

A case report of scrotal gangrene from snake bite

*A. L. Babata and A. O. Faniyi

Department of Surgery, University

of Ilorin Teaching Hospital

P. M. B. 1459, Ilorin

E-mail: alibabata_2000@yahoo.com

Summary

A case of snake bite of the scrotum in a 43-year-old male Fulani farmer cum herdsman is presented. Gangrene of the scrotum developed 4 days after the bite together with an increase in size of the scrotum to about 59cm in circumference. The patient received polyvalent snake anti venom almost 10 hours after the bite.

Surgery to excise the gangrenous part, together with multiple longitudinal skin incisions of scrotum and penis were carried out. The scrotal size reduced to almost half of the morbid size within 48 hours of surgery.

Key-words: Snake bite, Scrotal gangrene

Résumé

La présentation de morsure de serpent chez un cultivateur-cum-berger Fulani âge de 43ans. La gangrene du scrotum s'est manifestée 4 jours après la morsure. Le scrotum à gonfle de 59cm à peu près en circonférence. Environ 10 heures après la morsure, le malade à reçu un polyvalent anti-venin.

L'opération chirurgicale destinée à exciser la partie gangreneuse, et plusieurs incisions longitudinales de peau au niveau du scrotum et du penis ont été faites. En moins de 48 heures de chirurgie, la proportion des scrotums s'est réduite à peu près de moitié de la proportion morbide.

Introduction

Snake bite is a common occurrence in many parts of the world including Nigeria. The bite usually occurs in the lower extremities when the patient is working on the farm and accidentally disturbs the snake or sometimes at night when the victim unknowingly steps on the snake.

There are three common varieties of African snakes.⁴ The colubridae whose effect is haemotoxic resulting in bleeding due to afibrinogenemia sequel to disseminated intravascular coagulation⁴. The Elapidae whose effect is neurotoxic resulting in motor paralysis involving cranial and spinal nerves.⁴ The Viperidae whose effect is cytotoxic producing tissue necrosis, tissue swelling and subcutaneous ecchymosis⁴.

The case

Mr AB is a 43-year-old Fulani herdsman and farmer who was seen in the Emergency Room of the University of Ilorin Teaching Hospital (UIITH) on 18/10/03, having been referred from a private clinic in town for scrotal snake bite which had occurred about 10 hours earlier. The patient was working in his farm in the early hours of the morning when while in the stooping position, he was bitten by the snake. The fang had

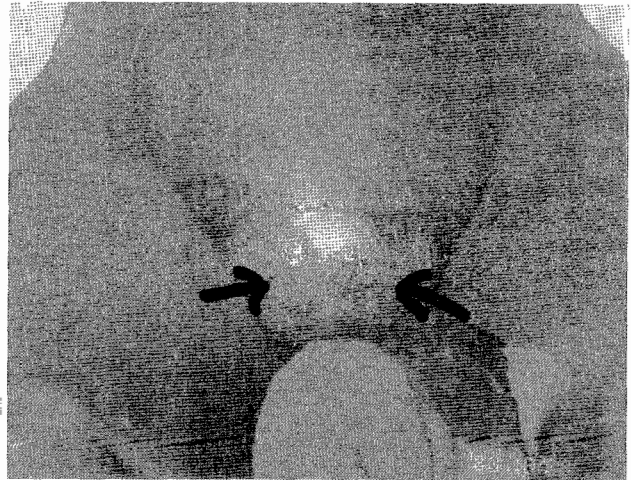


Fig. 1 Scrotal size, pre-operative appearance, gangrenous area is in the inferior aspect of the scrotum marked with dark arrows.

