may cause much anxiety and chronic disability. Later, with the damage done, he finds his way to the dermatologist. Naturally this is the minority of cases, for the recuperative powers of the human frame are great.

What is the remedy for this unfortunate state of affairs? Surely the extension of industrial medical services on a group basis, to include the provision of industrial skin clinics working in very close co-operation with the local general practitioners. The doctors in these clinics might well be part-time general practitioners in group practice with special experience of industry and of skin disease. They, and the industrially trained nurse, would be able to go into the factories and give expert advice on preventive methods. Workers would stay at work and come daily for whatever dressings were needed. If individual general practitioners wished to prescribe their own treatment the nursing staff would be able to carry out the necessary dressings, bringing the case to notice if response was not satisfactory, and a second opinion would be promptly available. I am, etc.,

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Ruptured Mycotic Aneurysm

SIR,—The case of ruptured mycotic aneurysm with recovery reported by Drs. P. R. Graves and I. J. Brodie Russell (April 1, p. 768) is of much interest but is not unique. A similar, though more acute, case with a positive blood culture was seen in an Indian base hospital some years ago.

A bombardier, aged 21, was admitted on February 25, 1946, in coma with a temperature of 105° F. (40.6° C.). The only history was that he had felt shivery during the previous afternoon and had taken mepacrine and gone to bed. The following morning he did not awaken, and, though at first thought to be oversleeping, was later found to be deeply unconscious.

On examination he was just able to respond to painful stimuli. The pulse rate was 120 per minute. Moderate neck stiffness and an easily elicited Kernig's sign were present. In the 3rd left interspace, and to a lesser extent in the aortic area, a diastolic murmur of peculiar intensity, resembling tubular breathing in character, was heard. It was unlike the usual murmur of aortic incompetence but was associated with a collapsing pulse and a B.P. of 160/60. Examination of the C.N.S. revealed moderate bilateral papilloedema without haemorrhages, a partial right 3rd nerve paresis, diminished deep reflexes, and flexor plantar responses.

Lumbar puncture showed a slightly blood-stained fluid under a pressure of 200 mm. of water. The blood was intimately mixed with C.S.F. and was not of traumatic origin. Repeated blood slides for malarial parasites were negative. Hb 108%, W.B.C. 15,000, with 95% polymorphs. The urine showed a trace of albumin and sugar. At this stage the diagnosis was obscure. Cerebral malaria, meningococcal encephalitis, and subarachnoid haemorrhage were considered, but there were strong points against each of these diagnoses. Rupture of a mycotic aneurysm was also thought to be unlikely, although the possibility was not entirely discarded. Treatment with quinine, mepacrine, and sulphonamides was started pending diagnosis. The following day some improvement in the patient's general condition and level of consciousness was noted. Further lumbar puncture showed a definitely blood-stained fluid under a pressure of 240 mm. of water, with raised protein and sterile culture. On the 3rd day impaired visual acuity (he was able to read only the largest newspaper headlines) and a left homonymous hemianopia were noted. On the fifth day he deteriorated, with frequent vomiting, tachycardia, and fever ranging from 99°–103° F. (37.2°–39.4° C.). He showed classical signs of aortic incompetence and also a mitral systolic murmur and reduplicated first sound. B.P. 150/50. A few petechiae appeared on the arms. Albumin and red cells were found in the urine, which was sterile on culture. Neurological signs remained unchanged, and his C.S.F. showed 200 R.B.C.s, 15 lymphocytes, and 5 polymorphs per cu. mm. A mild leucocytosis was still present.

At this stage a diagnosis of acute infective endocarditis with rupture of a mycotic aneurysm was made. This was confirmed by blood culture—a pure growth of a haemolytic coagulase-positive staphylococcus being obtained. Treatment with penicillin was started in doses which now appear homoeopathic—15,000 units, later rising to 30,000, being given 3-hourly for 30 days to a total of 5.5 mega units.

