

# Preventable gangrene following overzealous treatment of limb injuries

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## Abstract

In Nigeria and indeed Africa the treatment of musculoskeletal injuries are largely handled by traditional healers and the pattern and incidence of complications are varied<sup>1,2,3</sup>. In most cases simple soft tissue contusion are overzealously treated as if there were associated fractures or dislocations. The result of such overzealous treatment is hereby reported for public awareness and possible provision of adequate health insurance scheme. This report is done to evaluate cases of limb gangrene resulting from inappropriate treatment of limb injury.

## METHOD

This is a prospective study in which patients with limb gangrene are evaluated as each presents. Data were collated as emergency treatments of the clients were instituted. Sources and types of injuries as well as type of initial treatment were noted. Photographs were taken at the time of intervention; unfortunately the final photographs could not be taken as patients abscond from hospital before final plans for rehabilitation.

## CASE REPORTS

### CASE NUMBER 1

Bilateral gangrene of the hand following primary closure and tight bandaging of open fractures.

## Figure 1

Figure 1a: Bilateral gangrene of the hands



**Figure 2**



Mr. AO, a thirty two year old farmer fell from height (palm fruits) and sustained bilateral open fracture dislocations of the wrists. He also had minor bruises over the feet and knees. He walked out of the bush by himself and presented to a nearby Health centre where the wounds were sutured and tight cotton bandages were applied to both wrists. He was advised not to remove the bandage until about four days when he presented to our hospital. On exposure of the wound the findings were as seen in Pix.1a and b. The left hand was completely gangrenous while the right was indeterminate. Eventually he had amputation of the left hand and ischaemic contracture of the right.

### **CASE NUMBER 2**

Necrosis of the thigh following herbal bandaging as treatment for post traumatic knee swelling in a young footballer

**Figure 3**

Figure 2: Extensive septic necrosis of the popliteal area



Master E.A.I was clubbed at the right popliteal area by a friend at school. This was not reported to the guardian until two day after he could not use the affected limb. From there he was taken to a traditional healer who applied firm herbal bandage. When the bandage was opened after five days, the popliteal area up to the upper thigh was gangrenous. The above picture shows the lesion after one week of debridement. He was successfully managed by dressing, antibiotics and skin grafting. There was no residual chronic osteomyelitis or ankylosis.

### **CASE NUMBER 3**

Leg gangrene, foot amputation, chronic osteomyelitis and ankylosis of the left knee following native treatment of ankle swelling in a 20 year old girl.

**Figure 4**

Figure 3: Gangrene, foot amputation, chronic osteomyelitis of the left lower limb



This twenty year old lady had spontaneous painful swelling

of the left ankle joint and foot for about one week. She was taken to a traditional bone setter whose treatment measures included:

- Herbal bandage
- Regular massaging
- Herbal drinks and
- Scarifications

Three weeks into the treatment she developed signs of gangrene of the foot which was attributed to some devilish influence and was transferred to a spiritual healing home where the sepsis progressed towards the knee while the foot fell off. She was brought to the hospital in state of septic shock, anaemia and malnutrition because the husband and relations had abandoned her being scared that she may be a 'witch' suffering for her own sins. She was appropriately resuscitated, transfused and she left the hospital healthier and happier after an above knee amputation because the knee was stiff and septic.

### DISCUSSION

All the gangrenes presented in this series could have been prevented if proper and prompt treatment were given at the appropriate healthcare level. This is yet to be fully realized in our communities. The underlining problems behind the causes of these unfortunate health situations in our society are ignorance and poverty.<sup>2,4</sup> The complete lack of social support for the citizens in addition to the poor national economy and unemployment militate against the patients seeking proper medical care on time. Even the decision to accept an amputation in life-threatening situations continues to be difficult because of superstition.<sup>5</sup> Treatments for some of these patients were sponsored by the authors and other philanthropists as some of them are penniless or had been abandoned in the hospital by the relatives. Ignorance is a major reason for increasing patronage of wrong traditional practices in our society.

To have a satisfactory result from the treatment of all musculoskeletal injuries requires that the practitioner have basic knowledge of the anatomy and function of the human body and the client should be aware of the implications of inappropriate intervention.<sup>2</sup> It is important to know that a broken bone/joint must be realigned and held in a satisfactory position to allow for both skeletal and soft tissue healing to occur.<sup>6</sup> It is rather appalling that even in this

century millions of people do not know that there are no special herb or spirit that draws and align fractures. Bone heals by the intrinsic natural property that God gave to every tissue when the favourable environment is provided.<sup>6,7</sup> Complication may occur if the affected area is continuously disturbed by pulling and massage. Overzealous use of herbs, hot balms by herbalists and primary suturing of open fractures by some doctors and quacks are harmful.<sup>6,8,9,10,11</sup> It is rather disheartening that some of these complications seen in our practice are caused by medical doctors. Training of more Orthopaedic and trauma surgeons and continuing medical education (CME) of general practitioners may be part of the solution to these problems.<sup>5,12</sup>

### SUMMARY

Practitioners and the general public should note that:

1. All swollen limbs after injuries are not necessarily fractures or dislocations
2. It is not all fractures that needs serious treatment apart from counseling
3. It is not all pain and swellings following injury that are simple, there may be an underlying life threatening ailment such as cancer, blood disease or infection
4. It is important to always seek the opinion of an expert in a recognized hospital
5. Most gangrenous limbs from traditional bonesetters are caused by over zealous treatment of post traumatic inflammation of limbs as if they were fractures (typical example is shown in case number 2 above).
6. It should be reemphasized here that to reduce a fracture does not need daily pulling and massaging with native potions.<sup>10,12</sup>

### CONCLUSION

The importance of health education, free medical services to the rural dwellers and health insurance coverage for all citizens should not be overemphasized.<sup>5,12</sup> Government and philanthropist should help in this regard. This would form part of the efforts to avert unnecessary loss of limbs and lives due to mismanagement.

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