

hours or even less after childbirth, instituted to relieve pressure on obstetric beds, has proved unexpectedly popular with the mothers themselves. The number of domiciliary deliveries has been proportionally reduced without increasing the pressure on hospital facilities. This state of affairs is not universal over the country, but it certainly exists in the Inner London area.

The future of Queen Charlotte's has become urgent since the Department of Health decided to rebuild Charing Cross Hospital and Medical School at Fulham. There are proposals to expand the annual intake of medical students at Charing Cross to 120. An undergraduate teaching hospital without an adequate department of obstetrics and gynaecology is unthinkable, and it already has a professorial unit which will expect to move to Fulham. To have an adequate unit for the teaching of medical students it is estimated that about 100 maternity beds will be needed. But if an obstetric unit of this size is built on the Fulham site it will create a surplus of maternity beds in the South-west Metropolitan Region.

Queen Charlotte's at present houses part of the Institute of Obstetrics and Gynaecology, which is responsible for a considerable amount of the postgraduate education in those disciplines in the London area. The other parts of the Institute are at Hammersmith Hospital, where there is a separate professorial unit, and at Chelsea Hospital for Women. For several years there has been a plan to rebuild Chelsea Hospital, with its facilities for gynaecology, in proximity to Queen Charlotte's. But the gynaecological needs of this part of London would appear to be well served by units at Hammersmith, St. Stephen's Hospital, and the new Charing Cross Hospital.

The Royal Commission on Medical Education² recommended that postgraduate institutes should be linked to and ultimately become part of the combined medical schools that were proposed. An exception was to be made in the case of the Hammersmith Hospital and the Royal Postgraduate Medical School, at least in the foreseeable future. It is now becoming widely held that maternity units in isolated buildings are at a disadvantage in terms of modern obstetric, paediatric, and anaesthetic practice and that departments of obstetrics should be part of general hospitals with district responsibilities. Perhaps Queen Charlotte's, with its international reputation and long tradition, might be regarded at least for the time being as a special case.

A decision on these difficult questions is becoming urgent. There would appear to be three possibilities for Queen Charlotte's. The first is for the hospital to close as no longer needed for the maternity services required for the region. The professorial unit would move to the Institute of Obstetrics at Hammersmith Hospital, and facilities for postgraduate teaching might be provided at Hammersmith and at other general hospitals. The second possibility is for Queen Charlotte's to become the maternity department of the new Charing Cross Hospital Medical School. The number of beds at Queen Charlotte's, 140, is in excess of those recommended for the proposed number of medical students, but if the school of midwifery were retained this number would not be excessive. This would continue the use of the building for the purpose for which it was designed. It would be some distance from the main Charing Cross Hospital, and thus the disadvantages and inconveniences of a maternity unit divorced from the main hospital and medical school would be perpetuated. The third possibility is for Queen Charlotte's to continue its present work and for other maternity units in the area it serves to be closed. This would be attractive to those who

wish to see its work and traditions carried on, but there might be difficulties for mothers who would have to travel considerable distances to attend the hospital. Maternity care is much more than inpatient care, and requires numerous visits to hospital for antenatal clinics and other services. The Royal Commission showed (on 1964 figures) that less than half (48%) of the patients of Queen Charlotte's came from the Inner London area; 45% came from outer London and 7% from outside London. Thus if Queen Charlotte's were to continue it would have to maintain its role in dealing with special abnormalities, and staff responsible for admissions would have to ignore the catchment areas laid down for maternity patients in the London region.

It seems a pity that a controversial situation of this kind should have arisen over the conflicting interests of institutions which have served the people of London so well for so many years. Part of the difficulties arise from a conflict of interest between the metropolitan regional hospital board and the board of governors of the teaching hospital concerned. The Royal Commission recommended that for London, as for the rest of the country, the teaching hospitals should be merged with those of the metropolitan regional hospital boards to provide single authorities based on the university hospitals and responsible for hospital services as well as for undergraduate and postgraduate education. This remains a controversial recommendation but surely one worthy of reconsideration so that these conflicts of interest can be speedily resolved.

¹ *The Times*, 3 February 1971.

² Royal Commission on Medical Education 1965-68, *Report*, Cmnd. 3569. London, H.M.S.O., 1968.

Leukaemia on Myeloma

There is an undoubted relationship between some neoplastic diseases and the subsequent development of other malignant diseases. Patients with various myeloproliferative disorders, such as polycythaemia rubra vera, myelofibrosis, and chronic myeloid leukaemia, may eventually develop blast cell crises indistinguishable from acute myeloblastic leukaemia.¹ All four conditions are derived from closely related cells. The incidence of cancer of the skin is greater in patients with chronic lymphocytic leukaemia than in general.² The likelihood of developing these further malignant conditions may depend on the tissue treated with agents likely to interfere with DNA metabolism, such as x rays and cytotoxic drugs.

An association between myelomatosis and the subsequent development of acute leukaemia has recently been recognized.³⁻⁷ Many of the patients described have developed the myelomonoblastic variant of acute leukaemia, though some of them had acute myeloblastic leukaemia. A total of 16 patients with myelomatosis have been shown to develop one of the variants of acute myelogenous leukaemia. In addition a further patient with a plasma cell dyscrasia and amyloidosis also developed this complication.⁵

R. A. Kyle and his co-workers⁵ reported three of these patients who developed leukaemia and showed that this incidence in their series of patients with myelomatosis was much higher than the expected number. J. F. Holland⁷ has noted a further five patients developing acute myelogenous leukaemia after being treated with irradiation and melphalan for myelomatosis.

