G. HAY.

facial paralysis, as did the nine patients who had no detectable impairment of taste.

Of 14 patients first tested after the 14th day nine had loss of taste, of whom only five had denervation and ultimately did badly. One of the remaining five, who did not show ageusia, had fibre degeneration, and a poor final recovery.

We believe that the discrepancies between these findings and those of Drs. Peiris and Miles cannot be accounted for by the differences in the tests for taste used in the two series. Our findings appear to show that loss of taste (in 32 out of 41 early cases) had no significant bearing on the prognosis. Krarup's findings that every patient tested by him during the first week of the paralysis had measurable gustatory disturbances, as did 84% of 31 patients tested in the first 14 days, also detract seriously from the prognostic significance of these tests.

It is clear that much more work is necessary, and that this will require the study of large numbers of very early cases in wellequipped departments where tests for taste, nerve excitability, and the stapedius reflex (by impedance audiometry) can be expertly and immediately done. It is hoped that early loss of taste in Bell's palsy will not meanwhile be adopted as a justification for drastic intervention-for example, surgical decompression-or as a prognostic yardstick by which the outcome of therapeutic trials might be judged.—We are, etc.,

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#### REFERENCES

- <sup>1</sup> Krarup, B., Acta Otolaryng. (Stockh.), 1958a, 49, 294.
- <sup>49</sup>, <sup>274</sup>.

  1958b, ibid., **49**, 389.

  Bull, T. R., J. Laryng., 1965, **79**, 479.

## Systemic Lupus Erythematosus

SIR.—In their memorandum (20 November, p. 1227) on systemic lupus erythematosus and pregnancy Dr. G. C. Hanson and Dr. S. Ghosh mention the effect of increasing the dose of corticosteroids in the psychosis which accompanies severe episodes of this disease.

I have observed the same effect in a young woman who was controlled on prednisone, 15 mg. daily, and who inadvertently spent an hour sunbathing. This produced an acute exacerba-tion of the rash on her face and wrists, together with pyrexia, an ulcerated throat, photophobia, dyspnoea, and an acute psychosis, in which the patient, normally very co-operative and sensible, behaved like a 3-year-old having a real temper tantrum, and was very negativistic. With some hesitation the dose of prednisone was raised to 45 mg. daily, and promazine was also given. As the physical signs abated (the rash, the ulcerated throat, and the pyrexia) so the mental state returned gradually to normal in parallel with the physical signs.

One other observation in another patient whose lupus erythematosus was manifest chiefly in her joints produced pain, stiffness, and contractures. During pregnancy she was well controlled with prednisolone, and two months after delivery the prednisolone was slowly withdrawn. She had never shown signs of mental disturbance at any time during the three years of her illness. Four months later she began to relapse and was given indomethacin, 25 mg. three times a day, as an alternative to prednisolone. Her joint symptoms rapidly improved on this drug, and there were no skin manifestations or other signs indicative of active systemic lupus ervthematosus at this time. After about six weeks of this therapy she became very depressed, and indomethacin was abruptly discontinued. This withdrawal produced an acute exacerbation of symptoms of lupus erythematosus, reactivating not only the joints but also producing a typical facial rash, desquamation of the skin over the finger-tips, and dyspnoea. Remission was quickly obtained using prednisolone and amitryptyline.

-I am, etc.,

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### Vascular Lesions in Diabetes

SIR,—We have read with great interest your leading article (11 September, p. 603) about diabetic microangiopathy. It has been shown by others1 2 that the levels of serum glycoproteins are raised in diabetics with vascular lesions. We report here our observations in rabbits with experimental diabetes.

We have studied<sup>3</sup> the changes in some neutral mucopolysaccharide fractions-hexose, hexosamine, sialic acid, and seromucoid-in the serum of rabbits in diabetes induced by treatment with alloxan, cortisone, and alloxan combined with cortisone. In alloxan-diabetes the concentrations of hexosamine and sialic acid and in steroiddiabetes that of hexose and seromucoid were found to rise. The changes observed in diabetes induced by alloxan combined with cortisone were similar to those observed in steroiddiabetes. The renal vascular lesions were severest on treatment with alloxan combined with cortisone, and did not parallel the changes in the serum levels of the neutral mucopolysaccharide fractions.

