1. *The Treatment of General Paralysis by Inoculation with Malaria.* (*Arch. of Neurol. and Psychiat., August*, 1926.) *Bunker, H. A., and Kirby, G. H.*
2. *Malaria Inoculation in the Treatment of General Paralysis.* (*Arch. of Neurol. and Psychiat., August*, 1926.) *McIntyre, H. D., and McIntyre, A. P.*
3. *The Significance of Gain in Weight in the Malaria Treatment of General Paralysis.* (*Arch. of Neurol. and Psychiat., September*, 1926.) *Bunker, H. A.*

1. Of 106 cases of general paralysis inoculated with B.T. malaria (representing 54 successive passages from host to host), 22 died, 26 were unimproved, 8 slightly improved, 13 attained moderate remissions, and 37 attained full remissions. Of the 37, the duration of the full remission has been more than a year in 21 cases, more than two years in 12 cases, and in only 6 cases was it at the time of writing less than six months.

Of the cases of the simple dementing type (which formed 53% of the total), 12% achieved full remissions and 14% moderate remissions. Of the expansive type (19% of the total), 55% obtained full remissions and 10% moderate remissions. Of the manic type 17% of the total), 67% reached full remissions and 16% moderate remissions. The authors call attention to the fact that failure of the treatment depends on the presence of anatomical changes beyond the possibility of functional restitution, or inability of the organism to react to the treatment.

2. The authors inoculated 42 patients and 15 months afterwards 20% were in complete remission (at home and at work), 12·5% in almost complete remission, 20% improved, 17·5% unimproved, and 30% had died. They found as complications to be faced: (*a*) A tendency to pyogenic infections in 7 cases; (*b*) uræmia—2 patients developed uræmic coma; this can be forestalled by estimating the urea nitrogen content of the blood; (*c*) circulatory collapse—3 collapsed and 1 died; (*d*) acute bulbar palsy—3 died; (*e*) convulsions—1 patient died in a paretic seizure.

3. The author found in 80% of 62 cases an increase in weight above the pre-treatment level in cases. This increase occurred in only 50% of the mentally unimproved cases, but in 95% of the cases which achieved full remission and of those who showed moderate mental improvement. Failure to recover part or all of the weight lost during the actual course of the malarial infection seems to be of unfavourable prognostic significance. A marked and rapid rise of the post-treatment weight curve above the pre-treatment level often coincides with well-marked mental improvement, and is of favourable prognosis up to a certain point. The post-treatment increase in weight may be ascribed to malarial therapy, because (*a*) many patients exhibit it who show no mental improvement; (*b*) the maximum weight reached is not infrequently in excess of the usual weight in health; (*c*) the maximum gain is often only temporary; (*d*) a similar phenomenon has been observed in connection with foreign protein therapy of other types.

There would appear to be a fundamental alteration in the vital processes of the organism—underlying the striking therapeutic results of malarial therapy. G. W. T. H. FLEMING.

## 6. Pathology.

*The Colloidal Paraffin Reaction in the Cerebro-spinal Fluid.* (*Brain, June*, 1926.) *Critchley, A. M.*

Critchley uses a modification of the original Kafka technique, as follows (termed colloidal paraffin C):

A ·2% stock solution of Grübler's white paraffin wax of melting-point 52° C. is made in absolute ethyl-alcohol by dissolving at 52° C. For the working solution, 10 c.c. of this 52° C. are taken, and to it is added quickly 20 c.c. of twice distilled water warmed to 52°. An opalescent colloidal suspension results. There is a saline solution of ·2%. Into each of 10 tubes put ·5 c.c. of ·2% saline solution. Into tube 1 put ·25 c.c. cerebro-spinal fluid, mix and transfer ·5 c.c. into tube 2 and so on. Into each tube put ·75 c.c. of colloidal paraffin and mix. Into an eleventh tube put only paraffin and saline; examine in twelve hours at room temperature. All fluids with protein over ·05% gave abnormal curves (except cases of spinal compression). Cases giving a positive Pandy or Nonne-Apelt with a few exceptions have abnormal curves. No case with a positive Wassermann in the fluid gave a normal reading with colloidal paraffin.

The results are strikingly similar to the Lange reaction. It is cheaper, simpler, does not deteriorate so easily, is easier to read, and more reliable. It requires only ·25 c.c. of fluid, whereas the colloidal benzoin test requires 1·75 c.c. of fluid.

G. W. T. H. FLEMING.

*Lymphorrhages in the Muscles in Exophthalmic Goitre.* (*Brain, June*, 1926.) *Dudgeon, L. S., and Urquhart, A. L.*

In 9 cases of exophthalmic goitre the authors examined the extrinsic eye muscles and the heart muscle and, of the skeletal muscles, the deltoid, rectus and biceps. In 8 of these they found lymphorrhages in the muscles, most marked in the ocular muscles. The lymphorrhages were both large and small, the large ones causing wide separation of the muscle-fibres. The cell-content of the deposits were chiefly lymphocytes with some plasma- and endothelial cells. The muscle in proximity to the lymphorrhages may show atrophic changes, while an interstitial myositis is by no means uncommon. G. W. T. H. FLEMING.

*Significant Chemical Changes in the Spinal Fluid in Meningitis.* (*Arch. of Neur. and Psychiat., June*, 1926.) *Osnato, M., and Killian, J. A.*

In tuberculous and meningococcal meningitis the authors confirm the findings of Tashiro and Levinson in 1917. In tuberculous meningitis the mercuric chloride precipitate is usually twice the height of the sulphosalicylic acid precipitant. In epidemic meningitis the ratio is usually 1 : 2 or 1 : 3. In encephalitis the ratios