The technique observed is as follows: The current is administered in the normal manner; after the original muscular contraction and cry it is rapidly verified that the mouth gag is in correct position, has not shifted, and is firmly gripped. A Hewett gas-and-oxygen mask is then immediately placed over the mouth and nose and kept firmly in position; the mask should be of sufficient size to cover the No. 9 size rubber gynaecological ring used as a mouth gag. The oxygen is turned on and the administration is continued throughout the clonic phase and until the patient has taken two or three normal respirations.

With this technique cyanosis is avoided, thereby reducing cardiovascular stress and allowing a wider margin of safety; at the same time the impression gained by this observer is that there is a reduction in distress experienced by the patients on recovery from the convulsion.

I should like to thank Sister B. N. Samuel for her efficient running of the E.C.T. clinic.—I am, etc.,

London, S.W.1.

S. M. WHITTERIDGE.

Control and Treatment of Diphtheria

SIR,—Dr. James Fanning's interesting account of an outbreak of diphtheria in a girls' school and your excellent leading article on the control and treatment of this infection (March 22, pp. 371 and 384) both draw attention to the necessity for boosting doses of prophylactic at regular intervals during childhood and the school years. Insufficient attention appears to have been paid to this latter aspect of diphtheria control by the propaganda departments of public health authorities, and when this weakness in a child's protective armour is pointed out one is frequently confronted with the parental argument that their 7-year-old is immune because he was injected at the age of 1 year.

There is little difficulty in obtaining permission to revaccinate the school child, but the public still requires considerable education before it will accept the idea of reimmunization to diphtheria, and it is hoped that your leader and Dr. Fanning's article will direct the efforts of public health authorities towards this end.—I am, etc.,

East Horsley, Surrey.

BASIL S. GRANT.

Treatment in Early Cases of Influenza and the Common Cold

SIR,—For the past three years I have been treating successfully cases of influenza and the common cold by intravenous injections containing quinine bihydrochloride. Cases of the common cold subsided within 12–48 hours after a single injection of 2 gr. (0.31 g.) quinine bihydrochloride dissolved in 2 ml. of normal saline, while cases of influenza subsided within 2–3 days with the same injection and repeated within 12 hours. A number of cases were specially recorded during 1946 and a large majority of them responded successfully. Of course I am referring to cases seen within the first 24 hours. The object of this report is to interest investigators of this universal malady.

Virchow (1927) thought there might be a small decrease or increase in gaseous metabolism. Hardikar (1925) also noted a change in metabolism. Brown (1912), Solis-Cohen, Kolmer, and Heist (1917) noted that quinine is quite bactericidal to pneumococci *in vitro*. Probably quinine acts by checking the abnormal metabolism which is going on during the infection, or it may be that it interferes with the action of the virus concerned.—I am, etc.,

Belfast.

E. O. BLAKE.

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Technique of Venepuncture

SIR,—Further to Dr. J. A. M. Cameron's remarks on venepuncture (March 29, p. 425), I have found the essential points to be: (a) efficient local anaesthesia; (b) complete extension of the arm at the elbow and supination of the forearm; (c) congestion of the veins of the forearm by a constriction higher up the arm at about 70 mm. Hg pressure; (d) decision as to site of puncture to be made by palpation rather than inspection; (e) at the moment of insertion of the needle, traction to be made on the skin distal to the site of entry and at the same

time the patient or donor to be asked to clench the fist; and (f) attention to sharpness of the puncture needle.

I have found an oblique light shining on wet skin to be most helpful in demonstrating a slight convexity of the skin due to a palpable but not otherwise visible underlying vein, and whenever possible I try to avail myself of this aid, but do not regard it as essential. In many cases a suitable vein is plainly visible without this aid, and in most of the others the course of the vein will be identifiable by the palpating finger. In less than 0.5% of adults the only superficial veins are very small and close to the surface. No larger vein is palpable, and evidently most of the return circulation from the hand and forearm is by vessels deep to the bicipital fascia. This condition is not always bilateral, and both arms should be examined, but where it is, I do not regard these persons as suitable for venepuncture in the antecubital fossa. I agree with Dr. Cameron that attention to stance is of prime importance for successful results.—I am, etc.,

Cambridge.

C. B. V. WALKER.

Sphygmomanometer Armlet as Tourniquet

SIR,—The daily Press recently reported a case in which a tourniquet was not removed from a patient's leg following an operation, and in which the mishap had a fatal termination. I have for some time employed in orthopaedic operations requiring a tourniquet a simple apparatus connected with an ordinary anaesthetic machine, by which an inflatable sphygmomanometer armlet is connected by tubing to a reducing valve on the CO₂ cylinder. The latter is adjustable to give pressures between 150 and 250 mm. Hg, and, since the exact pressure maintained does not much affect the use of the gas for anaesthetic purposes, the supply is made by a branch tube both to the armlet and to the flowmeter of the machine.

