Syncope in a Patient With Cervical Tumor and Prolonged QT Interval

To the Editor:

Long QT syndromes can be congenital or acquired. Acquired cases have been described in association with severe bradycardia, hypokalemia, and with the use of antiarrhythmic drugs of class IA, IC, and III; antihistaminic agents; cisapride; and pentamidine, among others. A proposed pathogenic mechanism for this syndrome is a disproportionate activity of the left cervical sympathetic ganglions. In fact, pharmacologic blockade of the left stellate ganglion has been successfully used in patients not responding to β-blockers. Moreover, prolongation of the QT interval has been noted in various studies of patients with extensive surgical neck dissection or thoracic surgery. In these cases, no association with ventricular malignant arrhythmias has been described.

We report a case of a 79-year-old man admitted to our hospital in October 1998 because of a sudden loss of consciousness with splinter relaxation, while cycling, and no other accompanying symptoms. The patient had been a heavy smoker (60 cigarettes per day) until 3 years before. He was taking no medication. He had felt healthy until 2 months before admission, when he noticed a painless nodule in the right area of the tongue base and a progressively enlarging mass in the right submandibular and cervical area, with dysphagia for solid food and weight loss (6 kg).

Physical examination was unremarkable except for the cervical mass affecting the right area of the tongue base and a progressively enlarging mass in the right submandibular and cervical area, with dysphagia for solid food and weight loss (6 kg).

The ECG was normal. The patient died due to bronchopneumonia in January 2000. In summary, our patient presented syncope with a long QT interval and torsade de pointes ventricular tachycardia, and a squamous carcinoma of the tongue, infiltrating adjacent neck structures and affecting the right lateral cervical sympathetic ganglia.

We are not aware of reported cases of sympathetic cervical ganglion infiltration by a tumor with long QT interval and ventricular arrhythmias. In our patient, the tumor affected the area surrounding the right jugular vein and probably some of the right sympathetic cervical ganglia. This could have caused a disbalanced sympathetic enervation of the heart, the exact opposite effect of left sympathectomy, thereby originating prolongation of the QT interval. Treatment with IV magnesium during ventricular tachycardia episodes has proved effective, although there are no reported references of chronic treatment with oral magnesium. Our patient was treated with oral magnesium until radiotherapy was finished, with disappearance of the tumoral mass affecting the right cervical sympathetic ganglia. The QT interval was normal thereafter, and there was no occurrence of arrhythmias and syncope during this period.

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REFERENCES

1 Hoepp HW, Eggeling T, Hombach V. Pharmacologic blockade of the left stellate ganglion using a drug-reservoir-pump system. Chest 1990; 97:250–251

Reality-Based Medicine—the Response

To the Editor:

I would like to thank Dr. Chapman for his excellent editorial in CHEST (August 2000), concerning the often underestimated and incorrectly addressed problem of noncompliance or nonadherence to treatment prescriptions in chronic disorders (eg, metered-dose inhaler [MDI] dumping by asthmatics before scheduled visits).

In asthma (and COPD), this problem may even be worse, because most (though not all) patients typically seem to prefer
pills over puffs. Furthermore, a major issue in the nonadherence of patients to MDI prescriptions, apart from a “primary” dumping phenomenon, may be the inability to use the MDIs correctly, which in turn may lead to a misconceived “ineffectiveness” of the devices, and then to “secondary” dumping.

I tallied 50 consecutive asthmatics referred for “difficult asthma,” ie, patients who were prescribed the “correct” inhaler drugs, but in whom treatment was unsuccessful (unpublished data, 1998). When the patients were asked the simple question, “Show me how you use your device,” the result was that 80% of patients used their MDIs incorrectly (this was only sporadically observed with use of dry powder inhalers). My first and only action was a demonstration of correct MDI use. At a control visit 2 weeks later, 80% of this group had significant or complete resolution of asthma symptoms, normalization *cavum quo*, or improvement in lung function. In the other 20%, sinusitis, reflux disease, or Churg-Strauss syndrome were eventually diagnosed, although in a substantial number of patients no specific cause for nonresponsiveness to therapy was found.

This means that in about two thirds of asthmatics who are not responding to MDI therapy, in daily clinical practice, correct instruction of patients (which should have been done when MDI therapy was first prescribed) may suffice to obtain correct disease control! My personal “reality-based” conclusion of this little study is simple: patients do NOT leave my consultation room unless they have proven to be able to use their device correctly. Although this does not guarantee that they will adhere to the prescribed regimen, it certainly will eliminate a lot of expensive and useless supplementary diagnostic and therapeutic interventions.

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Erratum

In the March 2000 issue, the article “Sleep in Critically Ill Patients Requiring Mechanical Ventilation” (CHEST 2000; 117:809–818), by Cooper et al., contained two errors. On page 814, the ninth sentence of the second paragraph should read: “The median dose of midazolam in these patients was 165 mg/24 h, which corresponds to a lorazepam dose of approximately 10 μg kg⁻¹ h⁻¹ and is comparable to the mean lorazepam dose (9.1±18.2 μg kg⁻¹ h⁻¹) in our atypical sleep group patients.”