

WEST AFRICAN JOURNAL OF MEDICINE

ERRATA



Several errors regrettably appeared in this paper:

- (a) In the English title "Grengrene" should read Gangrene
- (b) In the abstract (Results) line7 "nephritic" should read "nephrotic"
- (c) Table 1 referred to in the text was missing.
- (d) In the concluding paragraph: "The legislatory body don't deters." Should read "The legislative body does not deter"

The full correct version of the case report is reproduced as follows.

Multiple Digital Gangrene arising from Traditional Therapy: A case report

Gangrène Numérique Multiple Émanant de la Thérapie Traditionnelle : un rapport de cas

E. I. Unuigbe*†, J. Ikhidero†, A. O. Ogbemudia‡, A. Bafor‡, A. O. Isah†

ABSTRACT

BACKGROUND: Traditional medicine has being advocated as an alternative to Orthodox medicine in Nigeria despite, its reported adverse effects.

 $\label{eq:objective} OBJECTIVE: \textbf{\textit{To report an unusual complication of traditional therapy.}}$

METHODS: A 20-year-old house-wife who was bitten by a crawling insect presented to a hospital with complaints of swollen body and pain in three digits. After clinical evaluation and investigations, she had both medical and surgical intervention. RESULTS: Two weeks following an insect bite, the patient noticed periorbital and bilateral leg swellings. She sought help from a traditional medicine practitioner who incised and tied the affected digits for three days. He repeated the cycle thrice. She had generalized oedema, massive proteinuria, hypoalbuminaemia, hypercholesterolaemia features consistent with a diagnosis of nephrotic syndrome. There was gangrene of the left middle finger and both index toes. Oedema responded to diuretics, lisinopril and low salt diet. She had surgery for the gangrenous digits.

CONCLUSION: Development of gangrene is an unusual finding in nephrotic syndrome. It occurred in this case as an aftermath of traditional medical intervention. This report reiterates the danger of this form of medical practice and the need for measures to protect the populace to be put in place. WAJM 2009; 28(3): 189–191.

Keywords: Gangrene, traditional medicine; complications; nephrotic syndrome,; gangrene of digits; multiple digit.

RÉSUMÉ

CONTEXTE: la médecine traditionnelle a être recommandée comme une alternative à la médecine Orthodoxe au Nigeria en dépit, ses effets néfastes annoncés.

OBJECTIF: signaler une complication inhabituelle de thérapie traditionnelle.

Méthodes: une femme au foyer de 20 ans qui a été mordue par un insecte rampant présenté à un hôpital avec les plaintes contre le corps gonflé et la douleur dans trois chiffres. Après l'évaluation clinique et les enquêtes, elle avait l'intervention tant médicale que chirurgicale.

RÉSULTATS: Deux semaines suite à une piqûre d'insecte, le patient a remarqué periorbital et enflures de jambe bilatérales. Elle a cherché l'aide d'un praticien de médecine traditionnel qui a incisé et a attaché les chiffres affectés depuis trois jours. Il a répété le cycle trois fois. Elle avait généralisé le ædème, proteinuria massif, hypo-albuminaemia, hypercholesterolaemia les traits en harmonie avec un diagnostic de syndrome nephritic. Il y avait la gangrène du majeur gauche et des deux orteils d'index. Le ædème a répondu aux diurétiques, lisinopril et au régime de sel bas. Elle avait la chirurgie(l'opération) pour les chiffres gangreneux.

CONCLUSION: le Développement de gangrène est une conclusion inhabituelle dans le syndrome nephrotic. Il s'est produit dans ce cas-là comme des conséquences d'intervention médicale traditionnelle. Ce rapport réitère le danger de cette forme(classe) de pratique médicale et du besoin pour les mesures pour protéger le peuple pour être mis en place. WAJM 2009; 28(3): 189–191.

Mots clé: la Gangrène, la médecine traditionnelle, la complication, nephrotic le syndrome, la gangrène de chiffres, le chiffre multiple.

