At present methods of classifying and quantifying disability vary so much from centre to centre that it is not possible to draw valid conclusions from any comparison between differing methods of rehabilitation. The methods used in rehabilitation also tend to be based more on clinical impression than on any scientific basis. This is, however, particularly true of the virtue of the method and example rather than validated methods of dealing with specific problems. It is extremely difficult to quantify rehabilitation in the same way as the doctors of a drug and its action. The response to these methods also varies from individual to individual, and certainly may contain a large placebo effect. It seems then that as a scientific discipline rehabilitation has hardly established its terms of reference and has not yet defined its units of measurement.

There have been a few notable studies in this field. The work of Copp in Manchester, Ferguson and MacPhail in Glasgow, and the multicentre trials of the British Association of Physical Medicine and Rheumatology spring to mind, but surely before implementing the recommendations of the Tunbridge report it is essential that basic studies should be carried out first by expanded academic departments of rehabilitation medicine, preferably organized on a regional basis, so that the degree and nature of the problems throughout Britain can be adequately defined and subsequently dealt with.

Dennis S. Smith
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Periodicity of Serum Prolactin Concentration

Sir,—Using a sensitive, precise, and specific radioimmunoassay for thyroid stimulating hormone (TSH) and a continuous blood sampling technique now recently described, we have demonstrated the existence of a circadian rhythm of TSH concentration in peripheral blood in man.1,2 Our findings have confirmed the extensive observations of Nicoll3 who obtained similar results. We have further developed the technique and this is the first measured variation in TSH concentration with a continuous sampling device. We have found that this technique is highly sensitive, and both are necessary to define more precisely the relationship between the daily secretory patterns and the physiological role of their common releasing hormone. We are, etc.,

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Propranolol and Cluster Headache

Sir,—A report of favourable results in treating severe cluster headache in a 30-year-old man with propranolol may be of interest. The patient had suffered for 10 years from recurrent attacks of cluster-like headache, with a mean frequency of 3-4 attacks per day for short periods of time, and the patient had been almost unable to sleep. The attacks always began on the right side of the head and the symptoms were on and off for several days. During an attack the right eye was red, there was slight photophobia, and the right temporal artery was swollen and tender. The attacks were never accompanied by visual disturbances but sometimes by nausea and vomiting. There was no family history of headache. Clinical examination and laboratory tests were normal. Many treatments had been given, including ergot and dihydroergot preparations, procyclidine, chlorpromazine, various barbiturates, and carbamazepine, without any discernible effects. During the first week of hospitalization the patient continued to have many attacks despite various analgesics. Treatment with propranolol was begun in the second week with a dose of 2 mg four times a day, increasing to 3mg four times a day for another three days. After one day’s medication the patient became completely symptomless and remained so for one week after stopping medication. Then after three days, which ceased promptly after instituting propranolol 60 mg/day.

This type of headache described fits well with the criteria of so-called cluster or histamine headache.1 Recently promising results from treating migraine with propranolol have been reported,2 but so far as I know there are no reports of the effects of propranolol on cluster headache. The mechanism is open to discussion, but one might assume that the inhibitory effect of propranolol on histamine activity, demonstrated in relation to gastric acid secretion,3 might also be the mechanism of its effect on cluster headache. The favourable result in this case seems to warrant further trials.

I am, etc.,
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Department of Neurology,
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Occupational Exposure to Nalidixic Acid

Sir,—A case of severe haemolytic anaemia in a breast-fed baby whose mother had been treated for pylonephritis with nalidixic acid has been reported. After recovery the infant’s erythrocyte glucose-6-phosphate dehydrogenase (G-6-PD) was found to be normal. Another case of acute haemolytic anaemia in a baby after 48 hours’ treatment with nalidixic acid has been reported.1 This baby has pronounced erythrocyte G-6-PD deficiency. We report here a case of haemolytic crisis in a man aged 20 who was exposed to nalidixic acid in his work in the pharmaceutical industry. He had no previous history of illness of any importance.

On 17 and 18 January 1972 the man’s work consisted in pouring nalidixic acid dust into a large container with a small shovel three to four times a day. His working area had no extractor fan ventilation and the process raised a very fine dust, clearly visible to the naked eye. In the evening of 18 January he began to suffer from acute anaemia, anorexia, hyperpyrexia, and his skin became quite dark. He was treated in hospital, but the symptoms improved during the next three days. When seen by us on 21 January his general condition was fairly good, the scrawny was jaundiced, and there was slight enlargement of the spleen. Inspection showed Hb 12 g/100ml; R.B.C. 3,800,000/mm3; leucocytes were within normal limits; there was slight anisocytosis, no poikilocytes, no target cells, and no nucleated red cells. P.C.V. 34%, reticulocytes 25%. The urine was normal and contained much urobilin but no biliary pigments. Total serum bilirubin was 1-5 mg/100 ml and the indirect 1 mg/100 ml; the direct and total urobilinogen were normal. Haemoglobin electrophoresis was normal and the HbA, was within normal limits. The fetal Hb was normal, and the direct