Letter to the Editor

Lippi-Induced Cardiomyopathy

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Koulouris et al, in their review of Takotsubo cardiomyopathy (2010) reported that a stressful psychological or physical event seemed to trigger myocardial dysfunction in about two thirds of cases.[1] They cited such acute psychological precipitants as unexpected loss of relatives, confrontations with other people, financial loss, fear prior to medical procedures, etc. We report a case of "Lippi-induced" cardiomyopathy (although "lippi" actually means unhappiness or sorrow, rather than stress or anger), brought on by one soccer fan's severe frustration with the Italian national team coach, Marcello Lippi, during the 2010 season of World Cup soccer in South Africa.

An 82-year-old Italian woman with a history of well-controlled hypertension and mild aortic stenosis presented after the onset of severe generalized weakness, which was followed by shortness of breath and substernal chest pain. These symptoms started immediately after watching Italy lose to Slovakia in the third group-stage game of the 2010 World Cup series. She had been feeling quite well until she felt severe, unrelenting anger towards the national team coach, Marcello Lippi, after which she immediately began to feel symptoms. A 12-lead electrocardiogram demonstrated ST-segment elevation in the anterolateral leads (Figure 1). The plasma troponin level was elevated at 4.44 μg/L. The patient was admitted for emergency coronary angiography, which revealed normal coronary artery anatomy. The left ventriculogram revealed a markedly reduced ejection fraction and a classic "octopus trap" appearance of the cardiac apex with distal and apical inferior wall akinesis (Figure 2).

The patient was medically treated with an anxiolytic and an angiotensin-converting enzyme (ACE) inhibitor. Her symptoms improved within 48 hours and the patient remained asymptomatic until her 4-week follow-up appointment. An echocardiogram at her 4-week follow up showed complete resolution of her left ventricular dysfunction. The patient continues to remain asymptomatic on anxiolytic and ACE inhibitor therapy.

This disease is diagnosed in 1-2% of all patients presenting with chest pain and ST-segment elevation, more commonly in postmenopausal women without significant history of coronary heart disease.[2] A massive release of catecholamines has been implicated in the pathogenesis of stress-induced cardiomyopathy or myocardial stunning.[3]

This presentation represents the first documented case of takotsubo cardiomyopathy associated with the World Cup soccer series.

