

Unwholesome Trauma Care: A Cautionary Note.

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ABSTRACT

Background: Trauma care requires proper training on how to diagnose life and limb threatening conditions. The aim of this paper is to report an extreme case of unwholesome practice that drained the patient physically, emotionally and financially.

Methods: The medical record of the patient and relevant literature were reviewed.

Result: A 25-year-old commercial motorcyclist (okada) presented with a huge discharging leg ulcer with exposed plate and necrotic distal half of the right tibia on the account of uninformed treatment he received from his primary physician and a traditional bonesetter spanning a period of five months. The foot was found to be grossly deformed and insensate. Below knee amputation was done as salvage.

Conclusion: Our undergraduate curriculum should change to expose medical students more to basic trauma care. A designated body should regulate activities of traditional bonesetters. The practitioners should be made to undergo some form of training to recognize high-risk trauma patients and the need for early referral.

KEY WORDS: Unwholesome; Trauma; Care.

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INTRODUCTION

Trauma care requires good knowledge of the pathophysiology of injury. Orthopaedic surgeons learn through years of training how to diagnose and treat life and limb threatening conditions associated with trauma¹. It is of vital importance that these conditions are identified early and vigorously treated. Where the expertise or facilities is lacking the patient should be transferred early to centres where the experts and facilities exist. It is important for all physicians to understand this.

This case report describes an extreme level

of unwholesome practice in trauma care. It is hoped that this report will emphasize the need for proper patient selection based on the knowledge, experience and understanding of the attending physician and the facilities at his /her disposal.

CASE REPORT

A 25-year-old commercial motorcyclist (okada) was admitted under our care on the account of injury he sustained 5 months previously. He was involved in a traffic accident in which he was hit from the back by a Mercedes 911 lorry while riding motorbike along a major high way in Onitsha. The lorry dragged him for a distance before he was extricated. He immediately noticed that he was bleeding profusely from the right leg and that part of the bone (tibia) was exposed. He could not bear weight on the leg. He was immediately taken to a nearby private hospital where he had implant surgery the same day of the accident. He also received one unit of blood.

He was in this hospital for six days. Within this period, he started running temperature and the leg was getting more swollen. At this point patient took his discharge and got himself transferred to a traditional bonesetter near his village. The bonesetter removed the sutures and started cleaning the wound with concoctions and topical antibiotic application. Over time, a huge ulcer developed, exposing the implant and the distal half of the tibia. On account of this, the bonesetter advised him to seek an alternative treatment. He arrived our hospital five months after the initial injury.

Examination revealed a grossly deformed limb with extreme equinus, externally rotated with insensate foot. There was 6cm real shortening of the tibia. On the anteromedial aspect of the leg was a copious purulent discharging huge ulcer measuring 20cm x10cm exposing a loosely and wrongly applied plate fixed with wires and pins. In addition about 7cm of the distal tibia was also exposed and necrotic.

Colour

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The knee was stiff with only a jog of movement. The anterior aspect of the knee and the proximal one third of the leg had an unstable scar (Figure 1).

X-ray showed wide diastasis of inferior sydesmotic joint with the foot in equinus and the tibia plafond completely missing. An 8-hole narrow plate was fixed to the tibia with wires and Steinmann's pin. The tibia and talus show extensive necrosis with sequestrae mainly in the tibia (Figure 2).

His PCV was 26.4%, HB 8.9g/dl, TWBC 6600/mm³, ESR 80mm/ hour(Westergren).

Wound swab grew coliforms sensitive to quinolones. He was counselled and was offered a below knee amputation. He consented and the operation was done. He made excellent recovery. He is yet to get prosthetic fitting.



Figure 1

Discharging huge ulcer anterior-medially measuring 20cm x10cm exposing a loosely and wrongly applied plate fixed with wires and pins.

DISCUSSION

In our environment trauma care faces special problems, that include the need to transport injured patients over long distances, the economic hardships of practising medicine in a depressed economy, influence of traditional bone setters¹ and faith healers, poor appreciation of the need of the injured by primary health care providers and the general public. In this scenario, unwholesome practice may be added.



Figure 2

X-ray shows wide diastasis of inferior sydesmotic joint with the foot in equinus and the tibia plafond completely missing. An 8-hole narrow plate was fixed to the tibia with wires and Steinmann's pin. The tibia and talus show extensive necrosis with sequestra mainly in the tibia

It has been clearly documented in trauma outcome studies that the quality of the initial care has big bearing on the final outcome². It is not unusual for patients with severe trauma to waste precious time in the hands of charlatans thereby stretching the "golden hours" to "golden days" and in some cases "golden weeks" as in this case.

It is obvious that this patient sustained severe open tibia injury with extensive soft tissue loss (possibly Gustilo *et al*³ Type IIIb). This type of injury is best managed in a trauma center where the expertise and facilities for external skeletal fixation and durable soft tissue cover exist. The most that was expected from the primary physician was to attend to any associated life threatening condition, and

transfer the patient. To embark on open reduction and plating with little or no knowledge of the principles of internal fixation and without respect for the injured limb was to say the least a surgical misadventure. The patient would have paid dearly without the intervention of the bone setters¹ who removed the sutures that allowed the pent up pressure to dissipate and created an egress for the bacteria laden exudates.

One is not trying to glorify the bonesetter who kept and sapped the patient for five months before pushing him out. A common indication for amputation in our environment is gangrene resulting from mismanaged fractures by the traditional bone-setters^{1,4-6}. There is a strong cultural belief that fractures are best managed by traditional bonesetters; this is coupled with the fact that their services are readily available, accessible and affordable to the natives⁷. Therefore, it is not uncommon for patients with suspected fractures of the extremities to consult the traditional bonesetter first. One expects a change in cultural belief among our people with adequate health education but this may take a long time to come, and the patronage of bonesetters and the attendant complication will continue. It is therefore being suggested that traditional bone setting should have some form of regulations by a designated body. The

practitioners should be made to undergo some form of training to recognize high- risk patients especially those with open injuries and the need to refer them early. It is also important that our undergraduate curriculum should be reviewed. A few weeks of posting in orthopaedics and trauma is definitely not enough considering the evolving trauma epidemic.

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