ALLOIMMUNITY TO HUMAN H-Y

SIR,—We wish to supplement your fascinating editorial of Nov. 6 (p. 1008) by some further evidence that H-Y antigen induces cellular immunity in man. A female patient with aplastic anaemia was given bone-marrow from her HLA-identical brother. After a period of transient chimerism the graft was rejected and the patient recovered her own haemopoietic function. At this time after grafting (31 weeks) her lymphocytes were tested in a cell-mediated lympholysis (C.M.L.) test.1 2 The C.M.L. was positive against donor and other family members (table 1). Positive reactions (target-cell killings) segregated in such a way as to indicate that non-HLA target determinants were responsible.

Subsequently the patient's cells were tested against a randomly selected panel of target cells. Of these only panel members with the HLA-A2 phenotype were killed. Neverthe-

4 Gorden, R. D., Simpson, E., Samelson, L. E. 1975, 142, 1108

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We interpret these data to mean that sensitised

Sex of HLA-A2 target

present

absent

M

f

17

0

26

15

2

17

*Level of killing was much lower than other positive targets in the same experiment.

members with the HLA-A2 phenotype were killed. Neverthe-

less not all cells carrying HLA-A2 were killed. In fact only 17 out of a total of 32 A2-positive cells were killed (table 1). At first this suggested a split of A2 which was perhaps not recognisable by serology, but this was ruled out by segregation studies. Some cells which carried an HLA-A2-positive haplotype in a family were killed whereas other cells which carried the same haplotype were not killed.

Of the 17 different cell phenotypes killed 15 were from males and 2 from females. All A2-positive males were killed (table 1). We interpreted these data to mean that sensitised cells from the patient were directed to at least two specificities, and one of these was the human H-Y antigen. The other specificity was a target determinant shared by the two females in which the level of killings was lower than that against the males.

The restriction phenomenon exhibited by the HLA-A2 antigen was analogous to similar phenomena in mice. In C.M.L. systems in the mouse T cells kill targets providing they carry the H-2 antigens of the original sensitising cell.3 This has been clearly demonstrated for the mouse H-Y antigen.4 These data are significant in transplantation. Bone-marrow grafts

between HLA-identical siblings are less likely to succeed when there is a sex mismatch.5 The opposite has been reported for renal allografts whereby male grafts to female patients survive longer than do female grafts to male patients. This has been interpreted as indicating enhancement directed to the H-Y antigen.6 These observations are confirmed by others.7

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SCHIZOPHRENIA-LIKE REACTION TO DIETHYLPROPION

SIR,—By the autumn of 1975, no case of a clear schizophreni-like reaction to diethylpropion had been reported to the Committee on Safety of Medicines, though five cases of unspecified psychosis, another five of unspecified mental dis-

order, and one case of hallucinosis had been reported, together with one case of unspecified mental disorder after withdrawal of the drug. The first clue to the realisation that the case described below was not one of idiopathic schizophrenia was that it was so unusually rich in schizophrenic symptomatology —i.e., it was "too good to be true".

A housewife and secretary aged 30, who began a course of diethylpropion as "Tenuate Dospat" in a dose of 75 mg daily in the summer of 1975, stopped the drug suddenly after a month, and a week later began to believe that deep spiritual forces were at work, testing her in various ways. A quarto-sized notebook had been filled by her with series of numbers and attempts at their interpretation and unusual interpre-

tations of the significance of different colours. On one occasion she thought that football players in a televised match turned their backs to reveal their numbers to help her get the right answers to some imaginary test. As well as believing that others were influencing her, she believed that she could alter the behaviour of others—even of a blackbird in the street—with changes in her own mood. There was some disturbance of thought process, and, though she used no neologisms, she used original combinations of standard words such as "word syndrome".

Her affect was flattened and her story bizarrely matter-of-

fact, so that despite her florid symptoms there was very little disturbance, and it was possible to treat her with the help of our community nurse on an outpatient basis with intramus-

cular fluphenazine. Within a fortnight, much of her conversation was normal, and within 2 months all features of mental illness had disappeared. At that time the story of the course of diethe-

ylpropion was revealed. She has now remained well for a year, medication having been discontinued for some 9 months.

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γ-LINOLENATE IN MULTIPLE SCLEROSIS

SIR,—We feel, as the manufacturers of 'Naudicelle', that the description "γ-linolenate in the form of 'Naudicelle'" in the letter from Dr Meyer-Rienecker and his colleagues (Oct. 30, p. 966) might be mistaken by your readers as implying γ-linolenate in its pure form. Naudicelle is the seed oil of Oenothera lamarkiana (evening primrose). A gas-liquid chromatography analysis shows the fatty-acid profile of the oil to be (%): palmi-

tic 5-3, stearic 1-6, oleic 9-3, linolenic 73-2, and γ-linolenate 8-5.

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John Williams

Managing Director


6 Oliver, R. J. D. Lorn J Liverpool 1974, 4, 519.

7 Kassaver-Nebesken, P., Oyoda, G., Terazaki, P. I. Personal communications.