

The Propaganda for Reform

IN THIS DEPARTMENT APPEAR REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY AND OF THE ASSOCIATION LABORATORY, TOGETHER WITH OTHER MATTER TENDING TO AID INTELLIGENT PRESCRIBING AND TO OPPOSE MEDICAL FRAUD ON THE PUBLIC AND ON THE PROFESSION

SINKINA

Report of the Council on Pharmacy and Chemistry

Sinkina is a malaria "cure" put on the market by the Metropolitan Pharmacal Company, New York. The product was presented to the Council on Pharmacy and Chemistry for admission to New and Nonofficial Remedies and was rejected because insufficient evidence was submitted to substantiate the improbable claims made for it. The manufacturers were sent a copy of the report stating that their product was refused recognition. In view of the advertising that was persisted in after its rejection, the Council's referee for Sinkina submitted the preparation to clinical tests. Both the original report and the results of the clinical tests are given in the following report, which was submitted to the Council and recommended for publication. The complete report having been sent to the manufacturers and their reply considered, the Council authorizes its publication. W. A. PUCKNER, Secretary.

THE COUNCIL'S FIRST REPORT

The Council, after investigating the claims made for Sinkina, declared the product unworthy of recognition and adopted the following report, which was sent to the manufacturers:

No experimental evidence regarding the therapeutic value has been submitted. The clinical evidence is scant and not of such character as to deserve much consideration, no sufficient precautions having been adopted to avoid wrong conclusions. Judging from the evidence at hand the preparation is simply a dilute sugar-alcohol-water solution containing a little oil of cumin—Roman caraway. It is highly improbable that such a liquid would have the therapeutic effects claimed for it by the Metropolitan Pharmacal Company. In view of the improbable claims made for Sinkina, and the failure to substantiate them by suitable evidence, it is recommended that the preparation be refused recognition without at this time considering the claims made in regard to the identity and amount of the drug claimed to be the essential constituent.

In spite of its rejection Sinkina was persistently advertised. It was thought advisable, therefore, to submit the preparation to clinical tests. This was done and the results are given in the following report:

THE CLINICAL REPORT

The following quotations indicate the claims made for this preparation:

"In malarial conditions there is nothing that acts so promptly and efficaciously as Sinkina. Sinkina destroys radically every trace of the parasite in the blood from the time of its first appearance, builds up the damaged corpuscles, revitalizes the system, and completely eliminates every trace of the disease. Sinkina is deservedly termed the *Specific* for Malaria."

These claims were supported by testimonials which usually gave no indication of a demonstration of the presence or absence of malarial plasmodia in the blood. The following is an example showing the character of most of the evidence presented by the manufacturers:

"Three weeks ago I prescribed Sinkina for a negro man 40 years of age suffering from a double tertian malarial infection having a chill every afternoon for four consecutive days. He came to my office about 8 a. m. and was due to have a chill about 6 p. m. I gave him the sample of Sinkina and directed him to take a tablespoonful at once also at noon and again at 4 p. m., and to continue taking it in same size dose three times a day till he had taken it all. He reported to me in a week from that date and told me he was feeling fine and that he hadn't had any more chills. The patient up to this time is apparently cured."

As the claims were supported by a few testimonials purporting to be based on exact investigations, the Council submitted the preparation to careful laboratory and clinical tests. For this investigation the Council was fortunate in securing the help of physicians actively engaged in the study of malaria.

Original from

UNIVERSITY OF CALIFORNIA

Walter Millard Fleming, M.D. Albany (N. Y.) Medical College, 1862; a specialist in nervous maladies and insanity, of New York City, for forty years; once health officer of Rochester, N. Y.; surgeon of the Thirtieth New York Volunteer Infantry and later of the Third Brigade, N. G., N. Y., during the Civil War; one of the founders of the Order of Nobles of the Mystic Shrine; died at the home of his son in Mount Vernon, N. Y., September 9, aged 75.

George C. Laws, M.D. University of Pennsylvania, Philadelphia, 1871; a member of the Medical Society of the State of New Jersey; one of the promoters of the Paulsboro (N. J.) National Bank; died at the home of his son in Philadelphia, September 5, aged 68.

