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ADVISORY COMMITTEE ON TRAFFIC IN OPIUM AND OTHER DANGEROUS DRUGS

Note by the Secretary.

The Secretary has the honour to circulate the following document, which may be of interest to the members of the Committee.

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THE CURING OF DRUG ADDICTS  
BY VESICATORY SERUM

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LECTURE

delivered at the Inaugural Meeting  
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I would merely remind you that it is generally recognised to-day that the human organism defends itself against constant microbial attacks by means of a mechanism peculiar to each individual, based on phagocytosis and antibodies.

Phagocytosis and antibodies explain and confirm the great theory of immunity.

Antibodies exist in a free state in plasma.

They are specific: that is to say that their action is exclusively directed against the antigen to which they owe their existence.

The leucocyte alone is capable of producing antibodies and is the basis of all the phenomena of organic protection.

The number of leucocytes contained in the blood serum normally varies from six to nine thousand per cubic millimetre, <sup>but</sup> the leucocyte content of the serum in the phlyctena produced by a vesicant is much higher as research has shown.

Thirty, forty, sixty and even eighty thousand leucocytes per cubic millimetre are the quantities usually found when the contents of the phlyctena are examined.

As we stated in our memorandum submitted to the International Congress of Medicine held at Cairo in December 1928, it is on this formidable and active army that we have based our method of autoserotherapy by vesicatory serum.

This serum, which contains antibodies formed in the cavity where it is prepared, acts, when injected into the body, as an antigen capable of bringing about a conflict, and producing reactions of hypersensibility and phenomena of immunity.

We first applied vesicatory serum in therapeutic treatment twenty-two years ago.

The question at present under consideration is that of the treatment of drug addicts by this method.

I will tell you the facts and analyse the individual cases.

FIRST CASE.

Mahamed Sayed, 24, was admitted to the European Hospital on May 2nd, 1929, suffering from subacute rheumatism of the joints.

He was a carpenter by profession, and complained that for a year he had been unable to work continuously owing to the pains in his knees and shoulders. He had undergone several different treatments but had obtained no permanent relief.

I examined him and immediately observed that, apart from his rheumatism, he was a drug addict, which he admitted.

A vesicant 8 centimetres square was applied on the evening of May 3rd and the next morning I extracted 10 grammes of serosity from the phlyctena produced by the vesicant, and injected it under the skin. He was given 2 grammes of chloral to quiet him and make him sleep.

I admit that I was both surprised and gratified to hear from the patient himself, that, apart from his rheumatism (which was already better), he no longer felt any desire to take cocaine.

I continued to give him a dose of chloral for several days, and a second injection of serum produced by a new vesicant was given three days afterwards, and a third on May 10th.

After May 6th, the patient did not take a single centigramme of cocaine or feel the need of it. He was discharged from hospital on May 21st completely cured.

SECOND CASE.

Omar Awad was admitted to hospital on September 10th, ostensibly because he was suffering from lumbago, but really in order to be cured of morphine addiction. He admitted that he was in the habit of giving himself about ten injections a day

of 40 centigrammes of morphine in all. I gave him my treatment and allowed him, during the first few days, an injection of 2 centigrammes of morphine, morning, midday and evening.

After the second serum injection, he ceased to suffer from the effects of the drug and no longer felt a desire for it.

Knowing how difficult it is for morphine addicts to fight against the craving for the drug, especially when the "luxuary dose" has been discontinued and the "vitality dose is still being given, and seeing my patient face the withholding of the last centigramme with truly marvellous heroism, I began to be doubtful if he really was a morphine addict at all, so easily was he cured of his morphine addiction.

After the third injection of vesicatory serum, our patient was discharged from the hospital on September 24th entirely cured. His treatment lasted fourteen days in all. When he left, he told me his real name, as he had gained admission under a false name, and in a letter which he wrote to us from Cairo he told us his joy at again being able to take up his normal life.

### THIRD CASE.

Mohamed Abbas, 35, employed by a big "Laira", was admitted to hospital on August 2nd with sciatica. This man was in the habit of sniffing one grain of heroin a day.

The first vesicant was applied that evening and the next day I removed 12 grammes of serosity and injected it under the skin of the abdominal wall. I allowed him half a gramme of heroin a day.

After the second injection, three days later, the patient only took a quarter of a gramme. After the third injection, he remained two whole days without a single centigramme, and after the fourth he was completely cured.

