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# Breast Erythrodermia An Unusual Presentation Of Snakebite

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## Abstract

Snake bite (SB) is one of the emergency conditions that require immediate therapy. Although it is an old problem, its incidence is not decreasing and it is associated with significant mortality and morbidity. Advances in medicine have changed this life threatening condition to a safe outcome in majority of cases especially in early presentation. Several factors influence the outcome in these cases but the main one, as in any emergency case, is the time factor. The aim of presenting this case is its rare location; we also reviewed the literatures regarding SB. Our patient received the usual therapy of antivenom (AV), steroid, antihistamine and local therapy. She had complete resolution of the lesion after 10 weeks of the incident.

## CASE REPORT

This is a 53-years old female patient presented to Alburaihy Hospital Taiz, Yemen- December 2005 with a history of SB of few hours duration. The site of the bite was the right breast. The patient was sleeping at the time of the accident, she woke up with an agonizing pain of the bite, and she had

seen the snake, which was about 50 cm in length, and yellowish brownish coloration. The medical and surgical history was unremarkable.

On examination, she was fully conscious, oriented, tachycardia, mild hypotension; respiratory rate was 24, and temperature 37.6 C.

**Figure 1**



Chest examination revealed a small bloody discharging bite site of about 3 millimetres with a wide area of erythrodermia involving the right breast, neck, right axilla. Auscultation of the chest was normal. The patient received AV injection, hydrocortisone, antihistamine, local injection of lignocaine, incision of the bite site and local wound treatment. The patient admitted for two days and discharged home. She had an uneventful recovery and the skin lesion resolved after 10 weeks.

### DISCUSSION

Venomous and poisonous animals are important causes of global morbidity and mortality. Their impact on humans is considerable, most current data suggesting they cause in excess of 3 million bites per year with more than 150,000 deaths [1]. Patients with SB need immediate AV therapy which depends on the type of the causative species.

Better definitions of the specific clinical envenoming syndromes attributable to individual snake species are required, including elucidation of within-genus variations, similarities, and differences [2]. There are two major families of clinical significance; namely elapid and viper family and four major types:

Rattlesnake, Copperhead, Cottonmouth Water Moccasin, Coral Snake. The diagnosis is usually simple and the treatment is successful in all cases that present early.

Cases of SB may be presented to the surgeon and there is a definite surgical role in the management of these cases.

The underlying pathology of the SB is due to the toxic effect of the venom which affects the soft tissue at the bite site, the nervous system, the muscles, the renal system, blood coagulation [3] and the heart. Clinically, patients could present as fainting, convulsion, dizziness, nausea and vomiting, disturbance of the vision, muscle fatigue and respiratory embarrassment, with subsequent death if no immediate action was undertaken. Locally the picture varies from patient to patient, but the common findings are those of inflammation, in addition to the bite with bloody discharge and the possibility of seeing the snake's fangs. Skin changes also vary; They can be in the form of erythrodermia as in our case or a spectrum of inflammation and gangrene in extreme cases.

The severity of individual case depends on several factors:

1. The type and the size of the snake.
2. The bite site.
3. The time of the bite to the presentation.
4. The age of the patient (children more vulnerable to bad outcome) [4].
5. The patient's co morbidities.
6. The amount of the injected venom.

Therefore, it will be a spectrum of mild response to a rapid fatal outcome.

Diagnosis usually is easy by history, examination and exclusion of the possible causative factors. Certain blood tests and urine examination are helpful to assess the case. Vomiting, neurotoxicity and serum creatinine are significant predictors of mortality among inpatients with SB [5].

Detection kit will help in identifying the type of the venom and therefore specific treatment but it is only available in certain countries. First aid, resuscitation, and AV are the main steps in management. Application of tourniquet is not advised as it can cause further limb damage and it does not

decrease the absorption of the venom. Early AV injection will be the corner stone in the treatment as it prevents the neurotoxicity and it is a life saving measure in most cases. The AV therapy should be specified according to the causative species. There should be also, a specification for treatment within the species.

Surgical treatment might be needed in form of wound debridement fasciotomy [6], amputation of the affected fingers or toes and rarely amputation of the ischemic limb secondary to advanced untreated compartment syndrome.

Plasmapheresis is indicated in some patients [7]

Table 1: Complications of snake bites:

- Anaphylactic shock.
- Compartment syndrome.
- Gangrene of the affected organ, limb, fingers and toes.
- Coagulation defects.
- Renal shutdown.
- Neurotoxicity.
- Myocardium impairment.
- Respiratory failure.

### FOLLOW UP

1. The patient should return to the hospital if there was no improvement in his symptoms or develop serum sickness due to antivenom.
2. The patient shouldn't have elective surgery shortly after SB (risk of bleeding)

### CORRESPONDENCE TO

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### References

1. White J, Bites and stings from venomous animals: a global overview, *Ther Drug Monit.* 2000 Feb; 22(1): 65-8
2. Currie BJ, Treatment of snakebite in Australia: The current *eviToxicon.* 2006 Jul 14
3. Wasserberger J, Ordog G, Merkin TE. Southern Pacific Rattlesnake bite: A unique clinical challenge *J Emerg Med.* 2006 Oct;31(3):263-6
4. Ozay G, Bosnak M, Ece A, Davutoglu M, Dikici B, Gurkan F, Bosnak V, Haspolat K. Clinical characteristics of children with snakebite poisoning and management of complications in the pediatric intensive care unit. *Pediatr Int.* 2005 Dec;47(6):669-75.
5. Kalantri S, SINGH A, Joshi R, Malamba S, Ho C, Ezoua J, Clinical predictors of in-hospital mortality in patients with snake bite: a retrospective study from a rural hospital in central India. *Morgan MTrop Med Int Health.* 2006 Jan;11(1):22-30
6. Ertem K, Esenkaya I, Kaygusuz MA, Turan C. Our clinical experience in the treatment of snakebites *Acta Orthop Traumatol Turc.* 2005;39(1):54-8.
7. Yildirim C, Bayraktaroglu Z, Gunay N, Bozkurt S, Kose A, Yilmaz M. The use of therapeutic plasmapheresis in the treatment of poisoned and snake bite victims: An academic emergency department's experiences, *J Clin Apher.* 2006 Apr 17.

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