

time I lost partial use of my left leg, and in a lesser degree lost some power from my right leg. With assistance I managed to walk out of the baths, but I felt the use in my legs to be slowly leaving me; after walking about 300 yards I was obliged to sit down, and I then lost all power in both legs and became completely paralysed, and lost all sensation from the third rib downwards. I also lost all control over my bowels and bladder. From the time I dived in the water to being completely paralysed was about twenty minutes. I passed blood in the urine for several weeks.

"I was admitted to the Royal Infirmary in a completely paralysed condition; my bladder was greatly distended. I was in the Infirmary eight months, and for some time my bladder was washed out thrice daily.

"Eighteen months after the accident I managed to stand up, and then got to walk just a little with the aid of two sticks. For many years this condition prevailed. I could walk just a little, and my general health was good. (I washed the bladder out every day.)

"My present condition is: my back and legs are weaker than they used to be, and I get a lot of pains across the front of my head and left temple. As the urine accumulates in my bladder the pains in my head become more severe. At the same time there are many days when I feel very well indeed, and I am still able to carry on my business, but it certainly gets harder to do so.

"I have washed my bladder out every day for forty years, and have always been obliged to use a catheter to pass water. I calculate that I have passed catheters 80,000 times. I use steel and silk web instruments. I am now aged 56."

I think this account of long duration of catheter life is almost unique and worthy of record.—I am, etc.,

Manchester, June 22nd.

JUDSON S. BURY.

PREVENTION OF RENAL COMPLICATIONS IN SCARLET FEVER

SIR,—Dr. B. A. Peters's letter in the *Journal* of June 20th states that by his (somewhat complex) method of treatment the complication rate for nephritis and albuminuria in his last 600 cases of scarlet fever was just over 1 per cent. This is admittedly a low figure. It can, however, be lowered still further, and, moreover, all the other complications of scarlet fever along with it.

During the last three years I have given Dick antitoxin intravenously to 832 cases. These have been "selected" only in the sense that they included all the worst cases—that is, nearly all definite cases admitted up to the fifth day of disease, and "septic" cases admitted up to the eighth day of disease. Exceedingly mild and doubtful cases were not included. The complications in this series have been: albuminuria 2, acute suppurative otitis media 5, arthritis (very mild) 3. Besides these there have been a small number of minor skin septic foci which can hardly be called complications. Excluding the latter, the total complication rate for scarlet fever in this series just exceeds 1 per cent. Such as they are, most of these complications occurred during a period of three or four months in 1930, when the dosage of antitoxin was insufficient. For all practical purposes one may claim that, by this method, the complications of scarlet fever can be abolished.

To many this may read like a fairy tale. Nevertheless, the facts can be demonstrated any day. The cases in the hospital at one time are never numerous, because they are discharged in eight to fifteen days. They are, moreover, quite well. There is practically no medical or nursing work involved except for the intravenous injection on the day of admission. Needless to say, adequate precautions have been taken to ascertain that complications do not, in fact, occur after the patients' discharge from hospital.—I am, etc.,

Isolation Hospital and Sanatorium,
Leicester, June 24th.

H. STANLEY BANKS,
Medical Superintendent.

VITAMIN B CONTENT OF LIVER EXTRACT

SIR,—It appears to be generally accepted that all commercial liver extracts are deficient in the antineuritic factor of the vitamin B complex, although they are rich in vitamin B₂. A reference to this in an article by Dr. Lucy Wills (*British Medical Journal*, June 20th, p. 1059), quoting a verbal communication from Dr. Harriette Chick, prompts me to ask you to publish this preliminary note on certain experiments carried out in this institute during the past six months, from which it is clear that the vitamin B₁ content of liver extracts varies to an extent which renders any generalization in this connexion inadvisable. The results obtained indicate that proprietary liver extracts are divisible into two sharply defined groups: those which contain considerable quantities of the antineuritic factor B₁, and those in which B₁ is present in negligible amount. There is no intermediate class, if equivalents of fresh liver are compared, and the first category includes the majority of the extracts tested.

Eight different liver extracts, as used for the treatment of pernicious anaemia, were tested for their ability to promote normal growth in rats on a diet deficient in all water-soluble vitamins; of these eight extracts six were found to be efficient sources of vitamin B₁ as well as B₂. Three stomach preparations were also examined for their vitamin content, and all were found to be effectual in correcting a deficiency in both factors of the complex; presumably the stomach preparations, therefore, contain both B₁ and B₂.

The full experimental data will be published in due course. The results suggest that those liver extracts which are rich in B₁ as well as in B₂ should be included in the list of medicaments available for use in cases in which administration of the vitamin B complex is indicated. Clinical evidence can indeed be adduced that such extracts are of practical value as general tonics, a fact which may be partly attributable to their vitamin content.—I am, etc.,

ESMÉ GILROY, M.B., CH.B.

Institute of Animal Genetics, Edinburgh,
June 22nd.

MICROCEPHALY

SIR,—It seems that my question was justified, because it has led Professor Berry to give a very clear and detailed statement of the reasons for believing that most mental defectives have unduly small heads, and to explain that he has discarded belief in microcephaly as a type of defective. His reasons for the latter view are less categorical, but the negation is interesting. I imagine that no worker in the subject will dispute the frequency of "microcephaly" in Professor Berry's sense, but I believe he is in a minority in his rejection of microcephaly in its more usual sense as a type name. The proper classification of defective types is, of course, a matter of opinion, and might be the subject of an interesting discussion; but if types exist at all, or have any meaning, then I hold that the microcephalic is as clearly differentiated as the mongol, and has as real an existence. The standard English textbook seems to be quite clear in this teaching, but no doubt Dr. Tredgold would prefer to speak for himself rather than through quotation. While admitting Professor Berry's right to dispute the reality of the type, my question now becomes more simply defined: Is he justified in using the type name with a new meaning if the majority of students of the subject still adhere to the old usage?—I am, etc.,

London, S.W.17, June 22nd.

NOEL H. M. BURKE.