CORRESPONDENCE

TIAPRIDE-INDUCED TORSADE DE POINTES

To the Editor:

Tiapride, an atypical neuroleptic agent, is a selective dopamine D2-receptor antagonist used for the treatment of agitation, aggressiveness, anxiety, and sleep disorders in elderly patients (1). We report a case of torsade de pointes, which has been associated with other neuroleptic agents (2–4), that occurred after the administration of tiapride to an elderly patient with agitation.

A 76-year-old man with atrial fibrillation was admitted for bronchitis and mild congestive heart failure. An electrocardiogram on admission showed atrial fibrillation at 47 beats per minute and a QTc interval of 440 msec. Treatment with intravenous frusemide and ceftriaxone was initiated. On day 3, oral tiapride (300 mg per day) was added for the treatment of agitation. On day 4, an electrocardiogram revealed a QTc interval of 600 msec. The 24-hour Holter recordings showed polymorphic ventricular tachycardia and QTc-interval prolongation. Thyroid hormone and serum electrolyte levels, including levels of potassium, magnesium, and calcium, were within normal ranges. After treatment with tiapride was discontinued, the QTc interval returned to normal (440 msec at a heart rate of 47 beats per minute) within 4 days. No other medication changes were made. One week later, results of a second 24-hour Holter monitor were normal.

In this patient, there was a strong temporal relation between tiapride administration and the development of QT prolongation and torsades de pointes. The patient had organic heart disease, which may have increased his propensity to develop torsade de pointes. No other cause, such as electrolyte imbalance, could be identified.

Acquired QT prolongation is caused primarily by drugs, and the list of noncardiac drugs, including antibiotics, antimonial, and antifungal agents, prokinetic drugs, second-generation antihistamines, tricyclic antidepressants, and neuroleptic agents, continues to expand (5). Our case report suggests that tiapride administration may prolong the QT interval in patients with predisposing factors, such as atrial fibrillation and heart failure, and precipitate torsade de pointes. Tiapride is well tolerated at the doses recommended for elderly patients, but because of the potential risk of QTc-interval prolongation in patients with heart disease, medical supervision may be required.

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HEARING LOSS DUE TO ACUTE LEUKEMIA

To the Editor:

Ear involvement has rarely been described in patients with acute or chronic leukemia (1). Otologic symptoms are usually related to bleeding, tumoral infiltration, or infection. We report 2 patients in whom hearing loss led to a diagnosis of acute leukemia.

A 31-year-old man was admitted with a 1-month history of severe left external otitis. Laboratory examination revealed a leukocyte count of 5.3×10^9/L with 28% blasts, 37×10^9/L platelets, and a hemoglobin level of 91 g/L. Examination of the bone marrow established a diagnosis of acute myeloid leukemia (type 2 FAB). The patient underwent chemotherapy, followed by autologous bone marrow transplantation. A complete hematologic remission was obtained and the otitis resolved. Eight months later, left external otitis recurred, and a blood count confirmed a relapse of leukemia. Salvage chemotherapy led to partial remission and resolution of the otitis. One month later, the patient presented with external otitis, hearing loss, and uncompleted left facial palsy. Computed tomographic (CT) scans and magnetic resonance imaging (MR) images of the left temporal bone showed diffuse inflammatory content in the tympanic cavity and adjacent air cells, without destruction of the ossicles and labyrinth (Figure 1). Surgical exploration revealed a left middle-ear chloroma. Palliative external irradiation (30 Gy) achieved local control, and oral chemotherapy was administered, with supportive care. The patient died 3 months later of disseminated invasive aspergillosis.