Benjamin Franklin Severs, M.D. Long Island College Hospital, Brooklyn, N. Y., 1888; a member of the Medical Society of the State of Pennsylvania; for two terms a member of the Philadelphia School Board; died at his home in Philadelphia, September 5, aged 57.

Augustus Christian Hetrick, M.D. Eclectic Medical Institute, Cincinnati, 1858; president of the Wellsville (Pa.) National Bank and for more than half a century a practitioner of York County, Pa.; died at his home, September 4, from acute gastritis, aged 78.

Mortimer M. Taplin, M.D. McGill University, Montreal, 1892; a fellow of the American Medical Association and a member of the Rochester (N. Y.) Pathological Society; died in the Rochester General Hospital, September 9, from pneumonia, aged 45.

James Franklin Eddington, M.D. Louisville (Ky.) Medical College, 1878; a member of the Illinois State Medical Society and local surgeon at Enfield for the Louisville and Nashville Railroad; died at his home, September 1, from heart disease.

Charles Joseph McFadden, M.D. University of Pennsylvania, Philadelphia, 1891; a member of the Medical Society of the State of Pennsylvania; died at his home in Pittston, September 3, after an illness of two years, aged 44.

William Van Buren Ezell, M.D. University of Louisville, Ky., 1872; for more than forty years a practitioner of Brazoria County, Tex.; died at his home in Angleton, August 26, from nephritis, aged 62.

J. Waller Ford, M.D. Medical College of Virginia, Richmond, 1876; of Hinton, W. Va.; while watering his horse at Talcott, W. Va., September 4, was kicked in the forehead and died two hours later, aged 57.

John E. Gruber, M.D. Medical College of Fort Wayne, Ind., 1882; for more than thirty years a resident of Isabella Co., Mich.; died at his home in Shepherd, August 31, from cerebral hemorrhage.

Reuben B. Keeran, M.D. Eclectic Medical Institute, Cincinnati, 1879; for twenty-seven years a practitioner of Hancock County, O.; died at his home in Findlay, September 5, from asthma, aged 60.

James Augustus Coyne, M.D. Jefferson Medical College, 1890; of Newark, N. J.; died at his summer home in Sterling, Mass., September 8, from heart disease, aged 60.

Owen A. Palmer, M.D. Hahnemann Medical College, Chicago, 1884; formerly of Warren and Cleveland, Ohio; died at his home in Akron, Ohio, August 21, aged 65.

Edward Worcester, M.D. New York University, New York City, 1851; for 53 years a practitioner of Waltham, Mass.; died in his home, September 2, aged 83.

Charles Hamilton Ballantine, M.D. Jefferson Medical College, 1882; of Philadelphia; died in the Jefferson Hospital in that city September 8, from dropsy, aged 56.

E. H. Fordtran, M.D. Fort Worth (Tex.) University, 1911; formerly of Fayetteville, Tex.; died in San Angelo, Tex., September 3, from tuberculosis, aged 25.

John Russell Morris (license, Nebraska, 1909); a resident of Richardson County, Nebraska, since 1873; died at his home in Humboldt, September 2, aged 63.

Mott J. Gillam, M.D. Bennett Medical College, Chicago, 1886; died at his home in Florence, Kan., July 2, from cerebral hemorrhage, aged 48.

Thomas H. Frey, M.D. Memphis Hospital Medical College, 1899; died at his home in Beaumont, Tex., September 6, from nephritis, aged 48.

Lewis G. Tandy, M.D. Washington University, St. Louis, 1886; died at his home in St. Louis, August 28, from meningitis, aged 51.

Experiments were made *in vitro* with the preparation; 1 ounce of Sinkina was used, and its action was compared with that of 10 grains of quinin sulphate. When these were added to cultures of malarial plasmodia in proportion corresponding to 1 ounce of Sinkina or 10 grains of quinin sulphate for a 150-pound man, the quinin was found to be unfailingly antagonistic to the malarial organism, the drug prevented the segmentation of the organism and finally killed it in about thirty-six hours. The Sinkina did not kill the parasite after seventy-two hours of continued action, and the parasites segmented in the presence of it just as actively as they did in the control.

