feels that attendant social problems can be solved in some other way she should not be afraid to say so. The surgeon may well be hoping that another solution will be found, difficult though this may be to put before the patient. I think also that many women will come to a hospital with a request of this sort just in order to test the authorities, in the same way that a child may test the authority of his parents. We may well find, as has been my experience, that after a long interview the mother suddenly fails to keep an appointment and one discovers that the unconscious need for the unborn child has finally overcome her former reasons for wanting to destroy it. As with other social problems, the need has been partly met by the social worker's ability to help the patient to talk out her difficulties.

Reasons for Termination

In most cases, however, the answer will not be so simple. It would be impossible to list here all the social factors which may be presented by the patient requesting termination, but I shall try to summarize a few of the more appropriate. Inadequate housing in urban areas ; the unsupported mother with a disabled, imprisoned, or student husband ; the inadequate mother with her existing children hopelessly out of control ; and the terrified single girl who would rather risk her life than face up to having her baby ; all produce a situation which may well affect the physical or mental health of a child. Before giving her report the medical social worker must satisfy herself that the situation is likely to be relatively permanent, bearing in mind that the problems of the young are subject to great fluctuations both in real terms and in attitudes. She must also try to discover what efforts have been made by the patient to improve the conditions that make having the child intolerable. The possible effects on existing children to an addition to the family should be taken into account. There may, for example, be a rather lonely child who would welcome the companionship of another sibling. Probably the greatest difficulty will be in trying to make a social evaluation while under considerable pressure in terms of time, stress, and emotional atmosphere, yet at the same time giving the patient the feeling that the investigation is disinterested and thorough.

To sum up, a whole range of emotions are evoked when a couple present themselves to be relieved of the burden of an unborn child. Whatever our natural reactions to such abnormal behaviour it is, nevertheless, our professional duty as social workers to consider patients as individuals with needs uniquely their own, and to try to understand the mechanism behind the request. Sometimes the pressure may come from sources outside the family. There are rumours of building societies that will give mortgages only if the wife agrees to take a contraceptive pill. Recently a local authority housing department would consider rehousing an unmarried mother only if she agreed to sterilization. If too liberal an interpretation is made of this new legislation there is every likelihood that similar pressures will force women to seek abortion. Medical social workers should be on their guard to protect patients from such outside influences.

CONFERENCES AND MEETINGS

Joint College of Physicians Meeting in Boston

[FROM A SPECIAL CORRESPONDENT]

The 49th Annual Session of the American College of Physicians was held with the Royal College of Physicians of London in Boston from 1 to 5 April in the presence of 6,000 physicians, including 100 from Britain. No more appropriate opening day could have been chosen for the London College representatives than William Harvey's 390th birthday.

The Convocation Oration was delivered by Sir Max Rosenheim, P.R.C.P., in the presence of new Fellows of the American College of Physicians and their wives, and the Presidents of the Australasian, Canadian, Edinburgh, and Glasgow Colleges, who received honorary Fellowships of the American College.

Iron Metabolism

M. JOHN MURRAY (Minneapolis) showed that gastric juice from patients with iron-deficiency anaemia or haemochromatosis could increase iron absorption in sham-operated and in gastrectomized rats. These observations strongly supported the secretion into the stomach of a factor which potentiates iron absorption in time of need. L. S. VALBERG and D. OLATUNDOSUN (Kingston, Ontario) had compared intestinal absorption of cobalt and iron in patients with normal repletion and with iron overload. The two elements had been found to be absorbed by similar transport pathways in the intestinal cells. Unlike iron, cobalt was not temporarily stored in the mucosa and lost when the intestinal epithelium desquamated. While cobalt transport was responsive to the intracellular mechanisms which enhanced iron absorption it was not to those that inhibit it.

