Correspondence

Letters to the Editor should not exceed 500 words.

Problems in Adoption

SIR,—A recent programme on B.B.C. radio on the subject of adoption must have given listeners a very adverse impression of the attitudes and work of adoption societies. This prompts me to draw your attention to some problems in adoption procedure and practice. The Adoption Act (1958) lays upon adoption societies the duty of visiting the home of a couple seeking to adopt a child so that the social workers can satisfy their adoption committees, which are statutory, that the home is one which is suitable for the reception and upbringing of a child. In the practice of the best societies the social workers, most of whom are fully qualified, also make an assessment of the couple, at a series of interviews, in respect of their stability, sincerity, and suitability as prospective parents. The Act also obliges societies to obtain medical evidence of the health of the couples, which may then be assessed confidentially by a consulting medical adviser, who recommends acceptance or rejection of the application. The object of this is essentially similar to life-assurance assessment—namely, to ensure the likelihood of both parents enjoying good health during the growing period of any adopted child—i.e., for about fifteen years from the time of placement. You will appreciate, Sir, that the primary concern of the good adoption societies is always the good of the child, and any benefit which may accrue to the adopting parents by satisfying emotional needs is a secondary consideration. Likewise secondary to the good of the child is the benefit which may accrue to the unmarried mother whose unwanted baby is taken off her hands by adoption.

Adoption arranged by private persons, usually doctors, is of course permitted under the Act. However, medical practitioners, both general and consulting, seem often to arrange adoptions in a very light-hearted and casual way, without adequate (according to the best standards) consideration for the future welfare of the child. I know of one case in which a general practitioner arranged an adoption for a couple who were his patients and about whom he might be expected to know the medical and psychological status and background. Fair enough. However, a man and wife, friends of the first couple but not patients of this doctor, decided that they too would like to adopt a baby. The doctor blithely offered to arrange for a baby to be given to them without any medical or psychological evidence about them being sought. The baby was the illegitimate child of a woman patient of his whose need to have her baby adopted was no doubt paramount in his mind. This is a practice which cannot be too strongly condemned. The incidence of failed adoptions—the break-up of the adopting home, or the later rejection of the adopted child by one or both adoptive parents—is notably higher when there is inadequate or unskilled preparatory casework, that is,

professional, social, and medical investigation of the prospects for a happy and healthy family life for the adopted child.

The health and future welfare of the baby must surely continue to be our primary consideration in adoption work. We must not find ourselves in the position where a prescription for a baby becomes no more than a treatment for an unfortunate sterile or emotionally disturbed woman with little thought for what may be the fate of the baby. —I am, etc.,

Edinburgh 9.

J. G. M. HAMILTON.

Dangers of Vitamin-D Intoxication

SIR,—May I yet again underline the dangers of vitamin-D intoxication and further remind doctors that this can occur with a current *B.P.* preparation quoted in the *B.N.F.*? A boy of 6 years was recently observed by his child-welfare clinic to be slightly knock-kneed. The mother was advised to give extra vitamin-D. Without reference any further to any doctor she called at her local pharmacy and was given for this purpose Calciferol Tablets *B.P.* She gave one a day to her son from March till November 1963. He quickly developed bed-wetting and more slowly an intractable thirst. He then had a month's admission to hospital during which complicated tests were performed and hypercalcaemia was discovered with a pitressin-resistant diabetes insipidus. He was referred to U.C.H. to exclude primary hyperparathyroidism, and it was only with difficulty that we obtained the correct history from the mother and checked its accuracy.

The latest edition (1963) of the *British National Formulary* describes two pure vitamin-D oral preparations—"Calciferol Tablets *B.P.*," which contain 1.25 mg. (50,000 i.u.) in each; "Calcium and Vitamin-D Tablets *B.P.C.*," which contain 0.0125 mg. (500 i.u.), with some calcium salt. May I suggest that there is no other situation in which two such similar names conceal a hundredfold difference in dosage of a potentially dangerous drug? May I suggest a change of name or a clear statement that the low-dosage range only be used for treatment of classical rickets? The strong ones are of course only for hypocalcaemic tetany and other special metabolic situations. The *B.N.F.* statement, "in the treatment of hypoparathyroidism, one to four tablets daily," is not a sufficient warning that these tablets should not be used in the treatment or prevention of classical rickets. Nor is the further statement in the paediatric section of *B.N.F.*

I note that your editorial (14 March, p. 650) recommends the treatment of old people with osteoporosis and a raised alkaline phosphatase with "calciferol tablets" over

a period of many months. It would seem most likely that this statement would be interpreted by your readers as a recommendation to use Calciferol Tablets *B.P.* for this purpose. If this is so it would seem inevitable that a proportion of these patients would develop the signs of vitamin-D intoxication—namely, anorexia, lassitude, constipation, thirst—which in extreme cases can lead to severe vomiting with secondary electrolyte abnormalities, renal damage, and fatal coma. —I am, etc.,

University College Hospital
Medical School,
London W.C.1.