Departments of 'Medicine, 'Surgery, University of Benin Teaching Hospital, Benin City, Nigeria

*Correspondence: Dr Evelyn I. Unuigbe, P. O. Box 10112, Benin City, Nigeria. E-mail: evelynunuigbe@hotmail.com

INTRODUCTION

The use of herbal products has been part of the healing traditions of Asia, Africa and America. Herbal remedies are now increasingly being used worldwide as a form of alternative or complimentary medicine. In many cases, their use gives disastrous results. In Nigeria, herbalists and traditional healers are the alternative to orthodox medical practice in health care delivery. In the recent past, however, the herbalist and traditional healers have received unprecedented publicity, and are allowed airtime on national and state television stations. During such times they profess to have cure for all manners of ailments and as expected their clientele has increased. This increase in herbal usage is now widespread, especially in developing countries. The survey by Eisenberg et al in a 1997 found that 12.1% of adults in the United States had used herbal remedies in the previous 12 months compared to 2.5% in 1990.2

Development of gangrene is one of the reported adverse results of traditional healing but is usually related to treatment of fractures by traditional bonesetters.^{3, 4} This communication reports the development of gangrene following a treatment regimen by a traditional healer, an unusual complication of traditional treatment of peripheral oedema.

Case Report

The patient, a 20-year-old housewife, was admitted to a hospital with generalised body swelling, pain of the left middle finger and both index toes. Four weeks prior to body swelling, she had been bitten by an unidentified crawling insect on the dorsum of her left foot. She noticed early morning periorbital swelling and bilateral leg swelling two weeks after the bite. She sought medical help from a traditional medicine practitioner who applied herbal preparations to the bite marks. He incised the left middle finger and both index toes, rubbed the incisions with same herbal preparation and tied the incised digits with strings. He untied the digits after three days and repeated the procedure three successive times. She noticed a progression of the body swelling and decided to seek orthodox medical care. She denied associated oliguria or frothiness of urine.

Physical examination revealed a patient who was conscious and alert, afebrile with conjunctival pallor. There was generalized peripheral oedema with ascites and pleural effusion. Her pulse rate was 120 beats/minute and she had a blood pressure of 130/80 mmHg supine. There was dry gangrene of the left middle finger and both index toes (Figure 1). Peripheral pulses were palpable.

Results of laboratory investigations are sown in Table 1. Renal sonography revealed normal-sized kidneys measuring 12.2cm x 4.8cm and 12.8cm x 4.2cm for right and left kidneys respectively. Both kidneys showed increased parenchymal echopattern with reduction in the corticomedullary differentiation; there were no demonstrable renal stones or obstructive uropathy.

A working diagnosis of nephrotic syndrome with gangrene of left middle finger and both index toes was made. Her treatment included frusemide 120mg twice daily, hydrochlorothiazide 50mg daily, lisinopril 5mg daily, and low salt diet with resultant reduction in fluid retention. She also had parenteral metronidazole 500mg 8 hourly and ciprofloxacin 200mg 12 hourly. She eventually had a Ray amputation of the left middle finger and disarticulation of both second toes. The wounds healed well and she was subsequently discharged for outpatient care but she was thereafter lost to follow up.



Figure 1: showing gangrenous left middle finger and both index toes.

Table: Results of Laboratory Investigations

| Test | Result | Normal Range |
|---------------------------------------|----------------|-----------------|
| Urinary analysis 24h-urine protein | 3+ Proteinuria | Nil |
| (g) Serum ceatinine | 10 | <150 |
| (mg/dl) | 0.7 | <1.0 |
| Creatinine clearance (ml/min) | 46 | 90–125 |
| Fasting blood glucose(mg) | 76 | <125 |
| Serum cholesterol (mg/dl) | 241 | <200 |
| Serum albumin (g/dl) | 3.2 | 3.5-5 |

DISCUSSION

Patronage of herbalists and traditional healers is widespread in Nigeria because societal beliefs, perceived easy accessibility and affordability of traditional healers among other reasons.1 It is not unusual for patients to consult traditional healers first, only to fall back on orthodox medicine when all other measures have failed. Patronage of traditional healers and herbalists is not restricted to a particular group of people but involves patients from every social and academic class, and, unfortunately, is encouraged by culture and traditional societal beliefs.5,6 Hence it is not surprising that in this case study, help was first sought from a traditional healer. This trend has also been reported by previous workers who discovered patients presented to traditional healers prior to attending orthodox medical facilities with serious complications resulting from treatments they had received.7,8

The problem for which the herbalist was consulted for, was the body swelling, the reason both patient and herbalist attributed to the bite incurred four weeks earlier. Unfortunately, the herbalist's regimen of incisions, herbal application and tying of digits off and on, rather than alleviate the presenting problem, resulted in development of gangrene necessitating amputation.

