Aug 29, 1915

Dear Dr. Sabin,

I apologize for implying my handwriting upon you—unfortunately the secretary is so founded.

Many thanks for your memorandum of August 26th. It is to my infinite regret that the results I have to report are merely tentative and that the information we all desire to see at as early a date as possible is not yet to hand. There are many reasons for this; firstly my work in the Public Health Laboratory since the day after tomorrow when I move to the Wellcome Research Laboratory at Beckenham, Kent, to take charge of the production of poliomyela vaccines here. Hence the continuity of experimental work has been broken. Secondly we experienced an acute shortage of monkeys following the expiration by the Indian Government of their care. Eventually we were able to obtain a shipment, but these animals arrived in poor shape with intercurrent infections, and a number of deaths furthered the urgency of the problem under study.
such that we attempted to gain some idea of the
potency of experimental small pool vaccines prepared from
the first 6 chairs we received. Each chair pool
controlled 7:3, was used in four animals each, some of whom
died of intercurrent illness during vaccination. 3 injection
of the intermediate were given & monkeys were bled
one week after the last dose. This scheme of dosage,
which I personally do not favor, was chosen to allow
comparison with tests on other batches of vaccine prepared
in this way as under the requirement of the N.I.H. In
polio vaccine I should add that viruses were grown
in chicks, monkey kidney, and calf kidney, while were also used
in neutralization tests that chimp, monkey, and guinea
vaccinations. Neutralization tests were calculated for red
in whole cultures and in cell suspensions. As I pointed out
at Rome last summer and last does not give
comparable titres to those in cell suspensions which generally
record titres 2 or 3 times higher with this caveat to
give now the geometric means of antibody level in the vaccinated
monkeys.

<table>
<thead>
<tr>
<th>Type 1</th>
<th>Type 2</th>
<th>Type 3</th>
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<tbody>
<tr>
<td>Makan</td>
<td>1:6 (2 monkeys)</td>
<td>YSK 1:2 (2 Mbs)</td>
</tr>
<tr>
<td>Burd Ile</td>
<td>1:30 (4 &quot;&quot;&quot;&quot;</td>
<td>FAF 1:7.5 (4 Mbs)</td>
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</table>
Confirmatory work has already been started at the Wellcome Laboratories, where pilot batches of single-strain vaccines are being prepared as quickly as possible. As soon as these second results are in hand, a strain of each type will be selected for production. All vaccine produced by the Wellcome Laboratories will be made from these strains and will probably be used by the Medical Research Council in controlled trials in 1956.

I have six strains in their 53rd kidney passage from isolation. All were isolated from cases of paralytic cases during 1953. The dominant particles of the 50th passage were segregated by two half dilution passages. One of these strains appears to produce constantly more complement fixing antigen than the others, as well as growing to about the same TCID₅₀/mL level. So far I have not been able to test these for virulence by various routes. I would, all the same, like to offer these to any interested laboratory, and particularly would
like you to know that I would be most grateful if you
will be able to examine them in the same way as you
have done yourself.

With kindest regards,

[Signature]

Alan. Joffe.