C. E. DENT.

New Drugs of Addiction?

SIR,—There has been much publicity in recent months, both in the medical and popular press as well as on radio and television, concerning the ever-increasing problem with regard to the illegal supply and consumption of the amphetamine type of drugs, especially that of "drinamyl" ("purple hearts").

A case has just come to my attention which I believe might well be the first one so far reported, and I feel it should prove of interest to my colleagues in view of its implications and potential danger.

This concerns a boy aged 17 who has been in the habit of taking considerable quantities of both "drinamyl" and "dexedrine" (amphetamine) tablets over the past twelve to eighteen months, to which he was introduced in his home town of Sheffield. Over the past fortnight he also heard of a new drug which was available, and he was informed that this was L.S.D. (lysergic acid).

The boy arrived in London on an impulse some ten days ago, and after a few days went to a fairly notorious public house in order to obtain a new supply of drinamyl tablets. These being unavailable at the time, he remembered recent information he was given at Sheffield and asked for and obtained twenty to thirty tablets of L.S.D. in exchange for a scarf. He described these tablets as flat, white, and scored in the middle on one side. He was warned by his friend not to take more than ten, as they were dangerous, so he took an initial dose of three tablets and then proceeded to take one at approximately half-hourly intervals.

After consuming most of his tablets he suddenly developed very vivid hallucinations, which took the form of a group of witches dancing around a cauldron, indulging in raucous laughter. He went out in search of these witches but could not find them, and started wandering the streets and proceeded to make a public address to passers-by concerning negro rights. Following this, he developed acute ideas of persecution, thinking that the Ku Klux Klan were after him, as well as a stone-throwing mob of angry antagonists. He sought refuge in a cinema, but there imagined a man was threatening him with a knife and finally asked for help from the police, who subsequently referred him to my care under Section 136.

During his hallucinated and deluded state he became completely disorientated in time, and felt that everything had occurred in the space of a few minutes, although in fact the disturbances lasted over several hours. On arrival in hospital he was already quite calm, although a few of his ideas of persecution remained. By the following morning he was quite rational, and showed no signs of his previous experience. He has remained completely well ever since.

It appears, therefore, that this boy suffered an acute psychotic episode from a drug alleged to be L.S.D., although at present we have no confirmation that the tablets ingested were in fact lysergic acid, and it has recently been suggested that they may have been "artane" (benzhexol) tablets instead. I have been in close touch with the firm manufacturing L.S.D., as well as the Home Office, and find that this drug is manufactured in this country as well as the United States only in liquid form, but both sources have heard recently rumours of the possibility that tablets are reaching this country from an external source, which are circulated under cover and are reputed to be a solid form of L.S.D.

If this is the case I feel we are facing a very real danger of a crop of acute psychotic episodes, which might well be missed or misdiagnosed without a full knowledge of their underlying cause. Fortunately my patient was young and frank enough to talk freely about his experiences and sources, although more hardened addicts may well withhold such information.

It would be interesting to hear whether anyone else has come into contact with a similar case, or whether other doctors are aware that this drug is in circulation amongst the habitués of certain clubs and public houses.—I am, etc.,

St. John's Hospital,
London, S.W.11.

P. R. BACHRICH.

Surgery for Peptic Ulcer

SIR,—In their article Professor J. C. Goligher *et al.* (22 February, p. 455) record a significant incidence of heartburn following vagotomy. This procedure, "a complete subdiaphragmatic or per-hiatal division of the vagus" of anatomical necessity frequently disrupts the oesophago-phrenic ligament. This prepares the way for a sliding hiatus hernia and gastro-oesophageal regurgitation. The same complication has been commonly reported following Heller's operation for cardiospasm. In both these procedures repair of the oesophago-phrenic ligament should be regarded as part of the operative procedure.—I am, etc.,

Baguley Hospital,
Manchester 23.

GORDON D. JACK.

Treatment of Dumping Syndrome

SIR,—There have been quite a few articles recently on the dumping syndrome and various ways of treating it. I thought it would be helpful to relate the following post-operative history.

A patient and colleague of mine had suffered from a duodenal ulcer since 1939. In February 1961 she had a vagotomy and gastrojejunostomy performed. Her first difficulties started soon after her discharge from hospital, when she started to have projectile regurgitation of yeasty-smelling stomach contents. In addition she started to have frequent dumping attacks associated with tachycardia and increasing steatorrhoea. This continued between March and July 1961, during which time she lost 17 lb. (7.7 kg.), and was frequently incapacitated.

Between August and November 1961 she was advised to try a fat-free diet. She lost a further 17 lb. (7.7 kg.) and was much worse. She

had attacks of colicky pain and severe watery diarrhoea every few days, and frequent hypoglycaemic and dumping attacks. We found that her attacks of tachycardia were caused by potassium loss (diarrhoea) and managed to control the tachycardia with extra potassium. But the diarrhoea and other dumping symptoms continued. Then she tried a high-fat-high-protein diet and was much better. She stopped losing weight and her symptoms became less frequent and less severe but nevertheless remained very troublesome.