The investigator was furnished with two sets of preparations in plain prescription bottles so as to avoid all influence of the personal equation. One set consisted of Sinkina, the other of a mixture of alcohol, sugar and water with some oil of cumin. The investigator reported that, so far as the tests on the cultures of malarial plasmodia were concerned, he could not determine any difference in the results obtained with the oil of cumin preparation, made in the laboratory of the Association, and those obtained with the Sinkina of the Metropolitan Pharmacal Company. Clinical trials were made by three independent investigators. Two of them received the two sets of preparations described.

FIRST INVESTIGATION

The first investigator treated two cases with Sinkina: one was of the ordinary estivo-autumnal type and the other an ordinary tertian.

CASES 1 AND 2.—A good many schizonts were present in the blood of each patient forty-eight hours after the administration of Sinkina. In the instance of the case of tertian the patient had his chill forty-eight hours after the medicine had been started. As the Sinkina failed to produce any effect the patients were then put on quinin to stop the disease.

CASE 3.—The patient had taken 10 grains of quinin on the day on which the experiment was begun. He had the tertian form of the disease, and plasmodia were quite numerous at the beginning. The quinin was discontinued and Sinkina was given in doses of 1 ounce three times a day. The day following the administration of 10 grains of quinin and 1 ounce of Sinkina, no parasites could be found in the blood. The Sinkina was continued in the doses mentioned. On the seventh day the patient had another chill, and a great many parasites were found in his blood. The Sinkina was discontinued and the patient was at once relieved by quinin.

This investigator gives it as his opinion, based on these observations, that the preparation (Sinkina) is absolutely worthless in the treatment of malaria, and he does not think it necessary to make any further experiments with it.

SECOND INVESTIGATION

The second investigator treated two cases of tertian malarial fever with these preparations until it was satisfactorily proved that the drug was having no effect on the presence of the parasites in the blood, when he began the administration of quinin.

CASE 4.—After the use of the remedies for one week the investigator still found young rings half-grown and gametes present in the blood. Apparently there was a relative increase in the number of parasites. He then began the administration of quinin. Blood-smears taken the next day after 40 grains of quinin had been taken showed one parasite after eighteen minutes' search of one slide, and two after thirty minutes' search of a second slide. At the end of a week's treatment the patient was discharged recovered. The blood examination of two slides was negative.

CASE 5.—This was a case of tertian malaria. After treatment for five days with Sinkina the blood still showed tertian parasites with increase in the size of the spleen, and the preparation was without effect on the clinical course of the disease. Quinin was then begun, and the blood examination became negative at the end of three days.

The investigator concludes that the preparations furnished him were absolutely worthless in the treatment of two cases of the tertian form of malarial fever, and that these solutions had no effect on the presence of the parasites in the peripheral

circulation. In a case of quartan malaria, both of the preparations (cumin oil mixture and Sinkina), sent by the Association Laboratory, were without effect on the plasmodia in the blood. This investigator employed the solution made by the Association Laboratory (cumin oil mixture) as well as Sinkina, and was unable to note any differences between them.

THIRD INVESTIGATION

The third investigator began the trial of Sinkina at the instance of the manufacturers, and used it in three cases, two of them being benign tertian malaria and one case of mixed infection (benign tertian and estivo-autumnal).

CASE 6.—This was one of the cases of benign tertian malaria. The patient gave a clinical history of malaria with chills occurring on alternate days for a little over a week. There was an immediate cessation of all clinical symptoms, and three days after the patient had been on $\frac{1}{2}$ ounce of Sinkina three times daily there was no evidence of any plasmodia in his blood; his additional treatment consisted of 5 grains of calomel the evening of the first day with a saline the next morning. Before the patient was put on treatment, numerous parasites of both the asexual and sexual forms were observed. The patient remained in bed for a few days, and then returned to work. A week later he was again taken ill with a return of all his previous clinical symptoms.

