LETTERS TO THE EDITOR

To the Editor—Swallowing-induced atrial tachycardia arising from superior vena cava: significant involvement of parasympathetic nerve activity



We read with great interest the case report of swallowing-induced atrial tachycardia (AT) by Higuchi et al. The arrhythmia was refractory to pharmacologic treatment; however, the drugs used were not specified. Subsequently, an electrophysiological study was performed and the swallowing-induced focal trigger was localized in the superior vena cava and was successfully ablated.

We would like to share our case of a 71-year-old man with 1-month history of swallowing-induced syncope. Short bursts of presyncope inducing AT during swallowing were recorded at lunch time. We found no pathology on echocardiography, stress testing, or upper gastrointestinal barium swallow study. Drug treatment with beta blockers was ineffective. Because the mechanism of swallowing-induced syncope was presumed to be vagally mediated, we attempted treating the patient with disopyramide owing to its vagolytic properties, as was already decribed in the literature [2]. After 2 days of therapy with slow-release disopyramide 250 mg twice a day, the patient reported complete abolition of symptoms. To confirm the causal effect, the drug was discontinued and the symptoms recurred almost immediately. Three months after hospital discharge we contacted the patient and found out that he stopped taking the medication and did not experience any palpitations or syncope. We confirmed the complete absence of AT with 72-hour Holter monitoring.

Several case reports in the literature address effective pharmacologic therapy of swallowing-induced arrhythmias with remissions lasting even after its termination.^{2–4} Therefore, we would like to stress that in similar cases treatment should be principally focused on antiarrhythmic drugs with known vagolytic action, since spontaneous remissions are possible and catheter ablation is an invasive procedure with few, but potentially serious, complications.

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Reply to the Editor – Regarding swallowing-induced atrial tachycardia arising from superior vena cava: Significant involvement of parasympathetic nerve activity



We appreciate Drs Antolic and Zizek for giving us great comments regarding our case of swallowing-induced atrial tachycardia. With great interest, we read the case shown in the letter.² Because this arrhythmia was known to relate to autonomic nerve activity and there were case reports in which beta blockers or class Ia antiarrhythmic drugs with vagolytic properties were effective,³ we tried bisoprolol, carvedilol, and disopyramide for this patient. However, all drugs were refractory to this arrhythmia and the patient was quite symptomatic, as this arrhythmia occurred almost every time he swallowed. Therefore, according to several reports of swallowing atrial tachycardia that can be treated by catheter ablation, ^{4,5} we undertook this procedure with the patient as a curative therapy as soon as possible. The case that Drs Antolic and Zizek showed was very interesting and gave us important input regarding treatment of swallowing-induced atrial tachycardia. However, we still do not know who can be treated using antiarrhythmic drugs or how long we should use antiarrhythmic drugs. Also, the effect of antiarrhythmic drugs is not stable. Therefore, we should consider catheter ablation as soon as possible when antiarrhythmic drugs are ineffective, since the success rate of catheter ablation is very high.

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