

Kollath,² working with rats, found that the administration of alkaline hematin served to prevent the symptoms which ordinarily supervene when the P-P factor or "vitamin G" is withheld from the diet. The above reasoning leads one to question whether or not it was the iron, so given, that conferred the benefit.

While none of the considerations here outlined prove that pellagra is an iron-deficiency disease, there is much plausibility to the view, and the writer has adopted the working hypothesis that pellagra is an iron-deficiency disease, and has set out to prove or disprove the thesis.

During the past summer the results of iron therapy have been studied in 51 cases of human pellagra. In severe cases, the iron was administered intravenously, and in milder cases it was given orally.

Although the clinical course of this disease is so variable that it is difficult to make a reliable prognosis in any single case, the results obtained are of a very encouraging nature. A more detailed report of these clinical studies will be published elsewhere.

Our studies included one series of dogs with black-tongue—believed by some to be the canine analogue of human pellagra. The animals were maintained on the Chittenden-Underhill diet of peas, cracker meal and cotton-seed oil. The dietary deficiency disease first described by the above-mentioned authors was produced in all its severity, and when the dogs in this condition received iron by the intravenous route, without any other alteration in the régime, they were restored to a normal appearance as judged by the disappearance of characteristic symptoms, return of appetite and an increase in body weight. These experiments are being repeated, extended and amplified, and will be reported in due course.

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SUPPLEMENTAL NOTE REGARDING MOSQUITO VECTORS OF EXPERIMENTAL YELLOW FEVER

IN a recent issue of this journal, the writer¹ summarized, in brief, attempts of several investigators to transmit experimental yellow fever through mosquitoes of various species. Shortly afterward abstracts of the work of Dr. Shüffner and his coworkers with *Aedes (Stegomyia) albopictus*² and of de Vogel with

"*Stegomyia scutellaris*"³ came to hand. As these mosquitoes are important semidomestic insects in the Far East, it seems of importance to call attention to these additional data. In biting experiments, the former authors report one fatal infection in ten rhesus monkeys tested, and de Vogel obtained only non-fatal infections in six monkeys, although a blood subinoculation from one of the latter produced death in another animal.

A point in taxonomy is raised in connection with the above two mosquitoes. On the basis of misidentified specimens, Theobald sank *A. scutellaris* into synonymy with *A. albopictus*. Both Edwards and Barraud have since corrected this mistake, placing *A. scutellaris* Walk. nec Theo. as a synonym of *A. variegatus* Bigot. Walker's type came from the Dutch East Indies, and the present distribution of *A. variegatus* is given as "Christmas Island, South of Java and many Pacific islands." *A. albopictus* occurs throughout the oriental region.

One would be inclined to conclude on the basis of the abstracts that two distinct species of mosquitoes were used by the above investigators, but I am informed that in his original article de Vogel treats the "*Stegomyia scutellaris*" with which he was working as synonymous with *A. albopictus*.

While the results of transmission experiments with *A. albopictus* do not indicate this species to be as favorable to the virus as the Javanese *A. aegypti*, which were also tested, or the West African *stegomyiae*, in our experience, yet incrimination of this ubiquitous oriental mosquito constitutes information of high potential value in prophylactic measures.

Taeniorhynchus (Mansonioides) africanus and *Aedes vittatus* are two important species incriminated by the writer in experimental yellow fever transmission which also occur in the Far East. With *A. aegypti*, the common host of that disease, and *T. uniformis*, an untested but very close relative to *T. africanus* which should be equally capable of acting as a host, also widely distributed in that region, one dreads to contemplate the appalling situation that would develop should the virus of yellow fever ever become established in East Africa and thence be spread into the vast, densely populated Orient.⁴

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² W. Kollath, "Water-soluble Vitamins and Their Relation to Each Other" (abstract), *Chemical Abstracts*, 24: 1887, 1930.

¹ C. B. Philip, *SCIENCE*, 71: 614-615, June 13, 1930.

² J. E. Dinger, W. A. P. Schüffner, E. P. Snidjers and N. H. Swellengrebel, *Nederl. Tijdschr. v. Geneesk.*, December, 1929, No. 51, pp. 5982-91.

³ W. de Vogel, *Bull. Office Internat. d'Hyg. Publique*, February, 1930, 22: 282-286. Abstracts in *Trop. Dis. Bull.*, 27: 486-487, June, 1930.

⁴ The writer is indebted to Dr. C. E. Mickel and Mr. W. B. Owen, of the University of Minnesota, and to Dr. H. W. Kumm, of the Rockefeller Foundation, for references in connection with the systematic points referred to above.