Ventricular tachycardia storm as predominant cardiac manifestation of lupus myocarditis

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ABSTRACT

Introduction: Systemic lupus erythematosus (SLE) is a multi-system autoimmune disease that can affect any part of the heart, causing arrhythmias on top of other cardiac manifestations. Malignant ventricular tachyarrhythmias are rare manifestations of SLE. **Case Description:** Our case is the first case reported in the literature of an SLE patient with multi-organ involvement who subsequently presented with ventricular tachycardia (VT) storm as a cardiac manifestation. The intractable VT storm was successfully treated with Stellate ganglion block while waiting for immunosuppressive drugs to take effect when chemical cardioversion and a total of twenty-six electrical cardioversions failed. The patient experienced critical illness myopathy after the initial acute presentation, but later fully recovered to baseline functional status after months of intensive rehabilitation. Cardiac MRI done three months after treatment showed no sign of myocardial inflammation or scarring, thus an ICD implant for secondary prevention was not indicated. **Discussion**: Anti-arrhythmic drugs are useful in the initial treatment of VT storm. Deep sedation and mechanical ventilation are the next steps in the management of intractable VT. Immunosuppression should be initiated to treat lupus myocarditis. While waiting for it to take effect, Stellate ganglion block can be an effective temporary measure to treat intractable VT storm when other therapies have failed. **Conclusion**: Lupus myocarditis with VT storm is a rare manifestation of SLE flare. Stellate ganglion block in treating VT storm along with timely administration of immunosuppressive drugs had resulted in good outcome for our patient.