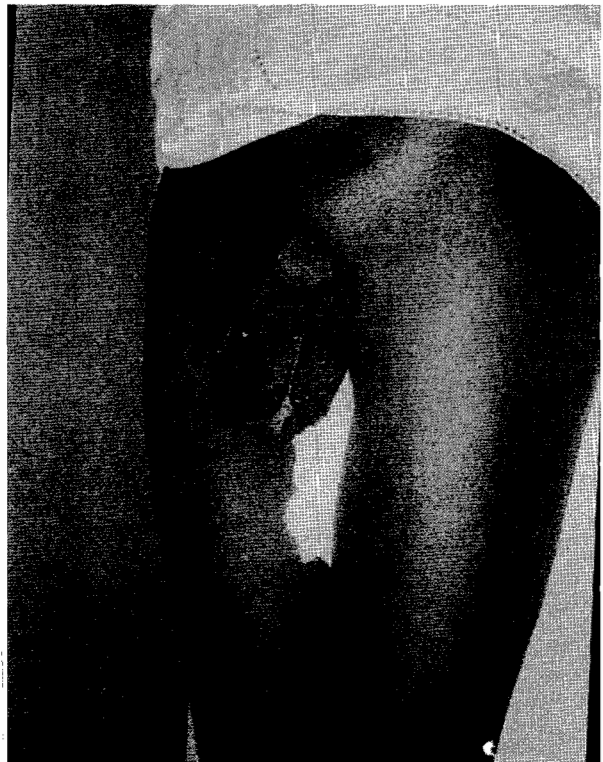


Fig. 2 Scrotal appearance 2 weeks post-op. incisional wounds healing rapidly

*Correspondence

pierced through his cotton underwear to get to the scrotum.

He had pain and progressive swelling thereafter. He was treated initially 9 hours after the incident in a private hospital with anti tetanus prophylaxis and antibiotics and then referred to the emergency section of the University of Ilorin Teaching Hospital. At the UITH, the scrotum was swollen, measuring about 21cm x 18cm. There was little ooze from the bite site on the inferior aspect of the scrotum. The penis was not swollen, and there was no evidence of systemic toxicity.

He was given 50mls polyvalent anti snake venom, 200mg intravenous hydrocortisone as a precaution against possible reaction to the polyvalent venom; caps Ampiclox 500mg 6 hourly and tab Chymoral one tab four times daily. Investigations carried out were all within normal limits.

The scrotal size was recorded daily and by the third day post admission, it had reached about 59cm size in the greatest dimension. The phallus was also getting progressively swollen, and a devitalized area in the inferior aspect of the scrotum was seen. An obvious gangrenous area about 10cm x 10cm in the most dependent aspect of the scrotum was noticed, but there was no fever. Temp. was 37.2°C. See figure 1.

Under spinal anaesthesia, the gangrenous area was excised till there was fresh bleeding. Multiple longitudinal incisions were made on the oedematous but viable scrotal skin. Two longitudinal incisions were made on the oedematous phallus. The wound was irrigated with hydrogen peroxide, and normal saline. Dressing was done with eusol. The scrotum was elevated with crepe bandage. Post-operatively, he was given cefuroxime 750mg, metronidazole 500mg and gentamycin 80mg each 8hourly for 72 hours.

The reduction in the size of the swelling was dramatic within 72 hrs of surgery. The wound continued to heal very well and patient was discharged home 3 weeks post surgery to conti-

nue wound dressing on outpatient basis.

See figure 2.

Discussion

Snake bite is common in Ilorin as in other parts of the world. The bite usually occurs on the feet, lower limbs and hands. Most of the victims are usually farmers and school children. Pochhanugool and Wilde¹ reported 2,523 cases of snake bite in Bangkok. Most occurred in the lower extremities. Suleiman and Shaha² in a review of 777 cases of snake bite in Pakistan reported that most of the cases were in the lower extremities. Cowin et al³ from the USA reviewed 73 patients with snake bite, 46 of whom had their bites in the upper extremities and 27 in the lower extremities.

This uncommon site, together with the development of scrotal gangrene makes this case unique. The dramatic improvement after surgical intervention and the considerable reduction in the size of the swelling within 72 hours of surgery as well as the improvement in the constitutional symptoms make it different from the typical course of Fournier's gangrene of the scrotum in which the patient may remain quite toxic for a much longer period.

References

1. Pochhanugool C and Wilde H. Venous bite in Thailand *Mild Med.*, 1998, 163: 318-323.
2. Suleiman M M, Shaha S and Rab M A. Snake bite in the desert *Journal Pak Medical Association* 1998; 48; 306 - 308.
3. Cowin DJ, Wright T and Cowin J A. Long term complications of snake bites to the upper extremity *Journal South Orthop. Ass.* 1998; 7: 205 - 211.
4. W W Davey. *First edition. Snake bites: Companion to Surgery in Africa.* Churchill Livingstone Edinburgh 1968, pp 127-134.