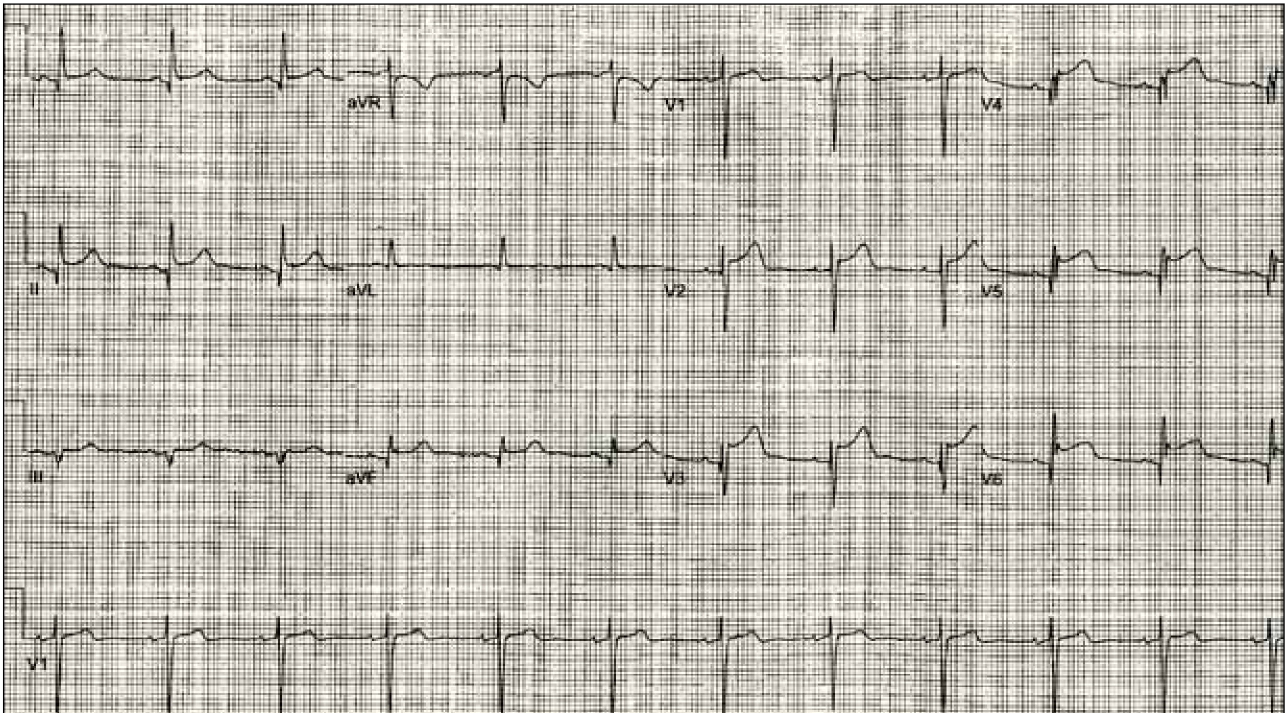

Figure 1. Electrocardiogram: ST-segment elevation in the anterolateral leads.

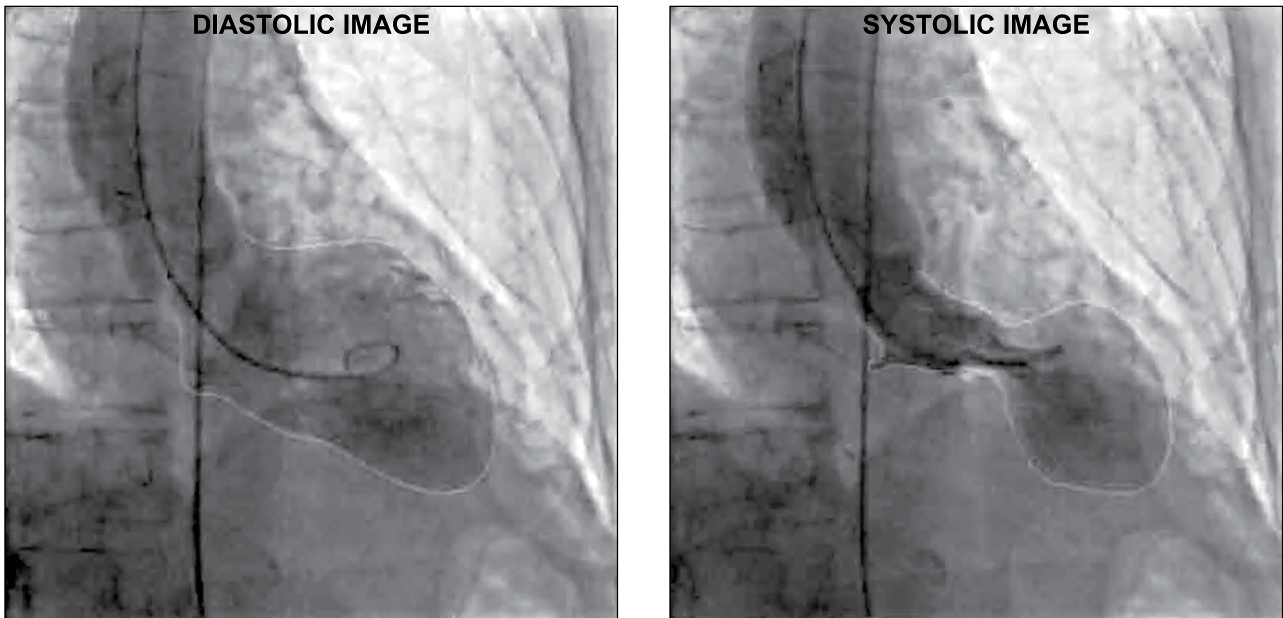

Figure 2. Left ventriculogram: classic "octopus trap" appearance of the cardiac apex.

References

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