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Author's reply: Dr Daly argues that the link between child sexual abuse and adult psychosis may be the result of confounding by psychotic symptoms in childhood or adolescence. He adduces evidence for this from his secondary analysis of data from the 1970 British Birth Cohort sample.¹ Of the female sample, 1.6% indicated that they had been forced to have sex by the age of 16, and this was associated with an elevated risk of visual and auditory hallucinations at age 29 (OR=8.5). However, after controlling for the experience of such quasi-psychotic symptoms before the age of 16, the odds ratio fell to a non-significant 2.4. Daly interprets this as indicating that this relationship exists because children with quasi-psychotic symptoms are more at risk of abuse and also at greater risk of developing psychosis as adults.

Nevertheless, Dr Daly's conclusion must equally be tentative. First, the British Birth Cohort sample apparently does not provide temporal discrimination between the occurrence of sexual abuse and the development of quasi-psychotic symptoms. Second, given that this is so, the diminution of the odds ratio after controlling for quasi-psychotic symptoms in adolescence could indicate mediation. In other words, the sexual abuse leads to adolescent symptoms which are then associated with adult symptoms. I find this explanation more plausible than the suggestion that psychotic symptoms themselves have a major effect in increasing vulnerability to abuse. There is some evidence that psychotic symptoms in adolescence are associated with prior abuse.²

It would be good to resolve this argument with appropriate data from a cohort study. However, this might not be possible: there are considerable ethical difficulties in contemporaneous enquiry about sexual abuse in child and adolescent epidemiological samples. Current research has provided some indication that the psychological consequences of abuse show similarities to psychological antecedent and maintaining factors in psychosis,^{3,4} and this does add plausibility to the aetiological role of sexual abuse. The particular association of early trauma with psychotic disorders (schizophreniform or bipolar) characterised by hallucinations is also difficult to explain in terms of confounding.^{5,6}

The final worry about Dr Daly's argument is that it may detract attention from therapeutic engagement with the consequences of sexual abuse and other trauma in people with psychosis.

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Revascularisation in patients with mental illness

Mitchell *et al* must be congratulated on their systematic review of myocardial revascularisation in patients with mental illness.¹ As physicians performing revascularisation procedures, we were disappointed by the inferior treatment received by patients with mental health problems. Fortunately, these patients account for only a minority of those presenting to acute cardiology services with symptoms and signs suggestive of acute coronary syndrome. However, when they do attend, they present cardiologists with a number of challenges, which ultimately can influence the decision regarding treatment.

Revascularisation remains an important treatment for those patients with myocardial necrosis, providing both symptomatic and prognostic benefit.² Importantly, however, it can only be performed following invasive coronary angiography – a procedure which carries a risk of vascular complication, myocardial infarction, stroke or even death of 0.2–1.0%. Clearly, patients must give appropriate consent before coronary angiography is undertaken, and this can represent an important hurdle when treating patients with mental health problems.

A second important challenge which should be considered prior to undertaking angiography, and must be considered prior to performing definitive revascularisation, is the issue of adherence to medication. Frequently, revascularisation can be performed percutaneously at the time of angiography. This procedure usually necessitates the implanting of coronary stents, which are small permanent metal scaffolds that help maintain coronary vessel patency. There are many advantages to using these devices; however, in recent times stent thrombosis has emerged as the most serious and worrying complication of their use.³ This condition is fortunately rare, but it remains a devastating, unpredictable event that has a significant morbidity and mortality; up to a third of patients will die. Research has identified that early or premature discontinuation of dual antiplatelet therapy is one of the most important risk factors in stent thrombosis.⁴ Consequently, cardiologists are reluctant to implant stents in patients who they feel are unlikely to comply with dual antiplatelet therapy. Unfortunately, patients with mental illness have been shown to be less adherent to medication,⁵ a factor which certainly has as an influence on revascularisation decisions.

These issues represent important challenges (and not excuses), which must be overcome to allow our patients to receive the most appropriate treatment. The differences in treatment certainly deserve to be highlighted and as recommended by Mitchell *et al* the reasons behind them require more in depth investigation, especially within the confines of the National Health Service.

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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 antiplatelet 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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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