

CORRESPONDENCE

This department is provided for the publication of informal communications which are of interest because they are informative or stimulating, and for the discussion of controversial matters.

THE PRESENT STATUS OF ISONIAZID

TO THE EDITOR:

Your inquiry about the present situation with respect to the indications of the value of the hydrazide of isonicotinic acid in the treatment of tuberculosis in man was received here while I was attending the May meetings in Boston, in which a good deal of interest in the new antituberculosis agents was shown. The following covers the questions which you asked.

It would appear that this drug is not as good as the original enthusiastic reports would lead one to expect. In this laboratory we have under way a modest program with this material, and have confirmed the observations of others: first, as to its high specificity against an experimental tuberculous infection; second, that the drug is of a low order of toxicity; and third, that resistant mutants occur in cultures of tubercle bacilli not previously exposed to the drug. As in the case of streptomycin, these resistant mutants are not numerous in comparison with the entire bacterial population of the test suspension, but they do occur, and this of course indicates that the drug in concentrations even many-fold greater than would be used for *in vivo* studies is not sufficiently germicidal to kill all of the bacterial cells.

Furthermore, in patients who are receiving the hydrazide of isonicotinic acid, resistant strains of tubercle bacilli emerge in a relatively short time, within four to six weeks. Hence another miracle drug, so-called, falls short of the expectations one might have for the ideal substance for the treatment of clinical tuberculosis. This, of course, does not imply that the drug is without real value. It will, however, require another year, or maybe two, before its true value and limitations can be established.

In the meantime, there is a certain reluctance on the part of many investigators to give this new drug to tuberculous patients who have never had chemotherapy previously. The

feeling is that established drugs, such as streptomycin and PAS, when used with discernment and for a sufficient length of time, actually do a rather satisfactory job. The place of the hydrazide of isonicotinic acid in the chemotherapy of tuberculosis will, it seems to me, be as a concomitant drug along with others such as streptomycin and PAS.

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[*Comment:* In communications from several workers who have been trying out isoniazid in leprosy on a preliminary basis, nothing whatever has been heard to indicate that the results have as yet shown any special promise for it in this disease. Not enough time has passed, and not enough patients treated, to permit any actual evaluation of this new drug in comparison with those currently in use, but at least it would appear that it offers nothing spectacular in leprosy.—EDITOR]