Starch addiction is well recognized, particularly in pregnant women of lower socio-economic status. Amounts as high as 30 grammes daily may be taken. MANFRED BLUM, C. G. ORTON, and L. ROSE (New York) showed that 8 grammes of laundry starch daily significantly reduced iron absorption, and related the anaemia of starch addicts to this effect. Starch might be of value prophylactically in relatives of patients with haemochromatosis who might be destined to develop the disease. R. K. NIXON (Detroit) had studied the marrow-haemosiderin pattern, finding that stainable marrow haemosiderin was absent in chronic iron loss, intestinal malabsorption, and polycythaemia rubra vera. The presence of large particles indicated a reduced iron turnover, and associated conditions included cirrhosis. Small particles were associated with an increased turnover, and were found in pernicious anaemia and in idiopathic haemochromatosis. Staining of marrow for iron might be a useful method of distinguishing primary from secondary haemochromatosis.

L. A. HARKER, D. FUNK, C. A. FINCH (Seattle) had evaluated iron stores by chelating agents. Chelate iron excreted after feroxamine correlated well with the presence of parenchymal iron deposits in the liver but not with reticuloendothelial iron, peripheral iron, or iron turnover. Only parenchymal iron seemed to be available for excretion after the chelate. The deferoxamine loading test might be particularly useful as a screening method to reveal parenchymal iron overload before irreversible pathological changes had occurred.

Diuretic Therapy

ALEXANDER LEAF (Boston) had attempted to localize the actions of diuretics within the renal tubular cell. He pointed out that diuretics acted by interfering with intracellular sodium reabsorption. This could be at the passive stage of entry, where the tubular cell recognized sodium, or at the second stage of active secretion, which was energy-requiring. Spironolactone had been

shown to interfere with the binding of aldosterone to the cell nucleus.

LAWRENCE E. EARLEY (San Francisco) discussed the factors affecting sodium retention, which comprised glomerular filtration rate, aldosterone, and a third factor—an unrecognized hormone which depressed sodium reabsorption in response to changes in extracellular fluid space. In addition, haemodynamic factors were concerned; renal vasodilatation decreased vascular resistance, and, though glomerular filtration did not change, sodium excretion was increased.

MARTIN GOLDBERG (Philadelphia) showed that osmotic diuretics (such as mannitol) and factor III acted proximally in the nephron, on the sodium-chloride exchange system. Carbonic anhydrase and frusemide acted slightly more distally, on the sodium–hydrogen bicarbonate exchange. Frusemide and ethacrynic acid acted at the ascending loop of Henle, affecting the counter-current system for concentration and dilution, while the thiazides acted slightly more distally in the early distal tubule and were not linked to the counter-current system. Spironolactone and triamterene had their effect even further down, on sodium and potassium exchange.

WILLIAM B. SCHWARTZ (Boston) divided the diuretics into two main groups—the proximally acting ones (blocking reabsorption of sodium and chloride, and including mercurials, thiazides, ethacrynic acid, and frusemide), and the distal ones (conserving potassium and including carbonic anhydrase inhibitors, spironolactones, and the pteridines (triamterene)). He emphasized the necessity of giving chloride as well as potassium when diuretics had induced hypokalaemia. This supplement could be in the form of potassium chloride, ammonium chloride (but not in cirrhosis, because it might induce hepatic coma), or lysine hydrochloride.

Diagnosis and Treatment of Infections

MAXWELL FINLAND (Boston) said he was less concerned about the toxicity of chloramphenicol than some other members of the panel which discussed the diagnosis and treatment of infections. He believed that some Gram-negative organisms were sensitive only to kanamycin or chloramphenicol and that kanamycin resistance was increasing. GEORGE G. JACKSON (Chicago), by way of contrast, believed that the only indication for chloramphenicol was salmonella infection. MORTON N. SCHWARTZ (Boston) warned that when aplastic anaemia complicated chloramphenicol therapy it was almost always fatal.

The panel discussed the management of bacterial meningitis, particularly in neonates and babies. Pointing out that Gram-negative meningitis in neonates might be due to a wide spectrum of organisms, Schwartz believed that kanamycin, with or without penicillin or ampicillin, was the best therapy. Pseudomonas infection was an indication for polymyxin. Finland urged that drugs be handled differently in neonates, especially in premature ones, and small doses must be used.

