

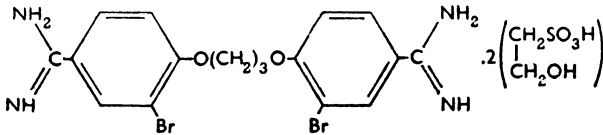
To-day's Drugs

With the help of expert contributors we publish below notes on a selection of drugs in current use.

Dibromopropamide

"Brulidine" (May and Baker).

Chemistry.—Brulidine is a cream containing 0.15% dibromopropamide isethionate, and has the following structural formula:



Pharmacology.—Tests *in vitro* have shown this antiseptic to be effective against staphylococci and streptococci and also to be active against several Gram-negative organisms, including *Proteus* and *Pseudomonas pyocyanea*, and to be of very low toxicity.

Therapy.—In clinical use, which has been mostly in the treatment of burns, these properties have not been so certainly established. Resistant strains of staphylococci may develop, and infection with *Ps. pyocyanea* may not always be overcome. The suspicion has also been aroused by clinical observation that the antiseptic may have some inhibitory effect on phagocytosis and on the healing of wounds.

Brulidine has been suggested as a first-aid treatment for burns and minor injuries, but the results of any long-term trial do not appear to have been published. In the treatment of superficial infections of the skin brulidine would merit a careful trial. There is as yet, however, no clear evidence that it would prove superior to the many antibiotic and antiseptic applications which are already available.

Side-effects.—Dermatitis resulting from first-aid treatment is common; any substance which is to be used extensively in first aid should be as free as possible from this risk. Contact sensitivity from dibromopropamide has been recognized, though it is apparently uncommon.

N.H.S. Basic Price.—8 oz., 6s. 8d.

"In 1958 the number of sight tests fell for the first time since 1952. The increase in 1959 restored the level to about what it would have reached had the earlier trend continued. The exceptional increase of 1959 over 1958 should be regarded as a two-year increment which is unlikely to recur. Of the total number of tests other than those carried out by local education authorities, 18% were carried out by ophthalmic medical practitioners, and the remainder by ophthalmic opticians. About one-fifth of these tests were for persons using the Service for the first time. The number of people having two pairs of glasses has increased only slightly: 14.2% in 1957, 14.4% in 1959, and 14.5% in 1958. The increase in the percentage of persons having bifocals has continued to go up: 15.6% in 1957, 16.4% in 1958, and 17.2% in 1959. The prescriptions for children, including those carried out by local education authorities, which accounts for about one-third, have continued to increase: 1956 (364,000), 1957 (388,000), 1958 (398,000), 1959 (415,000). But the percentage of children having standard glasses has declined over this period: 1956 (68%), 1957 (62%), 1958 (59%), 1959 (52%)." (*A.O.P. News, J. Ass. opt. Pract.*, August 4, 1960.)

Correspondence

Because of heavy pressure on our space, correspondents are asked to keep their letters short.

Adolescence

SIR,—Your leading article (July 23, p. 281) reviews in broad social terms the position of the adolescent in contemporary society and exhorts doctors to join with parents and social agencies in helping to create a background compatible with healthy development. This is a worthy aim, but no one seems clear how it is to be accomplished. Very formidable social problems are involved, and techniques for controlling and modifying social change are as yet rudimentary. The sociological problems which we do not understand should not be allowed to mask the very pressing clinical psychiatric problems of adolescence, which are the direct responsibility of the medical profession. To these you give only one sentence.

You comment that, "Fortunately most adolescents overcome their problems. There is no reason to believe that young people to-day are of poorer material than their predecessors or that they are not making reasonable use of their opportunities. Few require psychiatric care or even the ministrations of 'teenage clinics'..." One is obliged to ask how you define "few." This vague dismissive term disowns responsibility. If "few" means 10% the figure must be considerable.

Some general practitioners and school doctors are aware of severe mental pain and suffering in adolescent patients which they cannot relieve. Discerning teachers may recognize the enormous wastage of potential ability which occurs when personal problems interfere with learning. Magistrates, probation officers, and youth leaders are daily confronted with all kinds of troublesome, anti-social behaviour, much of which can be seen to stem from the acting out of personal difficulties. These are typical psychiatric problems: the latent psychiatric problem becomes manifest on careful examination of the patient.

Moreover, we know in general terms what becomes of this minority of adolescents who do not resolve their problems. They confront us daily as adult psychiatric casualties or character disorders. No one would suggest that these are "few" in number. A majority of them should have been detectable in adolescence, when the prognosis would have been more hopeful. Is it only in medicine and in surgery that early treatment is considered important?

The disturbed children and adolescents of to-day, left untreated, become the parents of a fresh generation of disturbed children. In this spiralling family disorder one must attempt to treat the problems of the disturbed family before the children become parents in their turn. Here prophylaxis and treatment coincide: here is one way of obtaining more of the good family environments referred to in your leader. Adolescence, a phase of development and change, provides a particularly favourable opportunity. This opportunity is missed if all symptoms and distress signals are dismissed as "just adolescence" and nothing more.

Child-guidance clinics are available for younger children, and a variety of out-patient departments and psychiatric hospitals offer services for adults. Yet facilities for the clinical investigation and treatment of adolescent psychiatric problems are negligible. Many disturbed adolescents are very glad to use professional help when they can get it, provided it is presented to them in ways which make contact with their needs. But the handful of clinics which do provide an out-patient service especially for adolescents are

quite unable to cope with the demand, so that even in London such help is not available to those who need it.