CASE 7.—This case was one of mixed infection (benign tertian and estivo-autumnal). The patient had a clinical history of malaria dating back two weeks, with a maximum temperature of 104 on admission. Tertian rings, estivo-autumnal rings and crescents were found in the blood. The patient was placed in bed, given thorough eliminating treatment, and $\frac{1}{2}$ ounce of Sinkina was administered four times daily. His clinical symptoms ran on for two days with no change, and there was no difficulty in finding the plasmodia in blood-smears, which were taken twice daily. The dose was then doubled and at the end of four days more there was no change in either his clinical symptoms or the blood-findings. The patient was then placed on 10 grains of quinin sulphate with 15 drops of diluted hydrochloric acid three times daily, to which he responded in less than forty-eight hours and made an uneventful recovery.

CASE 8.—This was the other case of benign tertian malaria. The patient had chills every other day while on the treatment, and laboratory diagnosis confirmed the clinical findings. Experimental treatment was carried on for four days, with a negative result.

The investigator calls attention to the fact that the first case in which improvement resulted does not show any necessary connection with the Sinkina administered, for many cases of benign tertian will clear up in just as short a time under any line of treatment, while practically all will eventually do so. This investigator later reported another case and transmitted a clinical chart.

CASE 9.—This patient was admitted to the hospital, Dec. 30, 1912, with a history of having had malaria for some weeks. The diagnosis was confirmed by a blood examination. He was then carried for four days without treatment other than rest in bed and a liquid diet. His symptoms subsided by the third day. On the fourth day a count of the parasites was made which showed that there were 1,160 asexual parasites and 260 sexual forms to every thousand leukocytes. The following day he was placed on Sinkina, 1 ounce three times daily. There was exacerbation of symptoms on the following day, which gradually increased until the fourth day, remaining about stationary for a day or so. The fifth day after the patient had been placed on Sinkina, another count of the parasites showed 5,600 asexual parasites and 300 sexual forms to the thousand leukocytes, this being an increase of 4,440 asexual forms and forty sexual forms to every thousand leukocytes. With the second count of parasites the dose of Sinkina was increased to 2 ounces every four hours, the patient being kept on this until January 14, without result. He was then placed on quinin, with a complete reduction of the temperature to normal and the disappearance of the parasites from the blood.

The investigator also reported a case of benign tertian malaria.

CASE 10.—This was in a child of 8 years which was treated by the investigator's confrère and gave similar negative results. Blood examination showed numerous parasites. The

child was placed on 1 ounce of Sinkina three times a day and kept on it for two weeks. The clinical picture remained unaltered, and parasites could be detected in numbers whenever examinations were conducted. A gradually increasing enlargement of the spleen was also noted. At the end of two weeks quinin was substituted, and the child went on to a rapid and uneventful recovery.

This investigator also concludes that the claim put forth by the Metropolitan Pharmacal Company that Sinkina is a specific in the treatment of the malarial fevers is entirely without foundation, and that the firm will be unable to demonstrate to the contrary.

These investigations demonstrate that Sinkina is not a specific against malaria, and that it has no more effect than a mixture of oil of cumin, sugar, alcohol and water. They further show the fallacy, first, of concluding from a temporary cessation of the symptoms in malaria that the disease has been cured and, second, of ascribing such temporary improvement to the influence of a remedy which has no known effect on the malarial organism.

Correspondence

Creeping Eruption

To the Editor:—I have noted the publication of reports of two cases of creeping eruption (*THE JOURNAL*, July 26, 1913, p. 247), by Dr. Gustave L. Rudell, in one of which, in August, 1912, he was able to recover the larva. In view of the fact, as stated therein, that recovery of the parasite producing this lesion is exceedingly rare, only two investigators having previously reported finding it, it might be of interest to report that in August, 1910, I succeeded in recovering two of these organisms from such a case while in hospital work in Philadelphia. I had not reported the case prior to this writing, since that part of the limited literature on the subject which had come under my observation had not before impressed me with the fact that the demonstration of this organism in connection with these cases was of such rare occurrence as is apparently true.

My notes show that both parasites found by me were practically the same as to shape, size and body markings as a specimen represented in a drawing after Sokolow, in Pusey's text-book—which was reproduced in *THE JOURNAL* of July 26—with the single exception that ring markings of the body in these specimens were not fully visible except near the head; there was a general motility of the body of a slight degree. The two larvae in question were recovered from the right forearm as small black dots, barely visible to the naked eye, and embedded in the cuticle at points of intense itching.

