

November 14, 1966

Dr. F. R. Peterson
Bristol Laboratories
Syracuse, New York 13201

Dear Dr. Peterson:

There has been a great deal of work on the effects of psychoactive drugs on the electroencephalogram, and this has included studies of the antidepressants. EEG patterns differ for each compound and for each class of compound. These observations, especially those which have been done quantitatively, have been useful in defining the clinical range and probable efficacy of new compounds in psychopharmacology.

EEG studies should be done in man as soon as the drug is considered safe for human experimentation. If a compound in the recommended dosage evokes no measurable EEG effects, the therapeutic index for psychotropic drug efficacy is probably very low. If the EEG changes are still unmeasurable at maximum dosage ranges, the compound will probably have little clinical merit. If a specific pattern is evoked in electroencephalograms, the therapeutic index can be defined with great accuracy.

Optimal methods vary. The techniques evolved during the past decade started with visual descriptions, followed by analog frequency analysis and analog amplitude analysis, and most recently have been replaced by digital computer methods. The present sophisticated techniques make possible accurate delineations of the probable therapeutic range, if drug studies are done accurately and early.

While these observations have not yet been considered by the present FDA as an essential part of a new drug application, the reports have been of great interest and considerable support to numerous pharmaceutical clinical directors, especially those who have had the opportunity to study quantitative data.

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A laboratory for the quantitative evaluation of EEG criteria is now being established at this Institution, following my experiences as Director of the Missouri Institute of Psychiatry from 1962 to 1966. It will be operational in the late spring. Such quantitative EEG evaluations can be undertaken in St. Louis by my associate, Dr. Turan Itil, who now has the laboratory for clinical electroencephalography at the Institute; and also by Dr. Carl Pfeiffer and Dr. Arthur Sugerman at the New Jersey Neuro-Psychiatric Institute.

If additional data regarding these experiences would be of interest, I would suggest you visit the College at 5 East 102nd Street (212 369-7900) at your convenience.

Sincerely yours,

Max Fink, M.D.
Professor of Psychiatry

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