benztropine 2 mg t.i.d., and she was discharged from inpatient treatment on this dosage.

She began attending a psychiatric rehabilitation day hospital shortly afterwards, and one month after starting pimozide 4 mg b.d. her schizophrenic symptomatology appeared to be under con rol, but she was complaining of poor visual acuity. On examination there was paralysis of the ciliary muscle of both eyes, with fixed dilated pupils, and paralysis of accommodation. She was examined by an ophthalmologist at this time and no other abnormality noticed to account for this. Pimozide was reduced to 2 mg daily as a maintenance dose, and orphenadrine 50 mg t.i.d. substituted for benztropine. Her vision and pupillary responses to light and accommodation gradually returned to normal over the following two weeks. It would appear, therefore, that as well as causing Parkinsonian side effects in a dosage of 8 mg daily, pimozide caused paralysis of accommodation, and interfered with normal pupillary reactions.

I would like to thank Dr. A. D. Forrest and Dr. J. D. Smythies for permission to report on this patient who was under their care, and Dr. J. Cullen, of the Royal Infirmary, Edinburgh, for confirming the ophthalmological findings.

—I am, etc.,

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"Stiff Man Syndrome" and Trauma

SIR,—The stiff man syndrome is now a well recognized clinical entity.[1] There has been frequent speculation on aetiology but to date there is no convincing evidence for any of the postulated mechanisms. We wish to report a case which appears to fulfil all the criteria of this disease and which is so closely related to trauma that this may well be implicated in its mechanism.

The patient was a 53-year-old man in good health until three years before admission when a large book-case toppled from a truck, struck his back, and rendered him briefly unconscious. For several months following the accident he had continuous pain in the paraspinal muscles, exacerbated by movement but never completely abating. He also developed increasing stiffness in his back and shoulders. The pain gradually subsided and disappeared over some months, but the stiffness was progressive until it involved the legs and arms. There was sudden exacerbation with emotional upset or sensory stimulus, often as little as a light touch on the skin, and this often resulted in excruciatingly painful cramping in the muscles of the abdomen and thighs. One year prior to admission he became unable to walk unassisted.

Physical examination revealed marked rigidity of all muscles of the trunk and legs. He was unable to bend from the waist. Gait was slow and unsteady, and he moved en bloc. The muscles were "bony" hard to palpation, and passive movement revealed continuous high tone in agonistic and antagonistic muscle groups. Stretch reflexes were brisk throughout with flexor plantars and no clonus. There was no muscle weakness or wasting. Muscle tone was, however, noted to be normal during sleep. Full evaluation by the psychiatric service revealed no significant functional component to the man's illness.

Laboratory studies revealed a maturity onset diabetes, first demonstrated two years prior to admission. *X*-ray spine and myelography revealed only spinal straightening and mild degenerative disease. Nerve conduction studies were normal. Electromyography revealed continuous normal motor action potentials in the paraspinous muscles despite all attempts by the patient to relax. 10 mg diazepam intravenously led to electrical silence after 15 minutes, and this persisted for 60 minutes.

Treatment was started with 60 mg diazepam orally, with good result. The patient became able to walk unaided and showed only minimal residual paraspinal stiffness. Attempts to substitute a placebo and then diphenylhydantoin for diazepam were quite unsuccessful, the patient suffering severe relapse which on one occasion required catheterization for complete urinary retention which was believed due to muscle spasm. Favourable improvement has been maintained on diazepam for one year.

We present this as a probable case of stiff man syndrome after back trauma. Whether it is related in some way to the spinal damage or is secondary to months of continuous voluntary tension in the paraspinal muscles as a result of pain is not clear. Finally, hysteria cannot be entirely ruled out.—We are, etc.,

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[1] Gordon, E. R., Januzko, D. M., and Kaufman, L., *American Journal of Medicine*, 1967, **42**, 582.

Treatment of Urinary Infections

SIR,—It was interesting to read that Dr. J. A. Davies and others (24 July, p. 215) in their comparative double blind trial of the treatment of urinary infections found that cephalexin and ampicillin were equally effective.

The logical conclusion, although not mentioned in their article, is that ampicillin must be preferred because of the enormous expense of cephalexin. In the dosage that they recommend the cost for five days treatment with ampicillin is £1·23 and with cephalexin it is £5·53. These prices are taken from *Mims* July 1971.

If a drug has some special indication cost is immaterial. If, however, two drugs perform identically, as in this case, the cheaper should be recommended. Is it not time that the medical profession became a little more cost-conscious about the treatment that it prescribes? I feel that this sort of information should be included in articles of this kind to help doctors to select the drugs that they use knowing all their advantages and disadvantages.—I am, etc.,

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Hong Kong Influenza Variant

SIR,—Dr. P. W. Gill (31 July, p. 308) points out certain features of recurrent epidemics of influenza A and suggests that infection with the strains of influenza A_2 virus current in 1966 and 1968 may have protected against the Hong Kong variant which appeared in Australia in 1968 and in Britain in 1969. He asks that other doctors who have the appropriate records will publish them in order to provide evidence of the truth or otherwise of the suggestion.

The records from our general practice (3,600 population) show that during the dominance of the Asian types of influenza A_2 between 1957 and 1968 the Asian type virus was isolated from 118 persons. The Hong Kong variant was not isolated from any of these persons in the first Hong Kong influenza epidemic, but in the second epidemic it was isolated from five of them and from a person known to have had influenza A virus infection in the past. The dates of the five "Asian" type A_2 virus isolations were as follows: 1958 February, 1963 March, 1964 February (two isolates), and 1966 January.

Our experience therefore does not support the suggestion that the 1966 epidemic conferred protection against the Hong Kong variant. It does not contradict the suggestion that the 1968 Asian strains did so, because none of the 48 persons who were virus positive for the Asian type of influenza in 1968 developed Hong Kong influenza in either of the epidemics.

The fact that in the first Hong Kong epidemic all those persons known to have been previously infected with Asian type of virus escaped may be considered to support the hypothesis of a temporary protection against the Hong Kong variant. Did they escape fortuitously because it was such a small epidemic in which only some 5% of our population was attacked? Alternatively, was it a small epidemic because so many of our population had been temporarily protected by a previous attack of Asian virus?

I hope that others with accurate information will help to swell the evidence for or against the hypothesis proposed by Dr. Gill.

—I am, etc.,

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Psychogeriatric Services

SIR,—The controversy which has been provoked by the report of the Society of Clinical Psychiatrists[1] suggests that the profession may be about to embark on a rather unedifying demarcation dispute.

Though patients can never rigidly be categorized, the problem of demented old people is best considered by dividing them into three broad groups.

(1) The bed-fast, who, owing to physical disabilities require heavy nursing care—for example, those crippled by strokes, Parkinsonism, arthritis, or contractures. These are currently, and rightly, a geriatric commitment.[2]

(2) The ambulant dement without any gross disturbance of behaviour. These must remain a community responsibility and ideally should stay in their own homes with increasing support from their relatives and social services. Thereafter they may live in ordinary local authority welfare homes, or in special residential homes for the mentally frail. In either event, their medical needs are