All the patients with myelomatosis who have developed

acute myelogenous leukaemia were treated with irradiation or alkylating agents. Melphalan was used in nearly all patients. The cause of the increased incidence is therefore uncertain. It seems unlikely that the development of this disease represents a natural evolution from myelomatosis, as in the case of the myeloproliferative diseases, since different cell lines are involved.

Patients with myelomatosis usually have a severely reduced capacity to synthesize antibodies, and their capacity to make an immunity response may well be impaired, this defect leading to an increased incidence of malignant disease. The effect may be compounded by treatment with cytotoxic drugs and x rays. The use of irradiation is known to be attended by an increased incidence of this form of acute leukaemia, and the prolonged use of cytotoxic immunosuppressive drugs in renal homotransplantation is accompanied by an increased risk of malignant disease, particularly of the lymphoreticular system.

The possibility remains that the increased incidence of acute myelogenous leukaemia is largely due to the prolonged use of the alkylating agent melphalan, though it is likely that immunosuppression, irradiation, and cytotoxic drugs all play their part in the process. This complication is serious enough to be considered before treatment with a cytotoxic drug is instituted for non-malignant conditions.

¹ Dameshek, W., *Blood*, 1951, 6, 372.

² Moertel, C. G., and Hagedorn, A. B., *Blood*, 1957, 12, 788.

³ Nordenson, N. G., *Acta Medica Scandinavica*, 1966, Supplement No. 445, p. 178.

⁴ Edwards, G. A., and Zawadzki, Z. A., *American Journal of Medicine*, 1967, 43, 194.

⁵ Kyle, R. A., Pierre, R. V., and Bayrd, E. D., *New England Journal of Medicine*, 1970, 283, 1121.

⁶ Andersen, E., and Videbaek, A., *Scandinavian Journal of Haematology*, 1970, 7, 201.

⁷ Holland, J. F., *New England Journal of Medicine*, 1970, 283, 1165.

A Surgeon's Reflections

It is no disparagement of the extraordinary advances in surgery during the last 50 years to say that blood transfusion and improvements in anaesthesia helped greatly to make them possible. The first used to be a major enterprise, with all the relatives lined up for matching of the blood groups, as Sir Charles Illingworth records in his recently published Rock Carling Fellowship lecture¹. A beaker, a glass funnel, some rubber tubing, and a few needles were boiled up—and the risk of hepatitis was negligible. In drawing on a professional experience that has covered about that span of time Sir Charles recalls the time when “the operation team was grouped as for a drama.” In the limelight at the converging point of interest was the surgeon, dominant and incisive, while attendants stood around like a Greek chorus. Today he is apt to be almost lost in a crowd of technicians with their complicated equipment monitoring the patient's vital processes; and the anaesthetist, “no longer much concerned with the simple task of keeping his patient asleep,” is in control of elaborate apparatus to keep him alive.

That surgeons can offer enormously more comfort and relief to humanity than they could 50 years ago is undoubted. But like practitioners in other branches of medicine they are now having to make painful decisions on whether it is really in the patient's best interest to be treated at all, and if so how. In one way there is nothing new in this, for “inoperable” cases have always been recognized. Now, however, the old jibe that

the operation was successful but the patient died is becoming outmoded. In its place we see what can be the sadder conclusion that the operation was successful and the patient lived—a life of painful and restricted invalidism. With different overtones this problem faces the surgeon in charge of a baby with a severe defect of the central nervous system,² a young adult reduced by a road accident to “a pithed heart-lung preparation,” and an elderly victim of a progressive disease. In such circumstances, says Sir Charles, the humane surgeon watching his patient suffer may be tempted to let the natural process of decay proceed to its appointed end and even to hasten it, while the one who believes that by divine decree the ultimate spark of life must be preserved will take the opposite view. All would agree with Sir Charles that these decisions must remain a matter for the individual conscience. How they are taken for each patient may be what distinguishes the great surgeon from his colleagues.

The preparation of young people for what can be one of the most arduous ways of earning a living still suffers from too much trivial clerking just at a time when they should be devoting themselves to laying a foundation in the craft. Obviously nobody can escape the routine chores that accompany almost any occupation, and the cry sometimes heard to be given more time to work “creatively” is apt to come mainly from people who have little capacity to “create,” for those who have it make the time. But if housemen are engaged on two hours of secretarial duties a day and another hour on taking blood samples for laboratory estimations, as Sir Charles says does happen, they can only have too little time for the real business of learning their profession. And in this respect it is the old-established teaching hospitals, he says, which are the worst offenders. The Goodenough Committee, whose report led to the institution of a pre-registration year, and the Royal Commission, which again emphasized the overriding importance of educational opportunities after graduation, have come and gone and left some sort of a mark in their transit, yet nobody can feel happy that enough is being done to enable professional people, especially the young, to equip themselves for such a swiftly and continually changing occupation as the practice of medicine has become in the last 20 years and will certainly be in the next 20.

¹ Illingworth, Sir C., *The Sanguine Mystery*, Rock Carling Fellowship, 1970. London, Nuffield Provincial Hospitals Trust, 1970.

² *British Medical Journal*, 1969, 3, 607.

Pharmacological Control of Upper Gastrointestinal Bleeding

Acute upper gastrointestinal bleeding is still a common cause of admission to hospital, and during the last 20 years the mortality rate from the condition seems to have fallen little, if at all, hovering obstinately around 10%. Thus an overall mortality of 8.9% was found in a recent review of experience in Oxford,¹ and in comparing the results obtained in three successive quinquennia the only major improvement noted was that fewer men were dying with gastric ulcers. This general lack of improvement is depressing, especially since the proportions of patients with haematemesis and melaena who were over 60 years of age had not risen with time, and it is the elderly who form the bad risk group.