The apparatus is indicated in the accompanying rough sketch, and has proved of real practical use. One becomes at once independent of the minute leaks which seem an inseparable feature of such pneumatic systems, and the surgeon is spared the irritation of the pressure running down in the middle of the operation. Above all, it is impossible for the patient by some mischance to be returned to the ward with the tourniquet still in action.

Some modification of the commonly used reducing valves and armlets is of course necessary for the use proposed, and unfortunately there does not appear to be any commercial source of such apparatus. I am, however, making inquiries with a view to their manufacture, and hope to write later when a more finished type of apparatus is available.—I am, etc.,

Wallasey, Cheshire.

R. L. WYNNE.

Control of Leprosy

SIR,—In the interesting leading article (Nov. 2, 1946, p. 655) on the control of leprosy occurs the statement: "It soon became evident that compulsory isolation had become worse than useless." At first sight this remark, from its context, might have been regarded as applied to India alone, but when coupled in the same article with a disparaging reference to "the Biblical and Middle Ages plan of compulsory segregation" and a later contrasting mention of "modern methods," it is evident that it was intended as an authoritative statement of the present position, and that by the up-to-date person the policy of compulsory segregation should be regarded as a futile anachronism.

Having been advocating and carrying out a policy of compulsory segregation for the control of leprosy in Fiji and the neighbouring islands of the Pacific since 1930, I am naturally interested in the

applicability or otherwise of your editorial comments to our work in this part of the world. It may also be of interest to your readers to know how the condemned policy actually works in the Pacific. Compulsory isolation of lepers in Fiji started in 1911 with the establishment of a small "asylum" on the recently purchased island of Makogai. Up to the end of 1946, 738 patients, or over 25% of the 2,845 admissions, had been discharged as "arrested" (having shown no sign of leprotic activity for at least 2 years) in addition to 436 "improved" patients, many of whom would have undoubtedly gone on to "arrest" under continued treatment but who were repatriated to India at their own request.

In a comparative study utilized in my handbook on Makogai, published in 1944, and reviewed in your columns, I pointed out that during the 24 years from 1919-43 our numbers had increased by 92, or 0.07 per thousand of the population, but that study of the types and stages admitted in each of the two years mentioned showed a marked improvement. Thus in 1919 there was not a single case admitted in the early non-infective neural-1 stage; in 1943 27% of the cases were neural-1. In 1919 24% of the admissions were hopelessly crippled and deformed neural-3 cases, as against only 3% in 1943. In 1919 32% of admissions were in the highly infective and advanced lepromatous-3 stage; there were none in 1943. Regarding these results I commented: "Prejudice, compounded mainly of ignorance and fear, natural in the early stage of a policy of segregation, has largely broken down. Discharged cases, averaging about forty a year over the past ten years, provide the best form of propaganda, both as to the good living conditions at Makogai and as proof that segregation is not necessarily lifelong."

More than 60% of our patients are lepromatous and infective—the type for which your leader-writer advocates isolation "with little or no compulsion." The suggestion is of course that if we improve conditions, increase amenities, and make the leper colony a real "home from home," patients will be so attracted that there will be little need for compulsion. This is very largely a delusion. At Makogai patients are better housed, fed, and clad than they have ever been in their lives and are given the best available "modern" treatment. They are provided with churches, schools, talkie theatre complete with stage, etc., and their own co-operative store. They are paid for their garden and fishing produce as well as for the many jobs of maintenance of roads and buildings they are enabled to do. There is no question as to their appreciation of all these amenities, and they are on the whole a contented community, the element of compulsion being kept well in the background and needing to be invoked on rare occasions only. It is quite certain, though, that their knowledge of any relaxation of the law under which they are segregated would definitely unsettle their minds, and although the large majority of at least the more advanced cases would undoubtedly wish to return, most of them would want to "taste their freedom" by visiting their relatives from time to time and for variable periods and so nullify the whole desired effect of isolation.

With regard to the remaining 40% or less "non-infectives," the difficulty of transport to and from the forty-odd islands from which our patients are drawn would necessitate the use of a few only of the main islands for the establishment of the proposed out-patient clinics, with the result that a large proportion of these patients would still have to be uprooted from their island homes and families. Fiji thus presents a very different problem from that of the solitary island of Nauru with its 70 square miles of total area, whose "serious epidemic" is quoted, apparently as an example of what should be done in the South Pacific. Knowing that compulsion was no longer available to enforce their attendance, many of our natives would certainly refuse to exile themselves in this way—at least for any prolonged course of treatment such as is necessary for leprosy. Being liable at any time to pass into an infectious stage, they would thus constitute a continual danger to the public.