Nearly two years after her operation, when she was still having episodes of colic and diarrhoea, we discovered empirically, while she was having courses of tetracycline for intercurrent infestations, that she had great relief from dumping and from diarrhoea while she was on antibiotics. We found that one attack of diarrhoea was associated with a white blood count of 18,000 cells/c.mm. In October 1963, over two and a half years after her operation, she was advised by a physician to take neomycin sulphate regularly two days out of seven. The result was a striking disappearance of colic and diarrhoea and a gain of 14 lb. (6.4 kg.) in weight on a full diet in ten weeks. This improvement has been maintained. One residual symptom that still causes trouble, though, is hypoglycaemia, particularly at night.

One can see from this cursory description of my patient's post-operative progress that many factors have been involved in her symptoms, but I would particularly stress the element of infection and the curative influence of regular neomycin—perhaps the least-recognized aid to the establishment of post-operative normal life conditions up to date.

One lesson we have both learnt is that there is no "central bureau of information" to help combat these syndromes. These various helpful pieces of advice have come from many sources. We would suggest that the time has come for all surgeons who perform this operation to recognize these post-operative complications and to take responsibility, where possible, for their prophylaxis and therapy.—I am, etc.,

London N.W.8.

STEVEN SMITH.

Fluoridation Falsified

SIR,—Dr. H. M. Sinclair, writing on 4 February in his letter published on 29 February (p. 554), stated that I have not replied to Mr. C. Dillon's criticism. My reply was in fact published on that date.¹

He asks why I excluded the placenta from the tissues that "are exposed to fluoride concentrations similar to those in drinking-water." My reason for doing so is as follows. It is unlikely that during its short life the placenta can take up enough fluoride in its calcified areas to "saturate" them. If this is so the placenta will always tend to bind fluoride from the tissue fluid, and thus maintain the concentration surrounding its cells at a low level. This contrasts with bone, which after a lifetime of high-fluoride intake may acquire such high concentrations that its capacity for binding fluoride is reduced, and at the same time some fluoride may be released in the course of bone remodelling. Bone cells may, after excessive intake, be exposed to much higher fluoride concentration than seem likely for the cells of the placenta.

Recent evidence suggested that the foetus does not benefit from fluoridated water given to the mother.²

It is certainly true or suspected that nutritional conditions affect fluoride toxicity.

However, the half-million people in Britain who receive fluoride in their water could be reasonably expected to cover the whole range of nutritional status and other circumstances present in this country, yet no evidence of harmful effects among any of them has been established.—I am, etc.,

Sutherland Dental School, G. N. JENKINS.
University of Newcastle upon Tyne.

REFERENCES

- ¹ Jenkins, G. N., *Brit. dent. J.*, 1964, 116, 94.
- ² Carlos, J. P., Gittelsohn, A. M., and Hadden, W., jun., *Publ. Hlth Rep. (Wash.)*, 1962, 77, 658.

Lubrication of Joints

SIR,—It is perhaps a pity that in your leader on the lubrication of joints (15 February, p. 384) no mention was made of three other forms of bearing well-known to engineers, of which at least two probably have some bearing on joint lubrication:

(1) For many years porous sintered metal bearings have been used, of which the theory of fluid transport has been given by Cameron, of Imperial College.

(2) Resin-impregnated fibre-based bearings have long been used for extremely high specific loadings when water-lubricated. Their theory still appears to be inadequately understood, although Blok, of Delft, did some work in this field.

(3) A form of bearing which I have never seen discussed in engineering literature is the "squish" bearing, such as is found at the gudgeon pin in internal combustion engines.—I am, etc.,

D. B. WELBOURN.
University Engineering Department,
Cambridge.

SIR,—I have read your fine and fair review of the present states of opinion about the lubrication of joints (15 February, p. 384). In it you mention the work of L. Dintenfass, citing his letter to *Nature*.¹ Since then his definitive paper upon the subject has appeared elsewhere,² and I have his authority for giving the following paraphrase of his view as expressed in that paper.

Dintenfass accepts the notion of a film lubrication of our joints except in certain extreme conditions, such as could occur also in engineering situations. The function of the hyaluronic acid changes as the joint passes from stasis through slow movement to rapid movement. Articular film lubrication is rendered possible and effective because of the deformability of articular cartilage, which is operative even when it and its fellow in the joint are separated by a layer of physically sensible thicknesses of fluid.

This theory of Dintenfass (the elasto-hydrodynamic), mentioned by you, is important for two reasons. First it has been adumbrated by a skilled rheologist, fully conversant with the problem itself and with the evidence for the diverse theories. Secondly it finds a function for the deformability of articular cartilage when it is in motion. The bearing of this deformability upon the structure of articular cartilage, starting from a consideration of two articular surfaces at rest and in physically effective contact, had already been shown.³ It had also been indicated in a preceding paper⁴ that there was likely to be a pressure wave travelling along articular cartilage when it was in motion.