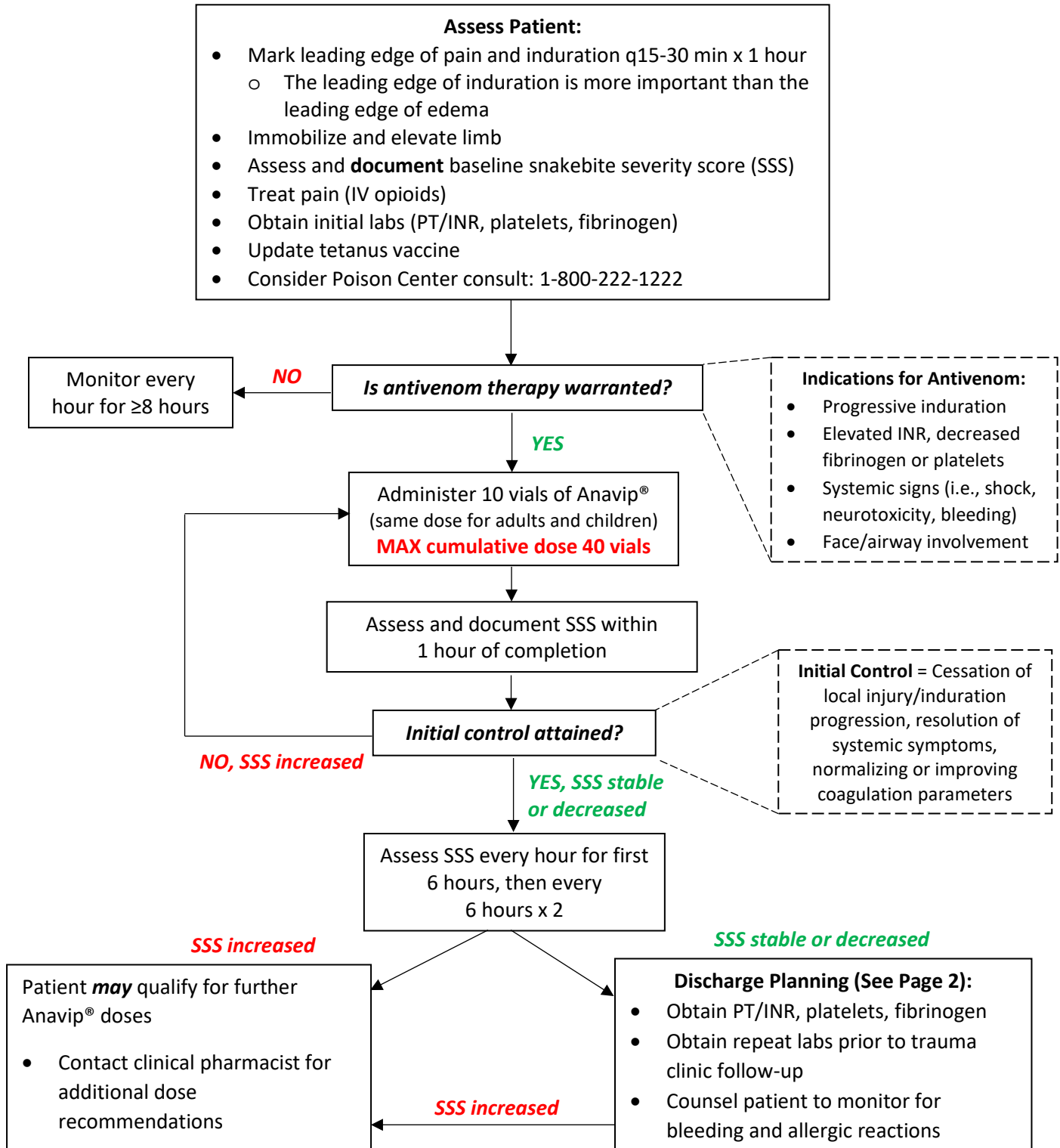


Snakebite Treatment Algorithm for Adult and Pediatric Crotalidae Envenomation

(Follow algorithm regardless of antivenom administration prior to arrival)



