

organization." After some opposition, debate, and a vote the motion was carried. The argument which the Council advanced in favour of its motion was that people whom the Association might want to invite to become president might practise in areas where it was not possible to hold an Annual Meeting.<sup>1</sup> In the years that followed that meeting the change in policy implied by the Representative Body's decision has had less effect than might have been thought, no doubt because it has been wisely interpreted as extending the area from which eligible persons might be chosen rather than restricting the choice to the few people in any generation who emerge as multiple-presidents. But that some of these leading members of our profession consent to preside also over the B.M.A. deserves the warmest acknowledgement. At the same time the continual strength of the B.M.A. in the provinces, where it originated, should serve to counterbalance the tendency of London to weigh heavily in so many aspects of British life, and not least in medicine with its twelve undergraduate medical schools.

The concern that Sir George expresses about the metro-

politan emphasis in the presidency is linked to his question whether the B.M.A. is in danger of losing its independent standing, or at least of seeming to do so. He fears the aura of the Establishment, and in this he gives a warning that any organization in the position of the B.M.A. must heed. But it has nothing to do with the presidency. The making of the Association's policy, the guidance it receives from expert advisers, the debates it holds (as fully reported as those of any comparable institution), the arguments it has with Government departments—all these are remote from the president's office. Sir George's plea that the Association must be vigilant for its independence is another matter. Recent events have shown that it can act decisively and quickly in the interests of the profession. But, now that the central Government, whatever its political complexion, controls so much of daily living with a pervasiveness unknown a generation ago, the preservation of professional freedom must be a task to which the B.M.A. never ceases to be alert. And the "B.M.A." means every member, not a nebulous body wearing the aura of the Establishment.

## Campaign against Cancer

During the year the British Empire Cancer Campaign has changed its name to the Cancer Research Campaign, and the 47th Annual Report,<sup>1</sup> now issued, is to be the last in its present form. From its new offices, which it shares with the Royal College of Pathologists at 2 Carlton House Terrace, London, S.W.1, the Campaign clearly has every intention of escaping from the cobwebs and of moving into the 1970s with an obvious determination to tackle pressing problems. Everyone will wish it success in its attempts.

Ever since the thalidomide tragedy there has been an interest in trying to associate teratogenicity with carcinogenicity. Though it has been possible in the laboratory to show that some potent carcinogens, if given at the right time during pregnancy, lead to developmental abnormalities, most workers would agree that the association between the two types of activity is not close. A survey at the Hospital for Sick Children, Great Ormond Street, is interesting in this connexion. The clinical records of children with solid tumours were examined to determine the incidence of major congenital malformations. The tumours comprised 144 neuroblastomas, 103 nephroblastomas, 96 teratomas, and 40 hepatoblastomas. Apart from an increase in malformations of the lower gastrointestinal and urinary tracts in cases of sacrococcygeal teratoma, none of the groups of neoplasms was associated with a conspicuous increase in congenital abnormalities.

Though smoking is acknowledged to be a most important contributory cause of cancer in man, notably cancers of the lung, larynx, pharynx, oral cavity, and possibly bladder, it receives scant attention in the present report, but some work is described. A study by J. Booth of the possibility that metabolites of nicotine may be implicated in the carcinogenicity of tobacco smoke is still only in its early stages. A. B. Wells has found that infection with a mycoplasma renders rats particularly susceptible to the stimulation, by tobacco smoke, of cell proliferation in the tracheobronchial epithelium, and that the pattern of cell proliferation stimulated by sulphur dioxide differs from that due to cigarette smoke.

A finding by C. A. H. Trench and his colleagues that the intraperitoneal injection of cigarette smoke led to the development of peritoneal tumours and ascites is difficult to interpret. People do not smoke by this route; and plain air that had passed through the same smoking machine after it had been repeatedly cleaned, rinsed, and drained also caused peritoneal tumours.

No really promising new chemotherapeutic agents have emerged during the year, and the somewhat unusual and surprising antitumour activity of 5-aziridino-2,4-dinitrobenzamide (CB 1954) against certain transplantable tumours in animals has not yet been shown to have a use in the clinic. L-Asparaginase derived from *Escherichia coli* is effective in lowering the blast cell count in some patients with acute myeloid or acute lymphoblastic leukaemia but is less effective in clearing such cells from the bone marrow. L-Asparaginase derived from *Erwinia carotovora*, which has a higher molecular weight than that derived from *E. coli*, is more quickly lost from the blood and less adept at finding its way into lymph than the latter. The same enzyme has been found to abolish the increase in immunoblasts which normally occurs four days after the immunization of rats with B.C.G. vaccine. This finding is in line with the observation that it reduces both humoral and cell-mediated immunological responses.

D. G. Harnden suggests that there may be a 20-fold increase in the incidence of carcinoma of the breast in males with Klinefelter's syndrome. In support of this view he records a survey of 68 cases of carcinoma of the breast in males the records of which found their way into the Birmingham Regional Histological Collection. This survey showed two examples of probable Klinefelter's syndrome in which sex chromatin bodies could be seen in the nuclei of both carcinoma cells and stromal cells. O. G. Dodge and his colleagues at the Christie Hospital in Manchester had previously estimated the increased risk of breast cancer in Klinefelter's syndrome to be 66-fold. They now refer to a case with the Klinefelter karyo-

<sup>1</sup> British Empire Cancer Campaign for Research, *47th Annual Report Covering the Year 1969*. London, 1970.

<sup>2</sup> Gunn, S. A., Gould, T. C., and Anderson, W. A. D., *Journal of the National Cancer Institute*, 1963, 31, 749.

<sup>3</sup> Roe, F. J. C., Dukes, C. E., Cameron, K. M., Pugh, R. C. B., and Mitchley, B. C. V., *British Journal of Cancer*, 1964, 18, 674.