I kept him in hospital five weeks under the strictest observation. He was discharged on September 19th entirely cured and having put on 5 kilos.

In November I was informed that the cure was permanent.

#### FOURTH CASE.

Ibrahim Ahmed, who had formerly taken hashish and heroin, had given them up and taken to sniffing one gramme of cocaine a day. Immediately upon admission to hospital on September 20th, 1929, he was treated by my method. One of the other patients, whose bed was near his, said that on the first day he threw and twisted himself about in bed, was excited, very pale and restless, with dilated pupils. I tried to calm him by giving him 3 grammes of chloral. The very first evening after the injection, there was a considerable improvement. The second day he was much calmer and his appetite, which had completely gone, began to return. On September 23rd he was given a second injection of 10 cc. and the same dose was repeated on the 26th. The patient's condition began to improve perceptibly. He refused the cocaine which I told the nurse to offer him for the purpose of ascertaining his condition. He was discharged from hospital on October 3rd as cured.

#### FIFTH CASE.

John Oe., 18, had been sniffing heroin for a year,

and came from Tanta for the express purpose of being treated by my method.

He had tried unsuccessfully some months before to break himself of the habit. He told us that he had come to Alexandria for a few days as he hoped that he might be able to overcome his craving for heroin, if he could get away from his friends and environment. However, having wandered about in the streets of Alexandria for 24 hours, completely exhausted and at his wits' end, as he knew of no trafficker in heroin, he became giddy and collapsed in a public garden. He was taken back to his hotel and returned the next day to his village.

This time, after the first injection, he admitted that the considerable reduction of the dose was not intolerable. There was no colic, sensation of cold or shivering fits; there were slight pains in the intestines, but no spermatorrhoea even when he was awake, like the time before.

At first he was rather depressed. The second day he pulled himself together and got out of bed for a stroll in the corridor of the hospital, ate his meals with relish and asked for nothing but his dose of chloral for the night.

After the second injection he handed back, of his own accord, the quantity of heroin which he had been allowed to have.

His mother who had come from her village to see him, was amazed at the change in his appearance in those few days. A few days afterwards, he was discharged from the hospital completely cured and resumed a normal life.

#### SIXTH CASE.

Madam X was in the habit of taking three boxes of sedol a day, having gradually contracted this habit in the course of the previous four years after attacks of nephretic colic. She was admitted to hospital on November 15th, 1929.

She wanted to get better, but made certain conditions before consenting to be treated by my method:

"There is one thing, Doctor," she said, "you must not cut down my dose too suddenly, for when I was confined and could not get out of bed, they tried to deprive me of sedol and I suffered so terribly from convulsions for a week afterwards that they were obliged to let me have it again."

This lady was treated the day she was admitted; an injection at 7 a.m., one at 2 p.m., one at 5 p.m., and one at 10 p.m.; the last two were double injections, that is to say two ampoules.

November 17th: injections at 7 a.m., 4 p.m. and 10 p.m., the two double;

November 18th: injections at 7 a.m., 5 p.m. and 10 p.m., each of one ampoule.

November 19th: hemotherapy of 10 cc. of blood and three injections of sedol.

November 20th: the patient found two sedol injections enough.

November 21st: second vesicant from which I obtained 7 cc. of liquid; sedol injections at 4 a.m. and 7 p.m.

November 22nd: an injection at 10 a.m.

November 23rd: 0; 24th: 0; 25th: 0; 26th: 0.

Severe facial neuralgia contracted through a draught upset the patient and deprived her of what little sleep she had been getting, but in spite of that she refused to have a sedol injection. She was discharged from hospital after having put on 3 kilos. I have seen her three times since she left, and during the first visit she paid us to thank us for what we had done, she said:

"The splendid thing about your method, Doctor, is that the patient does not suffer when deprived of the drug; he begins to feel a distaste for it, without understanding why."

#### TWELFTH CASE

Hanafi Mohamed Ali, 30, carpenter, had been sniffing heroin for a year: about half a gramme a day, in six separate doses. If he did not have his morning dose, he could not get up to go to work. During the last four months he had spent £85 on heroin. He was faced with the prospect of poverty and imprisonment, and came to me determined to be cured. He admitted that at first he used to sniff heroin because it gave him strength to do the work of two or three people. Nevertheless, when he had once acquired the habit he could no longer count on deriving any advantage from heroin even as an aphrodisiac. For the first few weeks only, he had prolonged erections, and then nothing. If he could not obtain the drug, he suffered from shivering fits, colic, vomiting, insomnia, and utter depression.