-We are, etc.,

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### REFERENCES

- Berkman, J., Rifkin, H., and Ross, G., J. clin. Invest., 1953, 32, 415.
   Gilliland, I. C., Hanno, M. G., and Strudwick, J. I., Biochem. J., 1954, 56, xxxii.
   Jakab, L., Bretan, M., Fehér, J., and Kammerer, L., Acta med. Acad. Sci. hung., in press.

# Origins of Homosexuality

SIR,-In your editorial "Origins of Homosexuality" (6 November, p. 1077) you state that "while F. J. Kallmann observed a 100% concordance rate for homosexuality between monozygotic twins others have cast doubts on his observations," thereby rendering "genetic studies . . . inconclusive." Among these others you list the 1960 paper by Rainer, Mesnikoff, Kolb, and Carr in Psychosomatic Medicine, which was entitled "Homosexuality and Heterosexuality in Identical Twins."

I think it is important to point out to your readers that a genetic hypothesis by no means requires 100% concordance in monozygotic twins. Indeed, Kallmann indicated in his original study as well as in his favourable discussion of our paper (published along with it) that such a perfect concordance rate is to be regarded as a "statistical artifact." He stated that the "fixed relationship between primary gene effect and its behavioural endpoint" which the demand for such perfect concordance would imply is inconsistent with the conceptual scheme of modern genetics.

Our paper was the result of an extensive search for discordant pairs. The male pair described therein was intensively studied in the search for psychological similarities as well as divergences; both were found. Investigating the rare cases of dissimilar twins affords an opportunity to learn about the contribution of the "environment" to the heredity-environment interactive process, a process which may start before birth and go on to include the role of life experiences. If genetic studies" refer to the total elucidation of this interactive process, they are certainly still "inconclusive." To imply, however, that Kallmann and others required a 100% concordance rate, and that finding and studying an occasional dissimilar pair casts doubts upon their observations and hence upon the role of genetic factors, is to build one non sequitur upon another. At present it would be more productive to consider the evidence, including the twin studies, for biological, genetic, and psychological factors and to use methods to explore their mutual influences.-I am, etc.,

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SIR,—I am writing to express my surprise that you saw fit to publish the letter from Dr. C. G. Learoyd on the above subject (27 November, p. 1309). I don't ever remember having read such a bigoted or emotionally toned letter in a scientific journal. It would appear to me that this sort of letter is the type one might expect to find in a weekly magazine rather than the B.M.J. There are, of course, many arguments both for and against altering the law appertaining to homosexual offences, but I would have felt that in this day and age as doctors we could at least view the problem with scientific detachment.-I am, etc.,

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## Intrauterine Contraceptive Devices

SIR,—With reference to your leading article of 31 July (p. 249), I thought you would be interested to hear of our experiences using the intrauterine contraceptive device as an alternative form of contraception at the Sheffield Family Planning Association clinic.

We were fortunate in having Dr. Betty Knowles, head of Family Planning Services in Fiji, to start our clinic for us (in February 1965) to train the five medical officers. Knowles had inserted 800 Lippes loops in Fiji, and we used Lippes loop No. 3 or C.

Our patients are all multiparous women, so that no dilatation of the cervix is needed, and in most cases we have managed insertion after caesarean section. Contraindications are severe menorrhagia, cavity or cervical fibroids, and history of endometritis, and overdue menstrua-tion. Loops are fitted at any time in the menstrual cycle.

The patient is shown the loop and warned of possible side-effects—i.e., pain and bleeding. She is instructed to check that the loop is in position by feeling for the threads, and that it has not been extruded into the vagina. This is done weekly and post-menstrually. All three