In his report on a "Health Survey of the British Solomon Islands Protectorate" Dr. S. M. Lambert, representative of the Rockefeller Foundation, comments on the Leper Hospital on the Island of Malaita: "They have 73 lepers in the colony at present: they have seen 194 lepers; they have had no arrested cases. The institution is growing, but they have no legal hold on the native. He may come in for a month and then he may not be seen again. They cannot compel them. . . . Dr. Macpherson, in charge of the leper asylum, told me that at Qaibaita the average term of residence of a leper is four weeks. . . . Hetherington (S.M.O.) agrees with the experience of Macpherson that the principal trouble is that the natives expect to get the same result for leprosy as they do for yaws. If they do not improve after three 'needles' they leave." This is of course the great weakness of attempting to treat leprosy without compulsory powers. I have heard the same complaint from numerous workers in India and elsewhere struggling to persuade their reluctant patients to stay the course. The prolonged period of treatment required, often without any very obvious improvement, must be terribly discouraging to the victims, and it

is asking too much of all but the most intelligent and persevering to continue to submit to an indefinite series of injections if the choice is left to them.

In conclusion I would like to emphasize that this letter is merely a protest against the assumption that because a policy has been found impossible or inadvisable in certain areas it is thereby necessarily to be condemned everywhere. I would submit that in Fiji we have attained and are attaining, under the existing policy, results that would be impossible under a voluntary system. It is gratifying to note that a review in the current *International Journal of Leprosy*, just received, refers to our "humane and efficient system" at Makogai. In the same way, therefore, as we have learnt to treat the patient rather than his disease, so must we determine our medical policies in the light of local circumstance and not by rule of thumb.—I am, etc.,

Central Leper Hospital,
Makogai, Fiji.

C. J. AUSTIN.

Peptic Ulceration

SIR,—I have been reading the recent correspondence on peptic ulceration with interest. Attention seems to be mainly focused on diet, intermediate feeds, alkalis, and surgery. Vitamin C is thrown in. Bilateral vagotomy is mentioned. Too little attention is paid to the psychological element, for psychoneurotic causation seems to me to be present in the majority of cases of chronic ulcer.

In the course of five years' practice I believe I have treated perhaps a hundred cases without ever having to admit defeat by seeing one of them undergo operation.

The treatment is the usual diet, two-hourly intermediate milk feeds, and alkalis. In all cases with a psychogenic aetiology, partial or total, phenobarbitone sodium, 1/4 gr. (16 mg.) or 1/2 gr. (32 mg.) is given in each dose of mist. mag. trisilicate. Occasionally tr. belladonna, 5 minims (0.3 ml.), is added to the alkali. The advantage of including the phenobarbitone in the medicine is that it can be introduced and withdrawn without the patients' knowledge. This to my mind is of paramount importance in treating the psychoneurotic. It is possible to cure the ulcer and then the residual symptoms of pain while dealing with the psychological element by phenobarbitone, and so to break the vicious circle. When residual symptoms have subsided, with the patient's confidence in himself increased in direct proportion to his weight, it is then possible to withdraw the phenobarbitone while continuing the alkali. His medicine is by this time the pillar of the patient's strength, but once the phenobarbitone is withdrawn (without his knowledge) the patient becomes less dependent on his medicine, and eventually this can be withdrawn. Why he becomes less dependent on his medicine he doesn't know, but to him it implies final health. Dieting is maintained for some months or perhaps indefinitely.

I have found that this method of treatment produces more rapid healing from the day the x-ray diagnosis of ulcer is made to the day x-ray proof of healing occurs than by any other method.—I am, etc.,

Hampton Hill, Middlesex.

I. E. D. McLEAN.

Solitary Prolapsing Thrombosing Piles

SIR,—It has been my practice for the last couple of years to ligature and excise solitary thrombosing prolapsing piles which are giving rise to severe symptoms and do not respond rapidly to palliative treatment. The excision is done under local analgesia and mostly in my surgery. The dissection follows the St. Mark's Milligan and Morgan method generally. In some the longitudinal muscle band is reluctantly divided in order to free the pile sufficiently to obtain a ligature of the uninvolved pedicle. Stout linen suture is used. The excision is only done in the clean thrombotic stage and in the early ulcerative stage with no gross signs of inflammation.

Many patients are saved from the strangulation and consequent gangrene of this complication with its prolonged severe pain. Sulphadiazine 3 g. is given one hour pre-operatively with sodium bicarbonate and 1-g. doses four-hourly with sodium bicarbonate are continued for six doses.—I am, etc.,

Johannesburg.

STEPHEN EISENHAMMER.