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doi: 10.1192/bjp.199.3.252a

Authors' reply: We thank Drs Garg & Garg for their insightful comments from a cardiologist's perspective. The purpose of our paper was in part to stimulate others to examine more precisely what factors underlie these apparent deficits in received cardiac care. Garg & Garg raise two issues that we agree deserve further investigation – consent to undertake invasive procedures, and compliance with follow-up care. Regarding consent, we are not aware of any studies on refusal of medical procedures particularly following on from an acute psychiatric episode. However, there are some data on refusal to start medication in psychiatric settings which may be a useful point of comparison.^{1,2} Kasper *et al* found that in newly admitted psychiatric in-patients 12.9% refused treatment but that 90% of these ended their refusal within 4 days suggesting persistent refusal may be overestimated, accounting for perhaps 1% of treatment problems.² It is worth noting that non-adherence rates among patients with severe mental illness is probably lower for hypoglycaemic and antihypertensive drugs than for antipsychotics.³ One important question here is whether the very small proportion of patients who cannot initially consent because of acute mental illness are always given a second chance to consent once well? Better links between physicians and psychiatrists would no doubt help here. Even in those with mental ill health, the vast majority of problems with day-to-day adherence are caused by accidental omissions and rational non-adherence and not ongoing florid psychiatric illness.⁴

The second issue raised was provider caution owing to the possibility of future non-adherence. Garg & Garg rightly highlight that non-adherence to cardiovascular medication is sometimes higher in those with mental ill health, although this is not always the case. Contrary to popular opinion, non-adherence (to medical drugs) is sometimes lower, not higher, in people with mental illness.⁵ In truth, we do not know whether there is a low prescribing rate or a low uptake rate or both. Focusing on anti-platelet drugs, an unpublished meta-analysis presented by Mitchell at the Royal College of Psychiatrists' Faculty of Liaison Faculty Meeting (2011) found no difference in receipt of antiplatelet drugs in those with v. without broadly defined mental illness, but there was a slight effect in those with severe mental illness (OR = 0.91, 95% CI 0.84–0.99), suggesting that patients with severe mental illness are indeed receiving slightly less medication for cardiovascular indications. A caution is that these studies are based on prescribed medication rates not actual adherence with medication.

Documenting these inequalities is only the initial step. Are we taking appropriate actions to compensate for these difficulties? For instance, we would not consider a patient with visual impairment to be non-adherent because they cannot read a patient instruction sheet. We would make extra effort to give the information in another format. Surely, where medical treatment is indicated, we (i.e. all healthcare professionals) must make some effort to compensate for the difficulties faced by patients with comorbid conditions and ensure our facilities and treatments are acceptable and understandable even when it is expensive or inconvenient to do so. Collaborative care, attached professionals and peer-support models have shown promise in some areas. Could cardiologists and psychiatrists working together establish whether these are useful in the aftercare of patients with mental ill health who require cardiac surgery?

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doi: 10.1192/bjp.199.3.253

Generalised spike-and-slow-wave complexes without seizures in schizophrenia

There has been long discussion about the increased prevalence of electroencephalogram (EEG) abnormalities and their significance in patients with schizophrenia.^{1–4} Although interictal epileptiform discharges presumably indicate a higher risk for seizures,⁵ such abnormalities alone in a clinical case of schizophrenia are generally not regarded as having strong implications for antipsychotic therapy.

Here, we report the case of a 17-year-old student who over a period of several months developed a paranoid-hallucinatory syndrome, feeling persecuted, sidelined and out-casted by his peers. He also experienced changes in auditory perception, reported supersensitive hearing and auditory hallucinations of backbiting whispering voices of his peers. There was a prodromal phase with increasing social withdrawal, affective flattening and a drop in school grades over a period of 2 years prior to the diagnosis of schizophrenia by an out-patient psychiatrist. Treatment with 250 mg quetiapine led to some improvement but not remission. Aged 13 he had been in a road traffic accident, with subtle contusions and subarachnoid bleeding which fully recovered without any other neurological, psychiatric, cognitive or magnetic resonance imaging symptoms or signs. A routine clinical EEG showed infrequent 3 Hz spike-and-slow-wave complexes (SWCs). Video telemetry for 3 days clearly showed 3 Hz SWCs with a duration of between 200 and 3500 msec and an average frequency of about 8 per hour and a peak frequency of 18 per hour without clinical seizure correlates. Assuming

that the EEG findings might play a role in the genesis of schizopreniform syndrome, medication was changed to valproate monotherapy. This resulted in full clinical and cognitive remission and considerable improvement of the EEG within a few weeks. Subsequently, the patient's school grades returned to top levels.

The clinical relevance of such an EEG finding in a patient with schizophrenia is still an unresolved question.⁶ In spite of an intensive historical discussion of this issue, to our knowledge this is the first description of a clinical case of schizophrenia with generalized 3 Hz SWCs and excellent clinical response to valproate monotherapy. In our view, this case illustrates three clinically important points: (1) it is worthwhile doing EEG studies in patients with schizophrenia; (2) non-ictal SWCs might play a pathogenetic role in a small subgroup of patients with schizophrenia; and (3) in clear-cut cases of SWCs in patients with schizophrenia but without clinical seizures, a therapeutic trial with anticonvulsant medication might be warranted.

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doi: 10.1192/bjp.199.3.253a