Transient dyspnea and left bundle branch block: a case of Munchausen Syndrome

Clinical Case Portal

Date of publication:
15 Jan 2013

Topics: Arrhythmias
        Basic Science
        Heart Failure (HF)
        Non-invasive imaging: Echocardiography, MR/CT, Nuclear

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Abstract

This case report illustrates the electrocardiographic and two-dimensional (2D) echocardiographic findings of Flecainide toxicity in a young female with Munchausen syndrome, demonstrating the appearance of a septal flash, interventricular dyssynchrony and a complete left bundle branch block, all of which resolved following drug withdrawal.

Case Report

A 39 year-old hospital nurse presented to the emergency department with a 10 day history of worsening shortness of breath (NYHA III), and intermittent palpitations. She had presented an episode of supraventricular tachycardia 17 years earlier treated with beta-blockers. Current medications included Bumetanide 4mg/day, Bisoprolol 5mg/day and Acetylsalicylic acid 80mg daily. Physical examination on admission disclosed lower limb edema. The electrocardiogram showed sinus rhythm with narrow QRS complex (Fig 1). NT-ProBNP plasma level was 525 pg/ml (N<450 pg/ml). A second electrocardiogram recorded two days after admission showed a complete left bundle branch block (Fig 1). Subsequent echocardiography demonstrated a LVEF of 60%, a septal flash (video 1), interventricular dyssynchrony as suggested by an 80ms difference in aortic and pulmonary prejection time (Normal value <40 ms), and mild mitral regurgitation (Video 2). There was no evidence of pulmonary hypertension. Pulmonary scintigraphy was negative, right heart catheterization showed normal right heart pressures and cardiac MRI was normal, besides the presence of mild mitral regurgitation.

Three days following discharge, the electrocardiogram showed no left bundle branch block, whereas echocardiography did not show inter-ventricular dyssynchrony, neither at rest nor during stress echocardiography, and mitral regurgitation was no longer present (Video 3). Septal flash also resolved (Video 4).

This unusual clinical presentation led us to order a toxicology drug screen. Plasma flecainide concentration was 773 ng/ml (normal therapeutic values: through 450-900 and peak 750-1250 ng/ml), thereby confirming our hypothesis of voluntary self intoxication.

Discussion

Our case illustrates the typical features of Flecainide toxicity, including symptoms and signs of heart failure, the appearance of a left bundle branch block, and the presence of a septal flash consistent with interventricular dyssynchrony. Transient mitral regurgitation most probably resulted from dyssynchrony. Munchausen syndrome, as described by Asher(1) is characterized by intentionally fabricated self-induced or exaggerated forms of many medical presentations with the aim of receiving medical care. This leads to many hospital admissions, numerous investigations and sometimes several surgical procedures. Medical staff quickly become frustrated by their interpersonal styles, by deception and manipulation, and by multiple unrevealing diagnostic procedures. These difficulties can lead to poor outcomes for patients and staff alike (2)

Flecainide is a class Ic antiarrhythmic agent used mainly for treatment of supraventricular arrhythmias due to reentry and is highly effective in suppressing frequent premature ventricular depolarization. Its cardiotoxicity is mainly due to its sodium channels blocking effects. Blocking the sodium channels result in slowing of conduction with enlarged QRS and intraventricular conduction delay (3).

Conclusion
There is no previous case report in the literature demonstrating the reversible echocardiographic features of flecainide toxicity with the appearance of a septal flash consistent with interventricular dyssynchrony associated with a new left bundle branch block, and mitral regurgitation. All these features resolved following the withdrawal of the culprit agent in our Munchausen’s syndrome patient.

References


Fig. 1:
ECG in sinus rhythm with narrow QRS complexes (upper panel) and left bundle branch block (lower panel)

Video 1:
Septal flash

Video 2:
Mild mitral regurgitation

Video 3:
Resolution of both the septal flash and Mitral regurgitation
Video 4:
Resolution of the septal flash