to the lack of correlation in this study between glyceryl trinitrate consumption and anginal attacks, which incidentally is not obvious from the table of results published, I am sure that much depends on the patients' own interpretation of his symptoms. When assessing prenylamine in angina¹ I asked the patients to record only attacks which were severe enough to interfere with their activity at the time of the attack, and I believe this made it easier for the patient to keep a valid record.

Lastly, I am disturbed by the alarmingly high incidence of status anginosus on withdrawal of the active drug in the recent study, and I wonder if we might have some further details of these patients' histories prior to starting the trial. This aspect of the drug clearly requires further investigation.—I am, etc.,

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REFERENCE

- ¹ Cardoe, N., *British Journal of Clinical Practice*, 1968, 22, 299.

Disodium Cromoglycate in Asthma

SIR,—Although the article by Dr. H. Herxheimer and Miss Helga Bewersdorff (26 April, p. 220) deals mainly with the prevention of induced asthma, they blandly report negative lung function tests in five chronic asthmatics treated with cromoglycate. No details concerning the duration of treatment or the number of observations before, during, and after giving cromoglycate are reported, and until this information is available I think it hardly reasonable to compare these scanty observations with the far more extensive observations by other workers.

Disodium cromoglycate has now been used extensively in three centres for more than two years—Manchester,¹ Birmingham,² and Stoke-on-Trent.³ These three centres have carried out not only double-blind trials but also long-term trials on the value of disodium cromoglycate in the prevention of asthma. All three double-blind trials came out strongly in favour of disodium cromoglycate compared with placebo, and the later long-term studies have also been most encouraging.

At a recent whole-day symposium on disodium cromoglycate (Intal), held at the Royal Society of Medicine in London,⁴ a number of communications were given reporting favourably on the use of disodium cromoglycate in the prevention and control of asthma. My own observations concerned 52 patients who had been treated with disodium cromoglycate for periods ranging from three months to twenty months. Fifty per cent. of these patients were assessed as showing definite or marked improvement and a further 27% were assessed as showing marginal improvement. From these and further observations I would conclude that disodium cromoglycate affords complete protection to a few and partial protection to many asthmatics. Certainly, since giving disodium cromoglycate openly to these and other patients the management of asthmatics attending this department has been easier and there have been far fewer acute attacks requiring emergency treatment and resuscitation. Many patients have had less need of their usual adrenergic aerosols. Many of

them on corticosteroids have been adequately controlled on a lower dosage, and in a few patients corticosteroids have been withdrawn completely since commencing disodium cromoglycate on a long-term basis.

I am not at all impressed with the contention⁵ that it is not advisable to record forced vital capacity and F.E.V. in patients with asthma. In fact, it is accepted by most workers that these measurements are essential for the effective monitoring of patients. In many of the patients treated openly over months with disodium cromoglycate there has been not only a substantial improvement in these indices as well as symptomatic improvement, but also the whole pattern of the asthma condition has materially improved.—I am, etc.,

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- ¹ Howell, J. B. L., and Altounyan, R. E. C., *Lancet*, 1967, 2, 539.
² Morrison Smith, J., and Devey, G. F., *British Medical Journal*, 1968, 2, 340.
³ Kennedy, M. C. S., *Lancet*, 1967, 2, 838.
⁴ Disodium cromoglycate (Intal) symposium—March 1969, *Proceedings in press*.
⁵ Herxheimer, H., *Acta Allergologica*, 1963, 18, 1.

Neonatal Meningitis Treated with Trimethoprim and Sulphamethoxazole

SIR,—The combination of trimethoprim and sulphamethoxazole promises to be more effective than any previously available therapy in certain conditions.¹⁻⁵ We report here the successful treatment of neonatal meningitis in an unpromising situation after other drugs had failed.

A female infant, born on 25 September 1968, had a small lumbar meningocele repaired within 24 hours of birth by Mr. Malcolm Gough. She was later found to have an Arnold-Chiari malformation on air-ventriculography. At the age of 2 weeks she developed meningitis. From the cerebrospinal fluid a *Escherichia coli* was isolated which was sensitive to colistin, chloramphenicol, and tetracycline, and resistant to sulphonamides,

ampicillin, and streptomycin. Treatment with intramuscular colistin and chloramphenicol (which was later given orally) and intrathecal colistin for nearly six weeks failed to control the infection in spite of the fact that the patient's serum and cerebrospinal fluid were shown to be bacteriostatic to the organism in a dilution of 1 in 8, and bactericidal in a dilution of 1 in 4 and 1 in 2 respectively. After the first week the cerebrospinal fluid (see diagram) protein content remained at a level higher than 1,000 mg. per 100 ml., the white cell count was higher than 1,200 per cu. mm., and no glucose was detectable although the fluid was sterile on culture. There was evidence of pus loculation on intraventricular taps and an air-ventriculogram. By this time the infant had received over 160 injections of colistin alone, and all injection sites showed considerable induration.

At this stage all other antibiotics were stopped and she was started on a combination of trimethoprim 20 mg. and sulphamethoxazole 100 mg. (Bactrim Paediatric tablets) by mouth twice a day. The cerebrospinal fluid gradually returned to normal and has remained normal since, except for a short period when the treatment was stopped and there was a rise in the white cell count and protein. At the age of 4 months a Rickham reservoir was inserted to facilitate cerebrospinal fluid removal to relieve pressure, and at the age of 5 months a Spitz-Holter valve was put in.

She is now 5½ months old, still receiving the same treatment, and her cerebrospinal fluid has remained normal. No significant drop in the haemoglobin or the platelet count has occurred, the total white cell count is within normal limits, and the polymorphs show no abnormalities.

This baby had a loculated purulent cerebrospinal fluid not controlled by a combination of intramuscular and intrathecal antibiotics, but which cleared while it was receiving an oral combination of trimethoprim and sulphamethoxazole. We suggest that this combination is useful in the treatment of neonatal meningitis and would be worth a trial in the treatment of any meningitis, as the penetration into the cerebrospinal fluid of the drugs to therapeutic levels appeared to be satisfactory in this case.