ALCOHOL-ASSOCIATED ATRIAL FIBRILLATION: DELIRIUM TREMENS CORDIS REVISITED

I just read two interesting articles on alcohol-associated atrial fibrillation.[1,2] That alcohol drinking causes atrial fibrillation has been known for nearly half of a century. In 1973 I wrote a letter to the editor that was published in the New England Journal of Medicine,[3] in which I coined the term "delirium tremens cordis" or delirium tremens of the heart.

Delirium tremens cordis is a syndrome that is familiar to most of the house staff trained in any city hospital. It is seen in patients admitted either in delirium tremens or impending delirium tremens. Although the ventricular response is rapid, the patient is neither aware of the arrhythmia nor disturbed by it. Occasionally, it may be misdiagnosed as ventricular tachycardia in the presence of aberrant ventricular conduction on the ECG.

I remember that when I was a medical resident at Cook County Hospital in Chicago, the ward was supervised by two residents. The other resident treated his patients having delirium tremens cordis with all sorts of antiarrhythmic drugs, and I prescribed nothing other than the conventional treatment for delirium tremens. We usually ended with the same therapeutic result, namely, return of normal sinus rhythm at the end of 48 to 96 hours.

The exact mechanism of delirium tremens cordis is not entirely clear. It is either due to an outpouring of catecholamines or secondary to metabolic disturbances, although a direct toxic reaction to alcohol cannot be excluded. It may be the result of an acid-base imbalance, because respiratory alkalosis due to hyperventilation and metabolic acidosis due to dehydration are common occurrences in alcoholic patients with delirium tremens.

The natural tendency for an inexperienced house staff confronted with such a patient is to treat aggressively with all sorts of antiarrhythmic agents and measures including cardioversion. Even heparin has been given because of a mistaken diagnosis of acute pulmonary embolism, particularly in patients who were hyperpneic and might have a Q_3S_1 pattern on ECG owing to ascites secondary to alcoholic cirrhosis. It is most important for the house staff, especially those working in a university medical center where patients with delirium tremens are less frequently seen, to be aware of this entity. The best treatment is to take care of the delirium tremens, and delirium tremens cordis will take care of itself.

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