

CASE REPORT

Chilling-Like Attacks Terminated by Slow Pathway Ablation

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Abstract: Symptoms of patients or the way of presenting complaints by the patients may be indefinite, obscure or misleading for the diagnosis of supraventricular tachycardia. The content of the history shows variability depending on the present symptoms, patient concerns and priority. Herein, an unusual case of a young woman suffering from chilling-like attacks for one and half years and treated by slow pathway ablation has been presented.

Keywords: Chilling, infection, supraventricular tachycardia, slow pathway ablation, malaria, cardiac innervation.

1. INTRODUCTION

Supraventricular tachycardia (SVT) with its paroxysmal nature is an episodic and paradoxical condition with a sudden onset and termination and constitutes a major cardiovascular health problem in terms of diagnosis, treatment and morbidity. Palpitation or sensation of rapid heart beatings, syncope, chest pain, lightheadedness, dizziness, fatigue, sweating and anxiety are the major symptoms of SVT. Occasionally, patients may have no symptoms [1-3]. Sometimes SVT may show up itself on a complex and unexpected clinical situation. Atypical presentations of various arrhythmia types and/or SVT such as burping [4], tinnitus [5], absence like seizure [6], asthma-like attacks [7] and headache [8] have been reported and reviewed recently [2, 3]. Herein, an unusual case of a young-adult woman suffering from chilling-like attacks for one and half years and treated by slow pathway ablation has been presented.

2. CASE

A 27 years old female patient was examined in our outpatient clinic with the main complaints of chilling attacks. Her attacks were said to be occurring about once a month for one and half years and accompanied by fever and sweating. Her detailed history revealed that chilling attacks were 20-30 minutes duration with a sudden onset. While she had been chilling, her body temperature had been measured to be within the normal range. She had also complaints of feeling cold, severe fatigue requiring bed rest for at least a few days. She had been prescribed antibiotic treatment several times

without any improvement. She had also been diagnosed with malaria and received anti-malarial drug treatment. She was otherwise a healthy woman without any complaints, except the attack periods. On her cardiac examination, her blood pressure and heart rates were within the normal range. Her electrocardiogram was normal. Her echocardiographic examination was also normal without any valvular pathology. Her routine biochemical and hematological parameters including erythrocyte sedimentation rate and C-reactive protein were also normal. She denied having severe palpitations but described the feeling of faintness especially during the initial periods of chilling attacks. When she was asked, she described a polyuric phase lasting a few hours after each chilling attack. Regarding the long-lasting untreated complaints, paradoxical nature of attacks followed by post-attack polyuria and fatigue, it was thought that she might have been suffering from cardiac arrhythmia or SVT. She was then admitted to the electrophysiology laboratory. On her electrophysiologic study, atrioventricular nodal reentrant tachycardia was documented, and slow pathway ablation was performed successfully. During the two years of the follow-up period, she has never experienced chilling attacks.

3. DISCUSSION

Symptoms of patients or the way of presenting complaints by the patients may be indefinite, obscure or misleading for the diagnosis. The content of the history shows variability depending on the presenting symptoms, patient concerns and priority. In our case, the way of presenting complaints might have made the clinician think of infectious disease or malaria. Repetitive attacks of chilling with obscure symptoms of feeling cold, sweating were the main reasons to give the antibiotic and anti-malarial treatment. In

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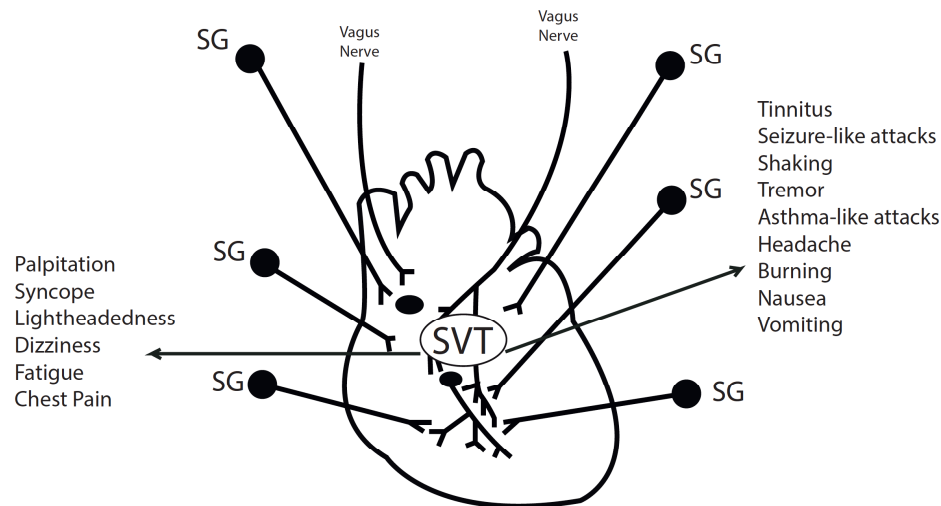


Fig. (1). Schematic illustration of cardiac innervation, common and unusual symptoms of SVT. SG: Sympathetic ganglion, SVT: Supraventricular tachycardia.

endemic areas, malaria is treated after a clinical diagnosis because of limited access to laboratory tests. Therefore, sensitivity and specificity of symptoms and signals are crucial for medical care because certain symptoms can be nonspecific and may be associated with other diseases; as a result, a patient may be misdiagnosed and receive the wrong treatment [9, 10]. However, our patients' hematological or inflammatory measures were all within normal limits.

Several crucial issues may be gathered from the clinical course of the patient. Regarding the normal laboratory parameters and unresponsiveness to the antibiotic and anti-malarial treatments, the paradoxical nature of chilling and faintness during the initial phase of attacks were the main clues which made us think of SVT. Moreover, polyuria and long-lasting fatigue and dizziness were also supportive of SVT. Post attack polyuria, fatigue and dizziness are the overlooked or ignored symptoms of SVT. Although it has never been assessed in literature, diuresis, kaliuresis, natriuresis, and subsequent hypotension are the likely underlying reasons of post-attack fatigue and dizziness [3]. The mechanism resulting in unusual or extra-cardiac symptoms in our patient remains unknown. Individual variances of perception may be taken into consideration to explain unusual symptoms. On the other hand, it can be speculated that cross-talk with cranial nerves at the cervical ganglions level or cross talk through the transmission of impulse from spinal cord to the thalamus may be the underlying mechanism of unusual sign and symptom presentations in our patient [2]. Schematic illustration of cardiac innervation, common and unusual symptoms of SVT is represented in Fig. (1).

In conclusion, considering the whole clinical spectrum of SVT during the clinical evaluation of patients and high suspicion index would help to identify the main underlying etiology especially in patients with paradoxical and unexplained symptoms.

AUTHORS' NOTE

All authors have substantial contributions to conception and design, or acquisition of data, analysis and interpretation of data; drafting the article or revising it critically for impor-

tant intellectual content; and final approval of the version to be published.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

Not applicable.

CONSENT FOR PUBLICATION

Not applicable.

STANDARD OF REPORTING

CARE guidelines and methodology were followed in this study.

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CONFLICT OF INTEREST

The authors declare no conflict of interest, financial or otherwise.

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