Dear Albert:

Thanks very much for brightening my day with your letter of April 26th.

The results Dr. Schubert has obtained, as far as I am concerned, represent definite evidence of histoplasmosis in your cases. The fact that all but two of the twelve cases tested showed positive complement fixation tests makes it almost beyond question that they are either histoplasmosis or some closely related infection. Indeed, you might be able to find a positive test if you test other sera on the two who showed no reaction at 6 months. We almost never get a positive reaction by chance. As a matter of fact, our percentage of positive complement fixation tests with undiluted sera is less than 1 in 100, and most of those who show positive reactions either are proved or suspicious histoplasmosis.

Since receiving your letter I have attempted to pull together some of the data on the complement fixation test as employed by us and as done by Dr. Schubert with our methods.

In Table 1 are shown the results of a statistical analysis of the test which was done by Saslaw at the Army Medical School, and ourselves. For this test a statistician came from Washington and divided the sera so that all tests were run blind. In summary, the outcome was that our test appeared to be perfectly satisfactory as to specificity and sensitivity when employed with undiluted serum. Actually, some experiments were carried out with serum dilutions, but for practical clinical purposes these do not appear to be necessary to arouse one's suspicions. Also, our test employing histoplasmin appeared to be more satisfactory than
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Saslaw's employing collodion agglutination and growth yeast phase antigens.

I think you will see from these results why we place so much confidence in a 4 plus result with undiluted serum. You will note that group 2D which is Proved Cases of histoplasmosis, showed 2 negatives and 13 doubtful (2 or 3 plus reactions.) While this may seem rather low for proved cases, it actually represents the fact that we secured more specimens on cases that recovered than on those who died. Naturally the complement fixation antibodies gradually dropped in those cases who recovered which accounts for the results obtained to a large extent. I will attempt to get the actual records of proved cases in shape and send them to you as soon as possible.

Table 2 represents the "Reproducibility of Complement Fixation Tests."

With these findings in mind, a thorough study of your pathological studies by a competent mycologist is certainly mandatory. I do not put any confidence in the brief examination which I did while in Cincinnati. As a matter of fact, I would suggest that you send the slides to Dr. Howard Larsh, Department of Plant Sciences, University of Oklahoma, who is our consultant mycologist. I am sure he could give you a report rapidly. Sending them to some other mycologist such as Dr. Emmons at N.I.H. or Dr. Howell at Staten Island might be more satisfactory, but I am certain would take longer. I happen to know that Dr. Norman Conant, who is perhaps the foremost authority in the country, is away for two months at present. Should you wish to send the slides to Dr. Larsh, please let me know, and I will write to him also.

Since I last saw you I have seen Dr. Korns and he has given me permission to send you a copy of his paper prepared with Dr. Richard Nauen. I am enclosing it herewith.

I am happy to hear that we may get some dope on Dr. Gresser's experience.

Sincerely yours,

Michael L. Furcolow, Sr. Surgeon
In Charge, Investigations Section

cc: Dr. Robert F. Korns