Diminished pain perception in schizophrenia

In their Case Report (March 6, p 864),[1] Hiroshi Murakami and colleagues describe administration of quetiapine to a patient with diabetes mellitus. I would like to ask why they did so, given that quetiapine has been contraindicated for diabetes mellitus in Japan since 2004,[2] when a death occurred due to its side-effect of exacerbating diabetes mellitus.

Additionally, Murakami and colleagues insist that the hypoalgesia of their schizophrenic patient with diabetes mellitus, who had neither abdominal pain nor guarding despite severe bacterial panperitonitis, was attributable to hypoperception related to schizophrenia, and that such findings were unlikely to have resulted from diabetic neuropathy because there were no signs of obvious peripheral neuropathy. However, impaired pain perception cannot explain the lack of abdominal guarding, which is a type of visceral–somatic spinal reflex. Because perception is an executive function controlled in the cerebral cortex, no matter how much pain perception is affected, the spinal reflex ought to be preserved. Therefore, peripheral neuropathy is more likely than hypoperception to be the explanation for both hypoalgesia and the disappearance of abdominal guarding.

Furthermore, I wonder whether Murakami and colleagues considered the possibility that inappropriate use of quetiapine exacerbated diabetic neuropathy via aggravation of diabetes mellitus? Although they saw no signs of obvious peripheral neuropathy, neuropathy can occur in parts of the body other than those examined—eg, visceral autonomic neurons—and damage to afferent visceral nerves might eliminate guarding and produce hypoalgesia.

We physicians have an obligation to provide unbiased care for patients with schizophrenia, and not attribute inexplicable physical symptoms to their psychotic disorder.

I declare that I have no conflicts of interest.

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Hiroshi Murakami and colleagues[1] raise an old, albeit controversial, issue: do patients with schizophrenia have diminished pain sensitivity? And if they do, what is the mechanism?

Some earlier researchers defied its existence,[2] and numerous hypotheses have been proposed for the phenomenon: behavioural inability to react, disorders of consciousness, analgesic effect of antipsychotic drugs, negative symptoms of schizophrenia, and disturbed psychophysiological development.[3] Some researchers argue that hypoalgesia is less a consequence of physiological derailment than a psychosocial inability to express emotion.[4]

I would like to point out one more contributor: diabetes, which is a common comorbid condition in patients with schizophrenia. An elevated threshold for pain perception is associated with diabetic neuropathy. Back to the case, could Murakami and colleagues exclude the possibility of early manifestation of diabetic neuropathy?

Future studies are recommended to consider diabetes as a confounding factor. Besides, decreased sensitivity to pain has been postulated as a screening method for vulnerability to schizophrenia.[4] Both issues might be interesting.

I declare that I have no conflicts of interest.

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Authors' reply

Exacerbation of diabetes mellitus is a possible side-effect of quetiapine, with published reports of associated diabetic ketoacidosis.[1] As noted by Futoshi Shintani, quetiapine is contraindicated in Japan for diabetic patients; unfortunately, the patient we discussed in our Case Report had been prescribed the drug by a psychiatrist before admission to our hospital. Needless to say, we discontinued this medication immediately.

On presentation the patient did not claim paraesthesia, hypaesthesia, or anaesthesia of her legs, and vibration perception on the legs with a 128-Hz tuning fork was normal at 15 s. Regarding Jie-Yu Chuang's question about an early manifestation of diabetic neuropathy, we did not do a nerve conduction study or peripheral nerve biopsies, so we did not exclude mild diabetic neuropathy as a complication of the patient's diabetes mellitus. There have been few reports of patients with diabetes mellitus and acute perforating appendicitis or pyoperitonitis without pain. Although severe bacterial panperitonitis might have induced dysfunction of visceral autonomic neurons or afferent visceral nerves, which caused loss of abdominal guarding, it is difficult to test the validity of the hypothesis in a patient who recovered completely.