Further crops of petechiae and a typical subungual splinter haemorrhage appeared. His haemoglobin fell 28% in eight days. The patient remained apathetic and disinterested, with an unhealthy yellowish-white skin against which the crops of petechiae stood out clearly. At the end of the first course of penicillin definite improvement had occurred, although the patient lost much weight in this time. A further course of penicillin to a total of 14 mega units with "sulphamezathine" 30 g. was given. At the end of this second course the patient felt entirely well and was afebrile. Blood count was normal and blood culture negative. All neurological abnormalities had disappeared except for a minimal hemianopia. His aortic incompetence was slight in degree and he was able to walk energetically about the hospital grounds without discomfort. He was eventually discharged to England, symptom free, three months after the onset of his illness.

An onset as sudden as this, with coma preceded only by a few hours' general malaise, must be very uncommon in infective endocarditis, and this at first tended to obscure the diagnosis. The coma was presumably due to rupture of a mycotic aneurysm, with haemorrhage in the region of the right optic tract, resulting in symptoms of raised intracranial pressure and a left homonymous hemianopia. The degree of subarachnoid haemorrhage did not alone appear sufficient to account for the depth of his coma, the rise in C.S.F. pressure, the papilloedema, or the homonymous hemianopia.

Alterations in the heart sounds were well shown in this case—the murmurs, character, and intensity of the sounds changing almost daily. It is possible, in view of the absence of previous rheumatic or congenital cardiac disease, that the infective process initially attacked a bicuspid aortic valve. Cases of ruptured mycotic aneurysm with recovery, although rare, may be more common than published figures suggest.—I am, etc.,

London, W.1. FRANCIS PAGE.

Persistent Hiccough

SIR.—I read the interesting report by Dr. B. Gallen (April 22, p. 960), and I would like to emphasize the importance of the psychological factor in such cases.

Recently I saw a case of a middle-aged man in hospital recovering from pulmonary lobectomy. The operation had been carried out a week previously due to a morbid condition of the right lower lobe, and, on awakening from the anaesthetic, hiccoughing had persisted at intervals of five to six times per minute except during sleep. The patient had become severely exhausted and was in constant pain. His condition was causing his medical attendants considerable concern and perplexity. Clinical examination, including *x*-ray examination of the chest, had revealed no specific organic cause for the symptom, and all attempts at therapy were only of temporary avail. Such methods as phrenic crush on the side of operation and the placing of a cork between the teeth (a veterinary practice, I believe) were also without success.

It was evident at interview that the patient was suffering from an acute anxiety state, and the establishment of rapport was difficult due to the severity of his distress. Attempt at hypnosis was strongly resisted, the patient complaining that he was too tired to concentrate. On the following day an investigation of the patient's personality was carried out under the influence of intravenous sodium thiopentone, and much free flowing anxiety and depressive features were exhibited. For some years he had been under considerable pressure of work and undue strain in his capacity of a business executive, and in addition he had become involved in a love affair with one of his business associates, unbeknown to his wife and family. He had been leading a double life in two separate homes, living in an atmosphere fraught with guilt, frustration, and anxiety. He intimated that the idea of returning to this unfortunate *milieu* was wellnigh intolerable. He had also had to undergo a prolonged period (some twelve months) under medical investigation for the condition in his chest before final arrangements were made for specialist investigation and operation at a large hospital. He had felt lonely without his family to comfort and reassure him in the face of a major surgical condition.

During the narco-analysis positive suggestion was given that his hiccoughing would cease, and this met with success. It was explained to him that his symptom was psychogenic in causation and would cease with his ability to relax. He was persuaded that his worries would be ventilated and discussed at a later date and that no doubt some workable solution to his problems would be reached. Thereafter his symptom, greatly modified in intensity, recurred at infrequent intervals and was easily controlled by sodium amytal 1 gr. (65 mg.) b.d. by mouth (an unusually small dose). This was combined with continued suggestion and reassurance at subsequent interviews. Moreover we were particularly fortunate to have the invaluable aid of an intelligent, sympathetic, and tactful nurse from whom the patient was able to gain much comfort and understanding. Forty-eight hours after the institution of psychiatric treatment the symptom was entirely absent.