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Author's reply

Sir—Amantadine doses of 100 mg daily are well tolerated in young adults, but 200-mg doses are frequently associated with adverse effects in the central nervous system. Furthermore, amantadine chemoprophylaxis with 100 mg daily is associated with frequent adverse events, including falls, in older nursing home residents.

In a retrospective cohort study, sequential dosing with 100 mg daily doses of amantadine (adjusted for renal insufficiency) was compared with rimantadine given for 24 or 28 days. Residents in nursing homes who received amantadine had around ten times higher rates of adverse events, including confusion and hallucinosis, and stopped medication early more frequently than when receiving rimantadine.¹

In studies of amantadine chemoprophylaxis with 200 mg daily during pandemic influenza, levels of protection against illness range from 30–100%, with an average of 60–70%.² These levels of protection are lower than those seen for disease occurring between pandemics. Although in one pandemic study, protection with 100 mg daily led to 49% reduction in illness compared with placebo, whether this dose would provide adequate prophylactic or therapeutic activity during pandemic influenza remains uncertain.

The neuraminidase inhibitors zanamivir and oseltamivir inhibit in vitro the H5N1 and H9N2 isolates from human beings, and all nine neuraminidase subtypes represented in avian species that might contribute to a potential pandemic strain. They are also active in animal H5N1 and H9N2 viruses.³ By contrast, the detection of de novo amantadine resistance in swine influenza A isolates, including those transmitted to human beings, and in a

small proportion of community isolates (in the absence of significant selective drug pressure) raises concern about the potential for resistance in a pandemic strain. Furthermore, up to 30% of treated people shed amantadine-resistant variants, the transmission of which cause infection and failure of chemoprophylaxis under close-contact conditions, such as in households and institutions. During the 1968 pandemic, in a family-based study of amantadine, in which treatment of ill index cases was combined with postexposure prophylaxis in contacts, illness was not reduced among contacts compared with placebo (6% efficacy compared to placebo).⁴

Amantadine chemoprophylaxis can prevent influenza A illness and by inference influenza-related sequelae. Several retrospective studies suggest that early amantadine treatment might lessen complication risk in selected populations. However, no data from prospective, randomised, controlled studies have yet established that amantadine treatment of acute influenza reduces the risk of complications, antibiotic use, or admission to hospital after influenza infection. By contrast, early treatment with neuraminidase inhibitors reduces the likelihood of lower-respiratory complications leading to antibiotic use.⁵

In the event of a pandemic, adequate availability of anti-influenza drugs could be assured only through stockpiling between pandemics. The choice of amantadine would be preferable to no drug. However, because of its narrower toxic-to-therapeutic ratio, requirement for individual dose adjustments, potential for resistance transmission, and uncertain effectiveness in reducing complications when used for treatment, it would be a less desirable choice for wide-scale pandemic use than alternative agents.²

F Hayden has been an investigator and paid consultant for Roche, GlaxoSmithKline, and other companies involved in development of investigational anti-influenza drugs (eg, R W Johnson, Biocryst, Abbot).

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Lap burn due to laptop computer

Sir—The following story should be taken as a serious warning against use of a laptop computer in a literal sense. The patient, a previously healthy 50-year-old scientist and the father of two children, had been writing a report one evening in his home. Sitting comfortable in an armchair, he had placed his laptop computer on his lap while writing for about 1 h. The next day he noticed irritation and oedema of his penile prepuce. Furthermore, the ventral part of his scrotal skin had turned red, and there was a blister with a diameter of about 2 cm. These findings were verified when I saw the patient 1 day later. There were no signs of phimosis or balanitis. The patient recalled that, while sitting 2 days earlier with his computer on his lap, he occasionally had felt heat and a burning feeling on his lap and proximal thigh, a sensation that was relieved at least temporarily when the computer was moved slightly.

After the first 2 days, the penile and scrotal blisters broke and developed into infected wounds that caused extensive suppuration. More than a week later, the wounds were covered by dry crusts and thereafter were healing quite rapidly. No antibiotic treatment was needed.

When retrospectively checking the manual of the computer, the following safety instructions were found: "Do not allow your portable computer to operate with the base resting directly on exposed skin. With extended operation, heat can potentially build up in the base. Allowing sustained contact with the skin could cause discomfort or, eventually, a burn." In the present case, however, the patient had lap burns although being dressed in trousers and underpants.

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