analyse the long-term results of clinical trials which have included radiotherapy as one treatment option, in the hope of shedding some light on the long-term effects of radiotherapy as well as establishing more clearly the value of postoperative irradiation.

Until chemotherapy has proved itself in the treatment of regional disease and until (or indeed if) radiotherapy can be shown to be harmful the complete radical local and regional treatment for patients with breast cancer and affected axillary lymph nodes still requires postoperative radiotherapy. One of the few certainties in breast cancer is that radiotherapy will prevent local recurrences if it is used in association with more conservative procedures.


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