Introduction:

Snakebite crotalidae (North American Pit Viper) envenomations are characterized by an erratic and unpredictable clinical course. They should be considered medical emergencies requiring close monitoring. Manifestations of crotalidae envenomations may include local tissue injury, coagulopathy, and severe systemic effects. Snake bite victims arriving at WVU Hospital should be evaluated in the following manner:

1. Patients are assessed by the Emergency Department staff to determine if a venomous snake was involved AND if envenomation occurred.
2. The bite should be examined for fang marks, erythema and ecchymosis. The area of erythema should be accurately measured and recorded.
3. The involved extremity should be kept in a neutral or dependent position to slow progression. Restrictive clothing and jewelry should be removed.
4. Patient should be assessed using the Guidelines for Assessing the Severity of North American Pit-Viper Envenomation table on the following page.
5. For none or minimal envenomations, the patient can be observed and safely discharged. If necessary, follow-up can be arranged through the Trauma Clinic.
6. For moderate to severe envenomations the Trauma Service is consulted.

Treatment:

Treatment for venomous snakebites includes aggressive supportive care and prompt administration of antivenin to selected patients.

1. Respiratory status, vital signs, neuro checks, circumference of extremity and size of erythema/ecchymosis is documented on admission and every 15 minutes for 4 hours.
2. Initial blood work will include:
   o CBC with differential
   o Prothrombin time and activated partial thromboplastin time, international normalized ratio (INR) and Platelet Count.
   o Fibrinogen
   o Type and cross
   o Blood chemistries, including electrolytes, BUN, creatinine
   o Urinalysis for myoglobinuria
   o Bilirubin
3. Repeat CBC, Plt, and PT/INR Q6 hours