The mechanism of analgesia in the diabetic patient's case we presented remains to be defined. Such an event as reported might occur in schizophrenic patients with complicated diabetes mellitus, and physicians have an

obligation to avoid delay of diagnosis and management of this rare disorder.

We declare that we have no conflicts of interest.

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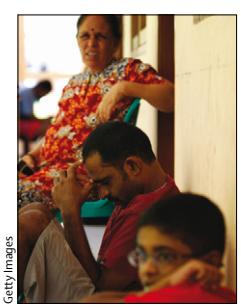
Treatment of HIV infection with drugs for HSV-2 infection



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In their Comment (March 6, p 782)[1] accompanying the study by Lingappa and colleagues,[2] Anne Buvé and Lutgarde Lynen suggest that aciclovir be given to HIV-positive individuals in resource-poor countries as part of a "care package" aimed at slowing disease progression. Indeed, the study shows a reduced risk of HIV-1 disease progression with aciclovir, but its effect is disappointingly modest at 16% over 24 months.

This reduction would have to be matched by the advantages of minimal cost, negligible side-effects, and facility of administration for treatment implementation to be justifiable. Unfortunately, aciclovir carries none of these advantages: it would require the same costly infrastructure required by potent antiretroviral therapy (ART) (clinics, training of medical personnel) and must be taken twice daily long-term, while its cost is similar to that of potent antiretroviral regimens currently used in Africa;[3] meanwhile, it is known to cause blood dyscrasias and other potentially serious side-effects.[4]

Equally importantly, the long-term effects of aciclovir on HIV resistance remain poorly defined. In particular, McMahon and colleagues[5] showed the emergence of the reverse transcriptase mutant variation V75I in 92% of in-vitro viral populations within 3 months of selective pressure of aciclovir. Genotype analyses were not available in Lingappa and colleagues' study.

Efforts to slow HIV disease progression in all populations should never cease. But why not concentrate resources on ensuring equitable access to antiretrovirals for all those in whom treatment is indicated, since potent ART is by far the best studied and most efficient approach to reducing HIV-related morbidity, mortality, and transmission?

We declare that we have no conflicts of interest.

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Authors' reply

We do not think there is disagreement between our point of view, as expressed in the Comment, and the one expressed by Angela Huttner and Alexandra Calmy. We agree that suppressive therapy with aciclovir cannot (yet) be recommended as a strategy to slow down disease progression in HIV-infected patients in low-resource settings. We expressed a lot of caution, as did Lingappa and co-workers,[1] and we suggested that cost-effectiveness studies be done.

The effect of suppressive therapy with aciclovir is indeed modest and implementation of a strategy of continuous treatment with aciclovir might be too costly and too difficult in relation to the expected benefits. Huttner and Calmy give a few reasons why suppressive therapy with aciclovir might not be cost effective, but a more systematic analysis of benefits, costs, and feasibility is needed.

We declare that we have no conflicts of interest.

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Mental health in Sri Lanka

In her World Report (March 13, p 880),[1] Nayannah Siva highlights some deficiencies in mental health care in Sri Lanka, but ignores the tremendous scaling up of mental health services over the past few years.

Sri Lanka has a free national health service but the main reason for the inadequate mental health care was the shortage of mental health specialists. The State trains adequate numbers of psychiatrists (88 in 2002–09) but many have migrated to high-income countries. Without a critical mass of advocates, scaling up services becomes a difficult task. However, the dedication of psychiatrists remaining in the country has achieved much. The Mental Health Act of 1873 has been redrafted and a National Mental Health Policy adopted. A National Mental Health Survey has been completed and data for prevalence of most common mental disorders are available.

Psychiatrists' numbers have increased and currently 22 of the 25 administrative districts have a psychiatrist providing care. To cope with the shortage of psychiatrists, a 1-year diploma course was started in 2008 and those who qualified have been appointed to rural