PROPAGANDA FOR REFORM

PART 1

JUNE 27, 1913

The Propaganda for Reform

In this Department Appear Reports of the Council on Pharmacy and Chemistry and of the Association Laboratory. Together with Opinions to Aid Intelligence, Prescribing and to Oppose Medical Fraud of 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 Pharmaceutical 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 presented in its rejection, the Council's refusal 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. PICKENS, 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 manufacturing process is so complex, and the character of such a substance as to deserve much consideration, so insufficient preparations having been adopted to avoid wrong conclusions. Judging from the evidence at hand the preparation is simply an extract of such character as to deserve much consideration, so insufficient preparations 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 eucalyptus. It is highly improbable that such a liquid would have the therapeutic effects claimed for it by the Metropolitan Pharmaceutical 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 by the Council it 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 malaria conditions there is nothing that acts so promptly and effectively as Sinkina. Sinkina destroys rapidly every trace of the parasites in the blood from the time of its first appearance, builds up the damaged corpuscles, restores 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 malaria parasites 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 9 p.m. I gave him the sample of Sinkina recommended by the physician, and advised him to take a tablespoonful of the fluid in water. He reported to me in a week that the colds had not occurred, and that he could now take more exercise. The patient up to this time was 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 with the University of California
Experiments were made in vitro with the preparation; 1 ounce of Sinksina was used, and its action was compared with that of 10 grains of quinina sulphate. When these were added to a large volume of malarial plasma in proportion corresponding to 1 ounce of Sinksina or 10 grains of quinina sulphate for a 150-pound man, the quinina was found to be unfeasibly antagonsitic to the malarial organism, the drug favoring the segmentation of the organism and finally killed it in about thirty-six hours. The Sinksina did not kill the parasites 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 provided with two sets of preparations in plain prescription bottles so as to avoid all influence of the personal element. One set consisted of Sinksina, either 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 plasma 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 Sinksina 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 Sinksina: one was of the ordinary estivo-aunnal type and the other an ordinary tertian.

CASE 1 AND 2.—A good many schizonts were present in the blood of the patient after the administration of Sinksina. In the instance of the case of tertian the patient had his chill forty-eight hours after the medicament had been started. As the patient failed to show any effect the patient was then put on quinina to stop the disease.

CASE 2.—The patient had taken 10 grains of quinina on the day on which the experiment was begun. He had the tertian form of the disease, and plasmaida were quite numerous at the beginning. The quinina was discontinued and Sinksina was given in doses of 1 ounce three times a day. The day following the administration of 10 grains of quinina and 1 ounce of Sinksina, no parasites could be found in the blood. The Sinksina 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 Sinksina was discontinued and the patient was at once relieved by quinina.

This investigator gives it as his opinion, based on these observations, that the preparation (Sinksina) 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 malaria 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 quinina.

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 quinina. Blood-amoebae the next day after 40 grains of quinina 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 Sinksina 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. Quinina then began, 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 these forms of malaria and that these solutions had no effect on the presence of the parasites in the peripheral circulation. In a case of quinina malaria, both of the preparations (quinina oil mixture and Sinksina), sent by the Association Laboratory, were without effect on the plasmaida in the blood. This investigator referred the matter to the Association Laboratory (quinina oil mixture) as well as to Sinksina, and was unable to note any differences between them.

THIRD INVESTIGATION

The third investigator began the trial of Sinksina 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-aunnal).

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 1/2 ounce of Sinksina three times daily there was no evidence of any parasites in his blood; his additional treatment consisted of 5 grains of quinina the evening of the first day with a saline the next morning. Before the patient was put on treatment, sputa were preserved, and no parasite of both the sexual 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 of his previous clinical symptoms.

CASE 7.—This case was one of mixed infection (benign tertian and estivo-aunnal). The patient had a clinical history of malaria dating back two weeks, with a maximum temperature of 104 on admission. Tertian rings, estivo-aunnal rings and crescents were found in the blood. The patient was placed in bed, given thorough eliminating treatment, and 1/2 ounce of Sinksina was administered four times daily. His clinical symptoms ran on for two days with no change, and there was no difficulty in finding the plasmaida in blood-smears, which were taken twice daily. The patient was then discharged and at the end of four days more there was no change in either his clinical symptoms or the blood-smear. The patient was then placed on 10 grains of quinina sulphate with drops of distilled 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 connexion with the Sinksina 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, 1913, 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 1,400 sexual parasites and 200 sexual forms to every thousand leucocytes. The following day he was placed on Sinksina, 1 ounce three times daily. There was no exacerbation of symptoms on the following day, which gradually increased until the fourth day, remaining about stationary for a day or so. On the fifth day another count of the parasites had been placed on Sinksina, another count of the parasites showed 6,800 sexual parasites and 300 sexual forms to every thousand leucocytes, this being an increase of 4,800 sexual parasites and 200 sexual forms to every thousand leucocytes. With the second count of parasites the dose of Sinksina was increased to 2 ounces every four hours, the patient being kept on this until January 14, without result. He was then placed on quinina, 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 control and gave similar negative results. Blood examination showed numerous parasites.
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. 241), by Dr. Gustave L. Baudel, 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 Pouey'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 similarity 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 an absence 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 part) in the center of which was a slight early 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 wet bathing clothes, at which time the larvae were probably deposited on his forearm.