The improvement in his rheumatoid condition was immediate and sustained, so that he was able not only to return to work but, perhaps ill-advisedly, to take on an evening job as well. Reduction in ancillary treatment has also been possible. More remarkable is the fact that this patient has suffered from alopecia totalis for three years and three months, and four weeks after starting treatment was found to have developed some growth of hair on the scalp and elsewhere. This hair-growth has continued, and while it is somewhat patchy and irregular at the moment, it is not just the downy lanugo hair sometimes seen.

Altogether in the series there were 34 males and 26 females whose ages ranged from 8 to 72 and from 12 to 69 years respectively. Dosage frequency was usually twice weekly, sometimes less, although in some cases a few alternate day injections were found to be needed at first. Injections were almost all given in the surgery by either my partner or myself, but could equally well have been given by either the district or the practice nurse. Tolerance was satisfactory. On direct questioning a degree of discomfort at the site of injection was not uncommonly admitted, but this was never severe enough to cause interruption of treatment. It is our impression that doses of 0.5 mg. were better tolerated by some patients than the 1 mg. which was the standard dose used in the early cases. Also on direct questioning there were seven complaints of possibly related systemic side-effects. Six of these occurred in women, of whom four complained of flushing. One man appeared to develop some fluid retention on 1 mg. intramuscularly on alternate days, probably due to overdosage.

The diagnoses and outcome of treatment are briefly summarized in the Table.

Diagnosis	Cases	Rapid Resolution	Mod-erate Benefit	Little or No Benefit
Skin disorders:				
Allergic rash ..	3	3		
Eczema (1 with asthma) ..	2	2		
Wasp sting ..	1	1		
Respiratory disorders:				
Asthma ..	5	3	1	1
Rheumatic disorders, major:				
Rheumatoid arthritis ..	2	2		
Osteoarthritis ..	2			2
Rheumatic disorders, minor:				
"Fibrositis" ..	18	15	2	1
Lumbago/back strain ..	11	9	2	
Sciatica (5 with lumbago) ..	6	5	1	
Other muscle strain/injury ..	5	3		2
Tennis elbow ..	3	3		
Olecranon bursitis ..	1	1		
"Rheumatism," severe ..	2	2		
Painful os calcis ..	1			1
Cervical spondylosis ..	1			1
Miscellaneous				
Ulcerative colitis ..	1	1		
Facial neuralgia ..	1			1
Brachial neuritis ..	1		1	
	66*	50	7	9

* Some had more than one condition.

The overall results mean very little, since they depend so much on selection of cases. We started with the conventional indications, but soon became more experimental in order to explore the frontiers of this form of treatment. We were surprised and encouraged by the results in minor rheumatic conditions,

so that the series became heavily weighted by them. Many of these patients appeared to respond quickly to a short course, or sometimes even to a single injection. Because of the duration or history of troublesome previous attacks, a placebo effect often seemed unlikely, but it is clearly impossible accurately to assess the true value of Synacthen depot in these conditions without a double-blind trial. This is now in hand.—we are, etc.,

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Sensitivity of some Mycobacteria to Rifocin-M

SIR,—I have recently tested the activity of Rifocin-M (rifamide; Lepetit Pharmaceutical Ltd.) against 20 different strains of four groups of mycobacteria. The strains comprised: nine wild strains of human tubercle bacilli, six of which were sensitive, and three resistant, to isoniazid; strains H37Ra (NCTC 7417) and H37Rv (NCTC 7416); and two, four, and three strains belonging to Runyon's groups I, II, and III respectively.

The drug was incorporated in Middlebrook culture medium, 7H10 oleic acid albumin agar (Difco) at 50° C. which was then allowed to solidify at room temperature. The medium was inoculated using a standard suspension of the strains prepared according to Medical Research Council methods (Appendix 2, Canetti *et al.*¹). Cultures were examined after seven and 14 days' incubation at 37° C. Growth of all the human strains was inhibited by Rifocin-M at a concentration of 1 µg./ml. The strains of the Runyon groups were not inhibited by this concentration of drug.

These results may be compared with those of Hobby and Lenert,² who used a liquid-medium system. They showed that both isoniazid-sensitive and isoniazid-resistant strains of tubercle bacilli were inhibited by 0.08 µg./ml. Rifocin-M in liquid tween-albumin medium, and by 0.31 µg./ml. in albumin liquid medium. They also reported that two of their four strains of the Runyon groups were inhibited by 0.31 µg./ml. Rifocin-M in liquid tween-albumin.

Rifocin-M is given by injection. Its use in undeveloped countries, where the main burden of tuberculosis lies, is therefore limited. Its potential usefulness, however, suggests that further comparisons be made of its activity in solid and liquid media.

I am grateful to Lepetit Pharmaceutical Ltd. (Miss J. A. Stanford) for supplying the drug, and to Drs. John Marks and Stephen Lapage and Mr. C. H. Collins, who supplied most of the strains used in the experiment.

—I am, etc.,

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Gastric Ulcer in Jamaica

SIR,—The current practice article by Dr. A. Morton Gill (17 August, p. 415) on gastric ulcer, and the subsequent letter by Dr. S. P. Bohrer and his colleagues (23 November, p. 515) in which they point out the omission of the epidemiology of gastric ulcer in Dr. Gill's article, are interesting in relation to my own observations of gastric ulcer in Jamaica. In a recent survey of this condition I found 81 (62%) of 130 gastric ulcers were concomitant with (and therefore secondary to) duodenal ulcers. Of the 81 cases with concomitant gastric and duodenal ulcers, only 12 had evidence of gastric retention and three evidence of pyloric stenosis.

Dr. Bohrer and his associates found a high incidence of antral stasis (presumably equivalent to retention) in cases with duodenal ulcer in Nigeria and were therefore surprised that gastric ulcer in their series was uncommon, because Dr. Gill, quoting Dragstedt *et al.*¹ and Burge,² incriminates antral stasis as a cause of gastric ulcer (this theory was also presented in more detail by Burge³ in a Hunterian Lecture). The fact that stasis is a common complication of duodenal ulcer in Nigeria, where gastric ulcer is uncommon, and that stasis is an uncommon complication of duodenal ulcer in Jamaica, where concomitant gastric ulcer is common, is evidence against the (antral) stasis theory, but is compatible with the more recent theory of the reflux of duodenal contents as a cause of gastric ulcer which was so elegantly presented by Capper,⁴ also in a Hunterian Lecture. This comparison between gastric ulcer in Nigeria and Jamaica illustrates the value of the concept of geographical pathology as stressed by Dr. Bohrer and his associates in the solution of the complex problems of medicine.

It is also of interest to speculate why duodenal ulcer frequently produces stasis in Nigerian but not in Jamaican patients. In Nigeria patients may be referred to or attend hospital at a later stage of duodenal ulcer disease when pyloric stenosis has developed, whereas in a relatively more developed country like Jamaica they attend at an earlier stage. It is also possible that duodenal ulcer in Nigerians, by causing excessive fibrosis,^{5,6} is more prone to cause pyloric stenosis and not duodenal reflux.—I am, etc.,

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Radiotherapy in Cancer

SIR,—The valuable record of results of cancer treatment at the Christie Hospital and Holt Radium Institute recently reviewed (19 October, p. 172) could be made even more valuable by inclusion of the figures necessary to calculate the age-corrected survival rates, in addition to giving the results in this par-