

July 20, 1965

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Dear Al:

I do hope your trip to Europe was a successful one, despite the transatlantic telephone calls which you must have received because of the housing problems in the Department.

I am in the midst of completing a report on cholinergic mechanisms in convulsive therapy and while reviewing the literature, came across the enclosed two articles which brought to mind the range of possibilities for studies in the drug addiction population. Hano, et al, reported that a single dose of morphine increased cerebral acetylcholine in untreated animals, but had no effect in chronic morphinized animals. The cholinesterase activity appeared to be the same in both sets of animals. They concluded that acetylcholine metabolism in brain may be involved in the mechanism of development of tolerance to morphine.

This observation is of special interest when joined to the cursory Russian report by Denisenko who recommended central cholinolytic agents for weakening the development of tolerance to morphine and its substitutes.

From our point of view, we know that cholinolytic agents produce EEG desynchronization. It is also probable, although far from proven, that drug addicts tend to develop highly synchronized EEG patterns during the course of dependence. If these observations warrant further study, it would be advisable to replicate Denisenko's report, with EEG controls.

I will be coming East for my vacation during August and will take the liberty of calling your office after you have had a chance to adjust to New York living in August.

My best regards.

Sincerely yours,

Max Fink, M.D.  
Professor of Psychiatry

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enclosure