



### Introduction

- Approximately 5000 venomous snakebites are seen in united states annually.
- Local tissue reaction, coagulopathy, nephrotoxicity, and neurotoxicity are common envenomation syndrome
- Cardiotoxicity commonly involve dysrhythmias and tachycardia
- myocardial infarction associated with venomous snakebite are reported but rare

### Case Presentation

- 49-year-old male with no pertinent past medical history (PMH) who presented as a transfer after snake bite to left hand.
- Crotalidae polyvalent immune fab (Crofab) was initiated
- Labs: Troponin was 3.363. EKG showed ST elevation in leads 2, 3 and avF (figure 1).
- Code STEMI called. Patient taken to catheterization lab. 40% stenosis in right coronary artery was seen (figure 2).

### Case Presentation

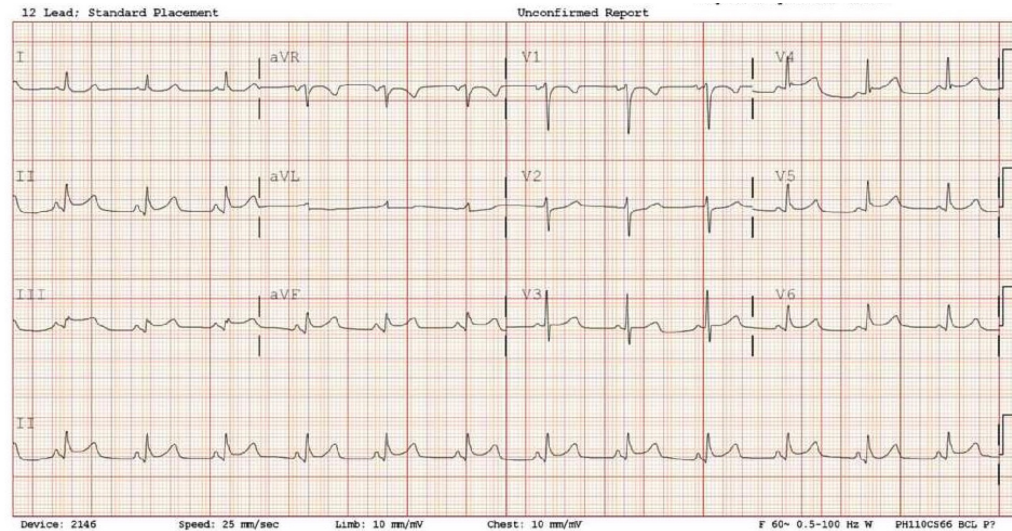


Figure 1: EKG on admission

- Cath lab results: left ventricular dysfunction with an LVEF of 20-30%, elevated filling pressures, and decreased gradient across the aortic valve.
- Patient developed acute kidney injury, compartment syndrome of left hand, pneumatosis intestinalis.
- Patient was treated appropriately. He was discharged to a rehabilitation facility after 3 months.

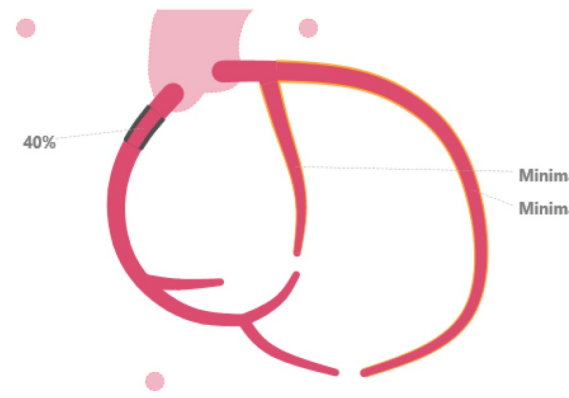


Figure 2: Admission Coronary Angiography Diagram

### Discussion

- Our case illustrates severe cardiotoxicity after snake envenomation.
- Snake venom has thrombotic, vasoconstrictive, and inflammatory properties
- Viper venom contain endopeptidases which lead to depletion of coagulation factors putting a patient in a hypercoagulable state
- Treatment is warranted toward prompt initiation of antivenom to decrease toxic complications
- Further research is warranted on STEMI following snake bite.

### References

- Kim OH, Lee JW, Kim HI, Cha KC, Kim H, Lee KH, et al. Adverse cardiovascular events after a venomous snakebite in Korea.
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- Yonsei Med J. 2016;57(2):512-7. Bashir R, Jinkins J. Cerebral infarction in a young female following snake bite. Stroke. 1985;16:328-30.