A 55-year-old man experienced sudden left sensorineural hearing loss followed by progressive right conductive hearing loss during the next 2 months. He was diagnosed with otitis media, but therapy with oral antibiotics was ineffective. He was then admitted due to the onset of trigeminal neuralgia. Examination revealed bilateral otitis media with a thickened ear drum. The skin of the external auditory canal was thickened as well. Right myringotomy showed a bloody effusion of which the culture was sterile. A CT scan showed that the mid-

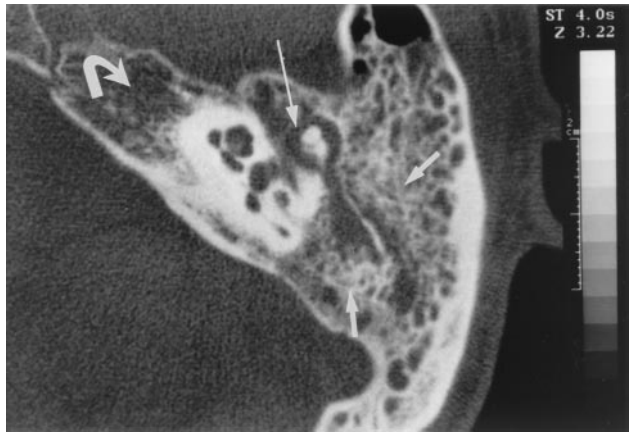

Figure. Horizontal computerized tomographic scan through the attic, with diffuse inflammation in the tympanic cavity (**long arrow**) and the squamous bone (**short arrows**). Note the slight modification of the bony pattern of the apex (**curved arrow**).

dle-ear cavities and skin were filled with soft tissue, and there was erosion of the cortical bone of the apex. A blood count showed 3.5×10^9/L leukocytes with 82% myeloblasts. Bone marrow examination confirmed acute myeloid leukemia (type 1 FAB). Cerebrospinal fluid was positive for blast cells. The patient underwent combination chemotherapy with idarubicin and cytosine arabinoside, along with intrathecal chemotherapy. Complete remission was obtained, and his hearing returned. Control MRI was performed with no evidence of tumor burden. The patient received two cycles of consolidation chemotherapy and 18-Gy of cranial radiation; complete remission persisted 6 months after diagnosis.

Several cases of leukemic infiltration of the ear have been described in patients with chronic or acute myeloblastic or lymphoblastic leukemia (1,2). Involvement of the cochlea and vestibule have also been reported (2,3). Free-floating cells are found in the perilymphatic spaces of the inner ear with or without hemorrhage (3). Hyperleukocytosis or acute myeloid leukemia subtypes 4 and 5 predispose patients to develop chloromas, which may occur in the ear, sometimes overlying the VIIth or VIIIth nerve, and lead to facial palsy and hearing loss, as in our patients (2,4). Chloromas sometimes precede the onset or relapse of leukemia by a few months (5,6). Because of the possibility of infection (eg, herpes zoster), examination of biopsy specimens is important for the diagnosis but may be difficult (especially in the middle ear) because of thrombocytopenia or an acquired coagulopathy (6,7). However, CT scans and MR images are likely to discriminate between infection and tumor involvement of the middle and inner ear. In our patients, treatment quickly led to resolution of the otologic manifestations and complete hematologic remission.

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HUMAN IMMUNODEFICIENCY VIRUS-ASSOCIATED POLYMYOSITIS DURING IMMUNE RESTORATION WITH COMBINATION ANTIRETROVIRAL THERAPY

To the Editor:

A 24-year-old asymptomatic woman was referred in June 1997 after testing positive for the human immunodeficiency virus type 1 (HIV-1). Her CD4+ T-cell count was 10/μL, and her plasma level of HIV RNA was 143,900/mL. Therapy with trimethoprim-sulfamethoxazole was initiated in combination with zidovudine (250 mg twice daily), lamivudine (150 mg twice daily), and indinavir (800 mg three times per day). Tests for syphilis, hepatitis B and C viruses, toxoplasmosis, cytomegalovirus (viremia), and human T-cell lymphoma virus 1/2 were negative. There was no cytomegalovirus retinitis.

After initiation of combination antiretroviral therapy, there was a prompt increase in her CD4+ T-cell count to above 100/μL. Memory CD4+ T cells (CD45RA-) contributed to the initial increase. After 6 months, the number of CD45RA+ 62L-selectin+ cells (true naive cells) increased substantially. The initial defective CD4+ T-cell prolifera-