Dear Dr. Sabin:

Thank you so much for sending a copy of your new paper on attenuated polioviruses. I have, indeed, performed the intraspinal inoculations in the third space above the level of the iliac crests, and this may well be the reason for our low paralytic incidence. In the meantime, I have already inoculated strains of all 3 types, excreted by vaccinated individuals, in the fourth space, so that I may have checked your observation within a few weeks!

On the other hand, my tests for cerebral neurotropism have been performed by the most traumatic method, i.e. inoculation of 0.5 ml in both thalamic regions. The type 3 strains causing paralysis in at least 3 out of 4 intraspinally inoculated monkeys exhibited an increased cerebral neurotropism, whereas the few type 1 strains causing paralysis in 1 out of 4 monkeys failed to show an increase of cerebral neurotropism. Thus, there is, in our experiments a correlation, or at least no discrepancy, between cerebral and spinal neurotropism.

Although inoculation in the third space may not be a reliable method for determining spinal neurotropism, the results of both intraspinal and intracerebral inoculation are indications for the high attenuation of the strains after passage through the human alimentary tract. I may draw your attention, in particular, to numbers 10 and 14, who both show an increased spinal and cerebral neurotropism of type 3 virus excreted on the 15th, 16th and 21st day after feeding, and no increase of neurotropism on the 5th, 8th and 33rd day.

We are testing attenuated strains excreted by vaccinated individuals and wild strains as well for their d and d* character respectively, but so far this method seems, in our hands, not to be a reliable substitute for the monkey test.

With kindest regards.

Sincerely yours,

Prof. Dr. J.D. Verlinde.