Herbs, like orthodox drugs, have both beneficial and adverse effects depending on the dose ingested but the adverse effects of herbs have increased with the outpouring of herbal mixtures into the open market. Some Chinese mixtures have been reported to cause renal disease that progress rapidly to the end stages.^{9,10} It is uncertain whether the herbal preparation applied to the digits was the cause of the nephrotic syndrome in this patient as fluid retention was already present before a traditional healer was consulted. The bite sustained by this patient may have been a red herring that drew attention away from the background nephrotic state. However, it is possible that one who consulted an herbalist for body swelling may have had previous visits to traditional healers. Hence several factors may have interplayed in the cause of nephrotic syndrome in this report.

Development of gangrene following manipulation of fractures by traditional healers has been reported.^{4,10} There are no reports, to our knowledge, of gangrene complicating the treatment of fluid retention by traditional healers. The use of tourniquet and incisions at bite sites are discouraged. In this report, the herbalist tied the left middle finger and both index toes with strings after incisions even though the bite was on the dorsum of left foot and the bite was two weeks earlier. This supposedly had produced a tourniquet effect. The stings were untied on the third day and retied almost immediately until three cycles were completed. Hence, vascular occlusion from the repeated and prolonged tying resulted to gangrene of the affected digits. This complication is worrisome and is a new dimension to traditional healing methods. The measures put in place by

the herbalist were unreasonable, hazardous and responsible for the development of gangrene in this case.

In conclusion, this case report highlights an unusual aftermath of traditional medical treatment for presenting complaints. Measures put in place by the traditional healer resulted in gangrene of three digits necessitating amputation. It is difficult to ascertain the beneficial and adverse side effects of traditional practices and herbs because they are shrouded in secrecy and are not open to scrutiny. The Legislative body does not deter traditional healers from advertisement and sale of their wares on television. Thus, it is imperative that measures be put in place to protect the populace. Patronage of traditional healing thrives on traditional/cultural beliefs, inaccessibility and unaffordability of orthodox medical facilities. This makes traditional medical practice as it exists in Nigeria presently, somewhat a dangerous practice. However, until it is outlawed, innocent and gullible Nigerians will continue to meet with this and other forms of medical disasters.

ACKNOWLEDGEMENT

We are grateful to Professor J. O. Ayanru for useful criticisms and review of the manuscript.

REFERENCES

 Chiwuzie J, Ukoli F, Okojie O, Isah E, Eriator I. Traditional practitioners are here to stay. World Health Forum 1987; 8: 240–4

- Eisenberg DM, Davis RB, Ettner SL, Appel S, Wilkey S, Van Rampay M, Kessler RC. Trends in alternative medicine in the United States 1990 – 1997: results of a follow-up national survey. *JAMA* 1998; 280: 1567–75.
- 3. Omololu B, Ogunlade SO, Alonge TO. The complications seen from the treatment by traditional bonesetters *West Afr J Med* 2002; **21:** 335–7
- 4. Ofiaeli RO. Complications of methods of fracture treatment by traditional healers: a case report of three cases necessitating amputations at Ihiala Nigeria. *Trop Doct* 1991; **21:** 182–3.
- 5. Thanni LO. Factors influencing patronage of traditional bonesetters. *West Afr J Med* 2000; 19: 220 4.
- Oyebola DD. Some aspects of Yoruba traditional healers and their practice. *Trans R Soc Trop Med Hyg* 1980; 74: 318–25.
- Katchy AU, Nwankwo OE, Chukwu CC, Ukegbu ND, Onabowale BO.
 Traditional bonesetters treatment of femoral fractures. How far? Nig Med J 1991; 21: 125.
- OlaOlorun DA, Oladiran IO, Adeniran A. Complications of fracture treatment by traditional bonesetters in southwest Nigeria. *Family Practice* 2001; 18: 635

 37.
- Vanherweghem JL, Depierreux M, Tielemans C, Abramowicz D, Dratwa M, Jadoul M et al. Rapidly progressive interstitial renal fibrosis in young women; association with slimming regimen including Chinese herbs. Lancet 1993; 341: 387 – 91.
- Chen YC, Wu MS, Chiang CYF, Leu ML. Acute tubular dysfunction and renal failure induced by Chinese herbal medicine. *Acta Nephrologica* 1996; 10: 96 9.