damage, as the authors pointed out. Wing (1981) reviewed six cases of Asperger's syndrome. Five of her six patients did the WAIS or WISC tests; in four of them the verbal IQ was higher than the performance IQ (being quite a bit higher in two of them).

Weintraub & Mesulam (1983) described 14 patients with right-hemisphere dysfunctions; as Denckla (1983) points out, they resembled those with Asperger's syndrome. The Weintraub & Mesulam patients had five features (introversion, poor social perception, chronic emotional difficulties, inability to display affect, and impairment of visuospatial representation); Asperger's syndrome patients show four of these (Wing, 1981).

Weintraub & Mesulam (1983) found a history of neurological disorders (infantile hemiplegia, perinatal stress and seizures) in 10 patients, and three of the remaining four had an abnormal family history. Wing (1981) described a history of cerebral damage in some patients, and found that parents' behaviour often resembled their childrens'.

These facts suggest that both groups of patients, those with Asperger's syndrome and those of Weintraub & Mesulam, are rather similar or share some characteristics. Perhaps the problem is inadequate communication between neurology and psychiatry. Weintraub & Mesulam emphasize right-hemisphere dysfunction but interpersonal aspects are stressed in Asperger's syndrome.

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Depression in General Practice

SIR: In their valuable study of the clinical features of depression in general practice and comparison with out-patients, Sireling *et al* (*Journal*, August 1985, **147**, 113–119) state: "Important factors associated with psychiatric referral appear to be severity and chronicity of the depression. This contrasts with Fahy's findings that neither factor played a major part, although both might be expected to do so".

Neither of these statements is completely accurate. First, Sireling *et al* (1985) did not study the psychiatric referral process. They compared general practice (GP) depressives (recognised and not recognised, etc.) with a separate group of depressed out-patients. This procedure does not justify conclusions—however correct these may later turn out to be—about factors affecting the process of referral. Secondly, my study (Fahy, 1974) was a prospective study of GP-identified depressives specifically designed to show how referrals differed from non-referred depressives from amongst a defined general practice population at risk. Subsequent reports of the findings made it clear that by every usual criterion of severity of illness (rating scales, weight of symptoms, factor scores, etc.) referred depressives were more severely ill and more endogenous. However, Sireling *et al* appear to have been misled by one set of multiple regression data (Table II in the paper in question) which showed that 'severity' and 'duration over one year' were statistically outweighed as predictors of referral by five other features, notably 'hopeless'. They appear not to have noticed that 'severity' was rated not by the research psychiatrist but by the eight collaborating GPs whose reliability was not measured.

The failure of these two features to emerge as superior predictors of referral does not mean they are of no value for this purpose in practice. The arithmetic of regression analysis assigns a weight to each variable expressing the individual predictive power of that variable when relationships with all other variables have been taken into account. The relatively minor roles of 'severity' and 'duration over one year' mean that it is unnecessary to invoke these variables in prediction of referral because of the greater importance of other clinical features which are themselves correlated with either severity or chronicity or both. In fact, the combined predictive power for referral of both 'severity' and 'duration over one year' was 14.4% of the total predictive value of the eight features considered in this particular analysis. Far from being "in contrast" with my data, Sireling *et al's* observations in this context are quite consistent with mine despite differences in material and method and an interval of more than ten years between the two studies.

Concepts of severity and of chronicity are difficult to define precisely in community settings. Total rating scale scores, symptom counts, weighted scores on dimensions, time off work etc. are just

some of the influences contributing to severity ratings in general practice. It is apparent from the comparative work on GP versus hospital depression now appearing that although the statistical significance of differences is impressive, the magnitude of these differences is often quite small.

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The Nottingham ECT Study: Double-Blind?

SIR: Gregory *et al* (*Journal*, May 1985, **146**, 520–524) state: "The rater and clinical teams in charge of patients were blind to the treatment group." The statement that a trial is "double-blind" does not make it so. The authors are not seen to attempt to disprove their "double-blind" design by assessing blindness in the rater, the clinical teams and the patients at every assessment point, when a lack of blindness would influence results. Notionally blind participants can be asked to guess patient status and then the observed guesses can be compared with guesses to be expected by chance, thereby quantifying any disparity between theory and practice using conventional statistical criteria. If it is believed that simulated, unilateral and bilateral ECT produce different degrees of dysmnesia then these could vitiate the "double-blind" design, a criticism which can be approached if the side-effects are systematically recorded at each assessment point and then submitted to statistical comparison between groups.

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Unilateral Auditory Occlusions and Auditory Hallucinations

SIR: After McGuffin noted that schizophrenic patients with auditory hallucinations sometimes plug their ears (*Journal*, June 1979, **134**, 651–652), Green suggested that plugging just one ear may help (*Journal*, September 1979, **135**, 287). Finding impaired binaural vs monaural verbal comprehension in schizophrenics, Green & Kotenko (1980) reasoned that plugging the inferior ear (usually the left) would improve comprehension and might ameliorate auditory hallucinations. Concurrent with another intervention, James (*Journal*, November 1983, **143**, 515–516) tried unilateral ear plugging (UEP) for auditory hallucinations. He concluded that the associated improvement was not due to UEP because plugging either ear helped. While inconsistent with the hypothesis that only UEP of the inferior ear should help, other notions about UEP could accomodate these findings. The need for other hypotheses about the UEP effect is further raised by a case we wish to report. For this patient with chronic hallucinations, plugging the superior comprehending right ear was followed by a striking decrease in auditory hallucinations. The effect outlasted the period of occlusion, and even persisted into an exacerbation of psychosis.

UEP had no effect on four other actively psychotic chronic schizophrenic men, but perhaps their heterogeneity was a factor. Compared with the others, the patient who benefitted was younger, better adjusted premorbidly, and was more reactive to life events. He had more florid positive and less marked negative symptoms, and was relatively more neuroleptic-responsive.

Case report: This right-handed 32-year old with chronic paranoid schizophrenia (DSM–III) had experienced frequent exacerbations, and was in hospital when UEP trials began. While other symptoms were neuroleptic-responsive, medication did little for his loud, nearly continuous hallucinatory 'voices'. He had heard them daily for six years. He was symptomatically stable for several months, and no change was made in medication or dose (chlorpromazine 400 mg, p.o., TID) for a month before, and during UEP trials. An independent rater assessed auditory hallucinations at base-line as severe (BPRS score = 6).

The patient had normal hearing on audiometric testing. On Green & Kotenko's (1980) test, his right ear comprehension score (27/40) was better than both binaural (22/40) and left ear (13/40) scores. Plugging the inferior-comprehending left ear ten hours daily for five days did not yield the predicted therapeutic response.

Three days after left UEP was ended, right UEP was begun. After two days, the intensity, clarity, and frequency of his auditory hallucinations markedly decreased (BPRS ratings = 2 (very mild) or 3 (mild)). Anxiety, excitement, suspiciousness, and unusual thoughts also diminished. Comprehension increased on all tested conditions, especially in the left ear. Three weeks of right UEP was associated with continued improvement. During this time