<sup>1</sup> *British Medical Journal Supplement*, 1952, 2, 12.

type which had both breast cancer and an interstitial-cell tumour of the testis. It is perhaps not surprising that a syndrome associated with progressive testicular atrophy and hyperplasia of Leydig cells should be associated with an increased risk of tumours derived from the latter element. This is the regular sequence of events in cadmium poisoning in rats.<sup>2 3</sup> Perhaps the surprise is that the association has not been more obvious previously.

A disturbing finding from J. C. Heath in collaboration with others is that detritus from two vitallium (a cobalt-chromium-molybdenum alloy) articulatory surfaces rubbed together mechanically in Ringer's solution gave rise to a rhabdomyosarcoma after intramuscular injection into a rat. Also disturbing is the finding by J. Swinney and R. O. K. Schade that 80 out of 100 biopsy specimens of mucosa taken at some distance from transitional-cell carcinomas of the bladder showed changes they interpreted as precancerous. It is not clear how many of the 100 patients had a history of exposure to a known bladder carcinogen, but if such a history were uncommon and if the findings can be confirmed they could be taken to suggest that environmental carcinogens acting on the whole bladder mucosa are implicated in the causation of the majority of bladder cancers.

## A New Sign?

Interpretation of the symptoms and signs of biliary disease may be difficult and inexact, and certain popular fallacies exist. One attributes flatulent dyspepsia to gall stones, whereas the facts show that gall stones and gall-bladder disease are not always present and that the symptoms are more nearly related to underlying patterns of abnormal contractility in the stomach and duodenum. Another fallacy concerns biliary colic; the pain is often believed to be sited over the position of the gall-bladder in the right hypochondrium, whereas it is usually felt across the upper abdomen, sometimes even starting in the left hypochondrium. The embryological development of the biliary system is from the foregut, which is a midline structure and symmetrically innervated.

If cholecystitis follows the colic the pain and tenderness will be felt in the right hypochondrium. This symptom sequence may be compared to that in acute appendicitis, where the central colicky abdominal pain (midgut) is followed by the pain and tenderness in the right iliac fossa (or where the appendix is lying). Biliary colic differs from appendicular, intestinal, or ureteric colic in that the pain builds up with intensity over a period of a few hours; it does not wax and wane.

Cardiac arrhythmias and pain are somehow linked to biliary disease, but the mechanism is obscure. Continuous electrocardiographic tracings during an operation may show an arrhythmia when traction is applied to the gall-bladder and the cystic duct. Many patients lose their cardiac symptoms after cholecystectomy.

Sir Zachary Cope, authority on the diagnostic problems of the acute abdomen which perplex the practitioner and surgeon, himself suffered recently from an attack of biliary colic and acute cholecystitis and has described it at p. 147. His trained senses recorded the early symptoms of the disease and his "cardiac link" symptoms. He makes a special point of the palpation of a tense, painless swelling—presumably the gall bladder—during the attack of colic. The swelling disappeared as the attack subsided, and he attributes it to a temporary obstruction of the cystic duct. Possibly this painless swelling has been often noted by practitioners who are at the bedside

of their patient during an attack of colic. Certainly in hospital practice patients with acute biliary problems are often referred by their doctors with letters describing a palpable gall-bladder which is impalpable on arrival at hospital.

## Home from Hospital

The Dan Mason Nursing Research Committee has issued its last report,<sup>1</sup> which must be a matter of regret to anyone who values factual information on nursing and related topics. This research project studied the needs for home care of 533 people discharged from hospital and how far these needs had been met. They came from two areas; the one in the north was an industrial area with rural surroundings, and the other in the home counties had a range of socio-economic groups. The inquiry sought to find what patients themselves felt their needs to be, how far their expectations were fulfilled, and what were the existing arrangements and community care for people leaving hospital. Patients included in the sample were seen just before discharge and about two and ten weeks later at home.

The most fortunate ones (apart from those with no special needs returning to their families) were the maternity patients; 75% of them had been asked about their home arrangements by the medical social workers as against only 15% of the general patients. There is a good routine for notifying health visitors about new babies, and mothers who needed home helps usually got them, though it should be noticed that a sizeable number thought after a period at home that their discharge had been too early, and felt very tired.

It is a different matter when one reads about the old, the incontinent, the solitary, and those suffering from malignant disease. Fifty-two patients had multiple needs, and in these cases "life was often grim for the patient and his family." Thumbnail sketches are given of 18 patients for whom society offered little. A 90-year-old widow, blind, with untreated carcinoma of rectum, sat in bed or on the commode all day "waiting for the end to come." An epileptic who had attempted suicide and whose husband was in prison, returned to two rooms with five children, one mentally retarded, and with no support arranged. A 98-year-old hemiplegic, doubly incontinent, was sent home to a daughter and son-in-law, both over 75, with no community services arranged.

One deplorable point is that 28 patients said they could not get adequate relief from pain, mostly because of doubt about who was prescribing for them. Five patients with malignant disease subsequently rang up the interviewer for advice; "all were desperate for effective analgesics, and could not think to whom to turn."

The main impression is of failure of communication. Hospitals know little of their patients' home circumstances, doctors do not hear of their patients' hospital treatment, patients do not know of the sources of help that are available. There is a great shortage of home helps, especially for those whose needs are greatest. Somehow the supply must be increased. The success of practice-attachment for district nurses and health visitors has been so great that perhaps home helps could be added to the team, and the morale-raising effect of working in a group might aid recruitment. Nobody in or outside hospital can feel complacent about the level of home care described in this report.

<sup>1</sup> Skeet, M., *Home from Hospital*. London, Dan Mason Research Committee of the National Florence Nightingale Memorial Committee of Great Britain and Northern Ireland, 1970.