

plants shows a definite concentration around one point causing a distinct difference in form of this distribution from that of the untreated which approaches that of a normal curve. This and the lower mode of the progeny from treated F_1 plants demonstrates a significant difference in degree of uniformity found within progenies from treated plants as against progenies from untreated plants". Thus colchicine treatment causes homozygosity in respect of height of plants thereby modifying the normal segregation. So far as we know, none has carried such investigations, a step ahead to examine the nature of the resulting anomalous segregations in generations like F_2 , F_3 , etc. A contribution to Mendelian anomalies coming from this direction, is yet to be settled.

Richharia¹¹ had also made similar observations on colchicine-induced variants in respect of oil percentages in *Sesamum orientale*. He found that colchicine treatment of plants of a true breeding variety of sesame gave variation

in respect of oil percentages between 51.21 and 54.13, whereas the normal progenies varied between 51.19 and 53.80 per cent.

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STREPTOMYCIN AND ISONIAZID

THE Second Report* to the British Medical Research Council by the Tuberculosis Chemotherapy Trials Committee gives the results of three months' treatment of 364 patients suffering from pulmonary tuberculosis of different degrees of severity. Of these, 142 were treated with streptomycin 1 g. daily and isoniazid 100 mg. twice a day, 102 with streptomycin 1 g. daily and sodium para-aminosalicylate (P.A.S.) 20 g. daily, and 120 with isoniazid 100 mg. twice a day alone. Over this period streptomycin and isoniazid, given together, were superior to streptomycin and P.A.S. in their effect on weight gain and blood sedimentation rate, and rather more effective in improving general condition. There was no significant difference in the effect on pyrexia, sputum-conversion or the radiographic appearances. Comparison of streptomycin and isoniazid with isoniazid alone, over the same period, showed that the combined treatment was much more effective in lowering the sedimentation rate and improving the radiograph. It was slightly more effective in returning the temperature to normal. The effect on general condition and on weight was similar with both treatments.

When streptomycin and isoniazid are given together, the reciprocal suppression of drug resistance is of the same order as that of streptomycin and P.A.S. over a three-month period. But the few available figures for isoniazid resistance at four months are less reassuring. Three out of eight positive cultures were resistant, though in most of these patients streptomycin was given only three times a week in the fourth month. Until more evidence is available, these results suggest caution in giving streptomycin less often than once daily when it is used with isoniazid, and we do not know that the combination will maintain its clinical superiority when continued for more than three months.

The chemotherapy of tuberculosis is no longer simple. Its very success and diversity are creating ever-changing problems with which everyone who treats the disease must become familiar. The pace of research is such that even the conclusions of the present authoritative report may be out of date in a few months.

* *B. M. J.*, March 7, 1953, p. 521.