Caterpillar dermatitis
Caterpillar dermatitis
Caterpillar dermatitis

Laboratory Studies

Laboratory studies are generally not required for caterpillar stings unless evidence of coagulopathy is present.

- CBC count
- Coagulation studies
- Prothrombin time (PT)
- Activated partial thromboplastin time (aPTT)
- Fibrinogen level
- Fibrin degradation products
- D-dimer assay
- Urine bedside test for blood

A chest radiograph is reasonable if the patient has significant respiratory symptoms.
Prehospital Care

- The involved skin should be immediately washed with soap and water, and dried without contacting the skin (eg, use a hair dryer).
- Local cooling measures can be applied to reduce pain. This may be enhanced by applying topical isopropyl alcohol or ammonia.
- Following ocular exposure, the eyes should be irrigated immediately with copious water.
- Following dermal exposure to irritant or toxic hairs or setae of caterpillars or moths, sticky tape (especially duct tape) can be applied to the site in an effort to remove retained setae. Alternative effective methods of removal include use of rubber cement, clear fingernail polish, or facial peels (each applied, allowed to dry, then peeled away).
- If acute symptoms follow respiratory exposure, supportive care is in order as necessary, including oxygen, antihistamines, and beta-agonist inhalers, if available.
- Anaphylaxis should be treated in standard fashion.
- Following caterpillar stings, the extremity should be splinted and elevated, and ice should be applied to reduce pain.
- Any potentially constrictive jewelry should be removed before swelling progresses.

Emergency Department Care

- Wash the skin with soap and water as mentioned above if this has not already been done in the field.
- Ensure appropriate tetanus immunization status.
- Treat skin exposure as follows:
  - Apply sticky adhesive tape (especially duct tape) to the site to remove all remaining hairs or spines possible. Other measures of removal as described previously for prehospital care can also be tried.
  - Acute dermatitis can be treated with antihistamines (H1 and/or H2 blockers), although their efficacy is controversial. Additionally, topical steroids may be employed. Systemic steroids may be necessary in patients with severe or persistent cutaneous symptoms. Application of antipruritic products containing menthol may be soothing.
  - Prostaglandin-synthetase inhibitors, such as aspirin or indomethacin, have been reported to reduce associated discomfort, but should be avoided if any evidence of coagulopathy is present.
- Treat respiratory exposure as follows:
  - Symptoms can be managed with antihistamines (H1 and/or H2 blockers) and beta agonist
Epinephrine and systemic antihistamines (eg, diphenhydramine, cimetidine), topical or systemic steroids, menthol-containing creams, and prostaglandin-synthetase inhibitors, such as aspirin and indomethacin, all may be beneficial in treating dermatitis. Rhinitis resulting from respiratory exposure may respond to antihistamines and systemic steroids. These are also useful for lower respiratory symptoms. Beta-agonist aerosols or inhalers (eg, albuterol) may be beneficial for wheezing. Analgesics may be required for caterpillar stings. The choice of agent should depend on the severity of symptoms. Mild cases may be treated adequately with oral opiates such as hydrocodone or oxycodone, while more severe pain initially may require parenteral agents such as morphine sulfate.

Stings by the South American *Lonomia* species, which can cause consumptive coagulopathy with hemorrhagic diathesis and acute renal failure, may be treated with antifibrinolytics. If blood products are required, they must be given cautiously to avoid feeding fuel to an on-going consumptive coagulopathy. An antivenom against this species has been produced in Brazil.
Caterpillar dermatitis