Hanafi Mohamed Ali, who started the treatment on December 2nd, was broken of the habit in 5 days. 20 centigrammes was enough for him on the first day, 15 on the second, and 6 on the third, fourth and fifth.

I have treated and cured 15 other similar cases.

The process is astonishingly simple.

After analysing the patient's water I apply an 8 cm<sup>2</sup> vesicant on some part of the body: preferably the antero-inferior part of the thorax or the abdomen.

Twelve or fourteen hours afterwards a phlyctena has already formed, containing a quantity of liquid varying according to the individual between 5 and 20 cc.



This liquid, which constitutes the serum, is removed by means of a syringe with a fairly thick needle and immediately injected, as it is, under the skin near the blister.

I recommend that the syringe be neither too hot nor too cold but of the temperature of the body.

The injection does not produce any reaction. At the most there are a few tenths of a degree's difference in temperature, but there is never any local reaction.

A second vesicant is applied in the same way after four days, and then a third.

I also particularly recommend a dose of chloral for the first few nights, when the patient suffers most from insomnia.

The dose of the drug allowed must be calculated on the basis of a quarter of the habitual dose during the first twenty-four hours, one-fifth during the second twenty-four hours, one-eighth the third day, and so on, until the patient can do entirely without the drug.

This is how we have succeeded in curing our patients.

"Cure" is the right word; curc from a medical point of view and from a physiological point of view.

When depriving drug addicts of the drugs to which they have been accustomed, we have not observed the fits of rage, fainting fits or syncope described in pathological treatises and well known to all those who have examined and treated patients of this kind.

The only things our patients complain of are slight insomnia or temporary neuralgia.

What an enormous difference between this method and other methods under which for several days or even weeks the doctor has to harden his heart and withstand the entreaties and

supplications of the patient, often without being able to understand how far such delirium is genuine or simulated if the patient is really suffering or only acting.

Is the cure permanent or not.

I am convinced that it is permanent in the case of individual drug addicts: that is to say, those who have begun to take drugs owing to some illness or the fact that they have been given an injection by a doctor, and even those who have started the habit through curiosity or for any other reason, but who do not frequent a vicious milieu or belong to an absolutely immoral set.

It is a matter of common knowledge that drug addicts like to associate with one another for the purpose of consuming their drugs in company. They form a sort of fraternity or sect where the drug is worshipped as a god and where the act of consuming the drug assumes a tremendous importance and, so to speak, a liturgical solemnity.

What will happen to the young man from Tanta whose parents traffic in heroin and who probably traffics in it himself? How long will he resist temptation when he goes back to this environment and is pestered by his old associates until he relapses into his old vice? Time will show.

There is another question which I regard as important; the way in which my treatment affects particular drug addicts.

An explanation of detoxication is the best justification of my method, for it is not sufficient to employ a particular treatment and note the results obtained, but, in our profession especially, we must understand the machinery set in motion and the causes which set it in motion.

Laboratory and clinical experiments have shown that vaccino-therapy is only specific if the organism is rendered sensitive to the antigen, and that it is only effective if the infection has been developing for some time.

Hitherto, it has been generally admitted that only organic substances of animal or vegetable origin could, in vivo, act as antigens capable of producing reactions of hyper-sensibility and phenomena of immunity.

Lumière's latest experiments in saponin, which is a glucose, and nocal, which is a sodium sulphonate of a nephtolonic hydrocarbon, have shown that the humoral fluids of guinea-pigs vaccinated with these substances acquire antitoxic properties.

I consider that these investigations have taught us a new fact and that I am justified in saying that particular substances, such as heroin, cocaine, etc. are capable of acting as an antigen and producing, in the serum saturated with it, antagonistic properties: that is to say, anti-bodies.

Without wishing to be dogmatic I think that Lumière's experiments provide us with the key to the problem of the effect of phlyctenotherapy on drug addicts.

It is now for the laboratory either to confirm our opinion or to furnish us with some other explanation of the existence of antagonistic properties in the phlyctena, and of the therapeutic value of serum.