In this case it was notable that there was practically no difficulty encountered in finding and extracting the larvae, which were picked from the skin along with small scale-like particles of cuticle by the crude method of using the nails of thumb and forefinger, and in these two instances the small mass thus obtained was placed on a slide moistened with water for microscopic examination; patient himself in my presence later picked a third one from this forearm which was not examined microscopically. It was likewise worthy of note that there was no eruption of a distinctly "creeping" nature in this case, but at each of the three isolated points of itching, which alone drew patient's attention to the condition, there was a small erythematous area (no doubt intensified by scratching the parts) in the center of which was a slight senly puckering of the epidermis containing the black dot.

Patient stated that he had been conscious of itching for only a few hours before I saw him and later informed me that he was aware of no further symptom of this kind after removal of the larvae. I might further add that he had just previously spent several days at the seashore, frequently in surf-bathing, at which time the larvae were probably deposited on his forearm.

THOMAS H. CATES, M.D., Little Rock, Ark.

Lactobacilline—A Reply

To the Editor:—May we call your attention to what is doubtless an unintentional injustice done our product, Lactobacilline Liquide, in the Queries and Minor Notes Department of *THE JOURNAL*, Aug. 23, 1913, p. 618? In your note you refer to an article by Professor Heinemann, dated Jan. 30, 1909, stating that yeasts were found in the product of the Franco-American Ferment Company as sold in the form of powder and tablets and that "Sewerin also failed to find *B. bulgaricus* in Lactobacilline."

The Lactobacilline preparations examined by Professor Heinemann were imported and were foreign products obtained previous to the time when the Ferment Company of New York manufactured Lactobacilline. The Lactobacilline referred to by Sewerin was examined by him in Russia and was not manufactured in America. His report was published in the *Centralblatt für Bakteriologie*, November, 1908, and was merely referred to in *THE JOURNAL*, Jan. 27, 1912. Evidently, therefore, the criticisms of Heinemann and Sewerin do not apply to the Lactobacilline products which we sell.

As to the query propounded by your correspondent regarding Professor Metchnikoff's supervision of the Franco-American Ferment Company's preparations, we wish to give the following information: Once a month samples of all Lactobacilline products made in this country are bought at random in the open market by an independent law firm which acts as attorney for Professor Metchnikoff and La Société Le Ferment. These are sent to Paris for examination. If they are not found to conform to Professor Metchnikoff's scientific requirements, *ipso facto*, we lose the right to use his name in connection with the products.

When under the authorization of Professor Metchnikoff we first put the Lactobacilline products on the American market, the therapeutic efficiency of the *Bacillus bulgaricus* in the various forms of auto-intoxication was but little known to the profession and we felt compelled to enclose printed matter in our packages. This, we were led to believe, made our products unacceptable to the Council on Pharmacy and Chemistry under its rules. It was for this reason solely that the Lactobacilline products have not heretofore been submitted to the Council and we wish to take this opportunity of stating that steps have been taken to submit these products to the Council on Pharmacy and Chemistry in the belief that they will be found acceptable for inclusion in New and Nonofficial Remedies.

THE FRANCO-AMERICAN FERMENT CO.,
by Joseph C. Richard, Vice-President.

Queries and Minor Notes

ANONYMOUS COMMUNICATIONS and queries on postal cards will not be noticed. Every letter must contain the writer's name and address, but these will be omitted, on request.

STATES IN WHICH GOVERNMENT PHYSICIANS MAY REGISTER WITHOUT EXAMINATION

To the Editor:—In what states, if any, are medical officers of the United States Army, Navy and Public Health Service (on the active list, retired or resigned) allowed to register, without taking the regular state board examination? Please omit my name in answering.
E. M. D.

ANSWER.—The following states have taken legislative action in this regard:

1. Alabama grants a certificate to practice to any such officer on the active list, provided he can produce evidence as to his still being in the service.
2. California allows the medical officers of the Army and Navy, whether on the active list, retired or resigned, to practice in that state on a proper showing that they are or were duly commissioned, and on paying a fee of \$50.
3. Illinois permits the State Board of Health to use its discretion in issuing licenses without requiring an examination to any physician who is a graduate of a medical college and who

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