There is a corresponding lack of specialized in-patient units for the more severely ill patients. Few tasks can be more difficult than that of finding full appropriate care and treatment for a suicidal 15-year-old. Grossly disturbed adolescent patients, in need of intensive specialized treatment, are at present inappropriately placed (as they always have been) in the adult wards of mental hospitals, in mental deficiency hospitals, in schools for maladjusted children, or in their own overburdened homes.

The resolution of serious human problems cannot be attained without expending a good deal of time and trouble. Such work is therefore expensive in terms of establishment. Yet, by contributing to mental health, and helping to avert mental illness in adult life, it can be both economic and economical. Moreover, we cannot in 1960 rest content with standards of mental health which fall seriously below our standards of physical health. It is surely symptomatic of low standards of mental health that so many doctors, administrators, and members of the public should habitually write off so much incipient neurosis, and character disorder, and even psychosis, as "just adolescence."

It is urgently necessary that each region in the National Health Service provides a full range of psychiatric services for adolescent patients. The *British Medical Journal* should not be content to advocate remote social measures while clinical services remain so inadequate and so neglected.—I am, etc.,

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DUGMORE HUNTER.

Accidental Arsenical Poisoning

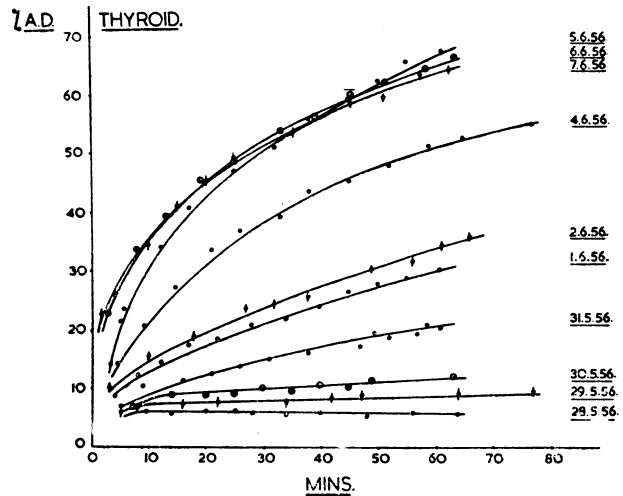
SIR,—In drawing attention to possible poisoning from arsenical pessaries, Dr. C. Grant Nicol (August 6, p. 467) is presumably referring to the development of arsenical encephalitis as a complication of treatment with organic arsenical preparations. Such encephalitis, where perivascular areas of necrosis are associated with capillary haemorrhage, have been reported on previous occasions, classically following intravenous administration for syphilis but also when given orally for colitis. It is thought that the toxic factor is unlikely to be arsenic itself. In the case of accidental arsenical poisoning (July 16, p. 240) death was due to the absorption of a toxic amount of organic arsenic and there was no evidence either at post-mortem or at microscopical examination of encephalitis. The distinction between the two forms of poisoning may be slight, but is important, especially as in the latter the estimation of arsenic in the organs affords diagnostic proof, in the absence of which the true cause is open to conjecture. A report on the subject is in the process of preparation.—I am, etc.,

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London, S.W.1.

Potassium Perchlorate in Thyrotoxicosis

SIR,—We were interested to read your leading article (August 13, p. 517) on the use of potassium perchlorate in the treatment of thyrotoxicosis. We think, however, that your statement that with perchlorate there is a "long duration of suppressed thyroid function after cessation of treatment" is to some extent misleading. Our observations, in fact, showed that thyroid function was completely suppressed for only two or three days after stopping perchlorate, thyroid uptake thereafter

gradually reverting to the pretreatment level during the subsequent four to nine days.¹ These results were based on continuous measurement of thyroid uptake during the



course of an hour after daily intravenous doses of ¹³²I. Typical results are shown in the Figure.—We are, etc.,

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REFERENCE

¹ Goolden, A. W. G., and Mallard, J. R., *Brit. J. Radiol.*, 1958, 31, 589.

Causes of Pernicious Anaemia

SIR,—I was interested in your leading article (July 23, p. 282) on causes of pernicious anaemia. Mortality rates for pernicious anaemia in England and Wales are not broken down into counties, but I have mortality figures for Cornwall for the 20-year span 1938–57 in local-authority areas. These details have been collected from the local offices of the registrar of births and deaths. The number of deaths in some of the areas is very small, so in the table I have given the figures in health areas (for administrative purposes Cornwall is divided into seven health areas, each comprising three or four local authorities, with a combined population in five areas of 50,000 and in two areas of 25,000). Comparability factors are not available for the 20 years under consideration, so a correction has been made by expressing pernicious-anaemia deaths as a percentage of deaths from all causes.

E. Scott¹ shows that in the survey conducted by the College of General Practitioners the general pattern of incidence decreases from north-west to south-east, and suggests, amongst other possible explanations, geological ground structure. I have felt for some time that geological ground structure plays a part in the irregular pattern of mortality rates for Cornwall.

In certain parts of the world cattle and sheep are liable to suffer from a wasting disease known by a variety of names according to the country—sickness (Florida), naku-rutis (Kenya), and pining (in the Cheviots, Hebrides, Dartmoor, Cornwall, and certain other areas of the British Isles). The disease in sheep is associated with anaemia and characterized by lethargy, loss of weight, watering of the eyes, and progressive weakness. If put on lowland grass they are up on their feet again in 48 hours and able to walk back to the moorland in two weeks. In cattle symptoms are not so marked, being limited to failure to grow and put on weight and a depraved appetite, picking up sticks, bones, and stones to chew. Goats are also affected,