On the whole the panel did not favour intrathecal antibiotics except for the occasional use of polymyxin, amphotericin, and kanamycin. G. D. MCKENDRICK (London) recommended intrathecal penicillin for pneumococcal meningitis and intrathecal streptomycin for tuberculous meningitis.

J. B. SANFORD (Dallas) said that he could find no real evidence for the value of corticosteroids in protecting from shock due to Gram-negative septicaemia, which carried a 50% mortality rate. Monitoring of the central venous pressure was the most important adjunct to therapy. Half of all Gram-negative septicaemias occurred in patients under treatment with Foley catheters in genito-urinary departments. In 70% of patients the causative organism was *Klebsiella aerobacter* or *Escherichia coli*.

GEORGE JACKSON (Chicago) discussed the use of amantadine as a prophylactic against viral influenza, observing that it must be given in a proper dose prior to the virus infection, while its efficacy ceased within a short period. The usual recommended dose was 200 mg. daily, slightly larger amounts giving rise to neurological and psychological reactions. It had been found to be effective prophylactically in military personnel, who had been able to work normally while taking the drug. Finland, commenting on the use of prophylactic amantadine during an influenza epidemic, pointed out the difficulties of who should receive the drug and how often. It was of no value to contacts, because they had already received maximal exposure. Moreover, prevention of an influenza epidemic lasting some weeks in a city such as Boston would be quite impossible.

Drug-induced Disorders

Haemolytic states following ingestion of drugs were classified by ALBERT LOBUGLIO (Buffalo) into three types: The Coombs-positive variety such as that following alpha methyldopa; the hapten (penicillin) type; and, finally, the reaction to cephaloridine when protein was precipitated on the erythrocyte. The first type was dose-dependent, usually occurring after three months' treatment and rarely after a year. It was due to a 7*S* gamma-G, warm non-complement-fixing antibody. It had specificity for the rhesus locus on the erythrocyte which was the same as for idiopathic immune haemolytic anaemia. The positive Coombs reaction remained after the drug had been stopped.

The hapten type of haemolytic state was due to an antibody to the drug itself: reactions to quinine, quinidine, isoniazid, and penicillin were typical examples. The penicillin became bound to the membrane of the erythrocyte; antibodies were formed to it; thereafter the erythrocyte became coated with antigen and antibody and was then removed by the reticulo-endothelial system.

Describing the drug reaction due to an underlying enzyme defect in the red cell, ROBERT W. KELLERMEYER (Cleveland) said that in these circumstances the erythrocyte could not handle oxidizing agents, and hence became susceptible to destruction. Primaquine administration in a patient with glucose-6-phosphate dehydrogenase deficiency was a good example, and patients with this enzyme deficiency might also develop haemolysis in response to the acidosis of renal disease or diabetes mellitus. ANTHONY V. PISCIOTTA (Milwaukee) discussed agranulocytosis due to drugs. In his opinion phenothiazines could most often be incriminated. The reaction was transient and not very severe, elderly women being particularly prone. The drug interfered with the developmental stage of leucocytes in the marrow, though the platelet and erythrocytic series were unaffected. In-vitro studies of the human bone marrow had shown that chlorpromazine inhibited granulocyte formation in about half the specimens studied.

LESLIE J. WITTS (Oxford) described the methods adopted in Britain for the detection of adverse drug reactions, emphasizing how a central agency could give important statistical information and also alert physicians to the dangers of certain drugs and to suitable therapeutic alternatives. During the last three years toxic reactions had been suspected, albeit rarely, in association with phenylbutazone, chloramphenicol, the phenothiazines, the thiazide diuretics, and methyldopa. In the Oxford area the incidence of marrow dyscrasias due to drugs was about 0.34 per 100,000. He questioned whether racial or even dietetic factors could explain the patchy distribution of chloramphenicol toxicity in various parts of the world.

The abstracts of all communications are soon to be published in the *Annals of Internal Medicine*, which is the official periodical of the American College of Physicians.