Allergic Reactions

- **Previous anaphylactic reaction to Crofab®**
 - Administer Anavip® according to this treatment algorithm
 - Mild reactions do not necessitate transition to Crofab®
- **Reaction to Anavip®**
 - Stop infusion
 - Give epinephrine, steroids, and antihistamines as appropriate
 - Monitor airway and vitals
 - Reassess risk versus benefit of antivenom
 - Once stabilized
 - If SSS increased, consider switching to Crofab®
 - If SSS stable or decreased, consider managing with supportive care and symptom guided Crofab®
- **Crofab® is restricted to use in patients with severe allergic reaction to Anavip® or horse protein**

Anavip® dosing and administration information

Dosing	Administration
<ul style="list-style-type: none"> • Adult and pediatric patients receive the same dose • <u>Initial dose: 10 vials</u> <ul style="list-style-type: none"> ○ May give another 10 vials IF symptom control not attained 1 hour AFTER infusion <u>completes</u> • If AFTER initial symptom control is attained, pain, induration, edema, or coagulation labs worsen, then may consider further doses • Contact a clinical pharmacist for additional recommendations • MAX cumulative dose 40 vials 	<ul style="list-style-type: none"> • Reconstitute each vial with 10 mL of normal saline (NS) from a single 250 mL NS bag • Inject the total reconstituted solution into the same bag of 250 mL NS • Infuse at 25-50 mL/hr for 10 minutes • If tolerated, infuse at 250 mL/hr until dose completion • Adjust fluid volumes for children <25 kg <ul style="list-style-type: none"> ○ Reconstitute 10 vials in 100 mL of NS ○ Infuse at 10 mL/hr for 10 minutes ○ If tolerated, infuse at 100 mL/hr until dose completion

- The Snakebite Severity Score (SSS) algorithm (Figure 1) is used to **assess progression** of envenomation signs and symptoms
 - SSS (Appendix A) does **not** determine whether or not to initiate antivenom treatment
 - A Poison Center (1-800-222-1222) consult is recommended to make the determination to treat and provide optimal envenomation management
- Discharge instructions
 - Obtain coagulation labs (i.e., PT/INR, platelets, fibrinogen) prior to discharge
 - Prior to discharge coagulation labs should be normalized or improving with no signs of active bleeding
 - Consider delaying discharge in those with critical lab values (i.e., INR >3.0, platelets <50,000 cells/mm³, fibrinogen <75 mg/dL) and/or active bleeding
 - Obtain coagulation labs prior to Trauma Clinic follow-up
 - Instruct patient to call the Trauma Clinic for signs or symptoms of allergic reaction, abnormal bleeding, or serum sickness (i.e., rash, fever, myalgia, arthralgia)
 - Patient with rattlesnake envenomation or abnormal coagulation labs should take bleeding precautions for 2 weeks (i.e., no contact sports, elective surgeries, or dental work)

References

1. Lavonas EJ, Ruha AM, Banner W, et al. Unified treatment algorithm for the management of crotaline snakebite in the United States: results of an evidence-informed consensus workshop. *BMC Emerg Med* 2011;11(2):1-15.
2. Dart RC, Hurlbut KM, Garcia R, et al. Validation of a severity score for the assessment of crotalid snakebite. *Ann Emerg Med* 1996 Mar;27(3):321-6.
3. Fowler AL, Hughes DW, Muir MT, et al. Resource utilization after snakebite severity score implementation into treatment algorithm of crotaline bite. *J Emerg Med* 2017;53(6):854-861.
4. Crofab(R) [package insert]. West Conshohocken, PA: BTG Pharmaceuticals Inc; 2017.
5. Anavip(R) [package insert]. Franklin, TN: Rare Disease Therapeutics Inc; 2015.
6. Bush SP, Ruha AM, Seifert SA, et al. Comparison of F(ab')₂ versus Fab antivenom for pit viper envenomation: a prospective, blinded, multicenter, randomized clinical trial. *Clin Toxicol* 2015;53:37-45.
7. Williams KL, Woslager M, Garland SL, et al. Use of polyvalent equine anti-viper serum to treat delayed coagulopathy due to suspected *Sistrurus miliarius streckeri* envenomation in two children. *Clin Toxicol* 2017;55(5):326-31.