**ELECTROCARDIOGRAPHIC BRUGADA PATTERN UNMASKED BY CORONARY VASOSPASM IN A COCAINE USER**

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*Background*: Brugada pattern on electrocardiogram (ECG) has been reported in those using cocaine and also in patients with coronary vasospasm (CV). The co-existence of all three conditions has been rarely reported.

*Case*: A 40-year old woman with history of hypertension, asthma and cocaine use presented with 3 hours of intermittent chest pain radiating to left shoulder associated with nausea. ECG on arrival showed sinus rhythm with nonspecific ST-T changes and i-STAT troponin was 0.37 ng/dL (normal <0.04). She developed recurrent chest pain and repeat ECG revealed ST-segment elevation in leads V1 and V2 (Panel A). Emergent coronary angiography showed sequential, long-segment, critical yet smooth narrowing of the dominant right coronary artery (Panel B). This was complicated by ventricular fibrillation that was successfully defibrillated using a single biphasic shock at 200J. Administration of multiple doses of intracoronary nitroglycerin (total 800 mg) resulted in resolution of CV and ST-segment elevation (Panels C-D). ECG changes were felt to be a result of unmasking of the Brugada pattern by CV triggered by cocaine use. Patient was treated with long acting calcium channel blockers and remained asymptomatic at 1 year of follow up while abstaining from cocaine.

*Conclusion:* We have previously shown ischemia-induced Brugada phenocopy in obstructive CAD. This case demonstrates Brugada ECG pattern unmasked by CV following cocaine use.

