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 accompodate 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