The EndSARS debacle: Radiological observations in simultaneous upheavals

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Abstract

Background: Mass upheavals across Nigeria, especially in Lagos and its environs, ultimately resulted in many deaths. The protesters seized the opportunity of the #EndSARS protest to commit atrocities across the Lagos State and the city of Lagos, in particular on October 21, 2020. Clashes occurred at Lekki Toll Gate, Surulere, Oyingbo, Alausa, Mushin, Ikotun, Agege, and Somolu areas of Lagos, as well as Ikorodu. Prison riots allegedly simultaneously occurred at Ikoyi and Kirikiri prisons. The police and soldiers had been invited to quell the demonstrations, and many people died across the Lagos State at the end of the crisis.

Aim: The aim of the study was to document the different radiological injuries observed following an apparent simultaneous upheaval.

Materials and Methods: Ninety-nine bodies (including body parts) brought from morgues located in five different parts of Lagos and its environs were examined at the departmental facility, adopting standard protocols for mass disaster management. Whole-body digital radiographic skeletal survey and autopsies were done for all cadavers and body parts retrieved.

Results: Ninety-nine bodies/body parts were examined, of which 22 bodies were burnt beyond recognition, making it difficult radiologically to recognize the gender of the victims. The traditional autopsy revealed there were 98 (98.99%) males and one (1.01%) female. Contrastingly, radiological examination positively identified 75 (75.8%) victims as males and 2 (2.0%) as females, while 23 (23.2%) could not be classified. Most injuries were caused by blunt-force trauma, gunshots, and fire, often with incineration.

Conclusion: Deaths in the prisons and other custodial locations were attributed mainly to firearms; the victims from Ikorodu suffered mainly shotgun injuries apparently because the clashes were among rival groups. The victims from Agege were largely incinerated, possibly preceded by a combination of blunt- and sharp-force trauma; these cases presumably resulted from communal clashes. In general, the different though seemingly simultaneous upheavals were heralded and sustained by differing activities, thus manifesting with varying skeletal injury patterns.

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Abstract in French

Contexte: Des bouleversements massifs à travers le Nigeria, particulièrement à Lagos et ses milieux ont finalement fait de nombreux morts. Des manifestants ont profité de la manifestation #ENDSARS pour commettre des atrocités dans l'État de Lagos, et la ville de Lagos en particulier le 20 octobre 2020. Des affrontements ont eu lieu à Lagos dans les quartiers de Lekki Toll Gate, Surulere, Oyingbo, Alausa, Mushin, Ikotun, Agege, Somolu, ainsi qu'Ikorodu. Dans le même temps, des émeutes carcérales auraient eu lieu dans les prisons d'Ikoyi et de Kirikiri. La police et les soldats avaient été invités à réprimer les manifestations et de nombreuses personnes sont mortes dans l'État de Lagos à la fin de la crise. Objectif: Documenter les différentes blessures radiologiques observées suite à un apparent bouleversement simultané. Méthodes: Quatre-vingt-dix-neuf corps (y compris des parties de corps) apportés de morgues situées dans cinq parties différentes de Lagos et ses milieux ont été examinés dans l'établissement départemental, en adoptant des protocoles voulues pour la gestion des catastrophes massifs. Une radiographie numérique du corps entier et des autopsies ont été effectuées pour tous les cadavres et parties du corps récupérés.

Résultats: Quatre-vingt-dix-neuf corps/parties de corps ont été examinés, dont vingt-deux corps ont été brûlés au-delà de toute reconnaissance, ce qui rend difficile la reconnaissance radiologique du sexe des participants. L'autopsie traditionnelle a révélé qu'il y avait 98 hommes (98,99%) et une femme (1,01%). En revanche, l'examen radiologique a identifié positivement 75 victimes (75,8%) comme étant des hommes, 2 (2,0%) comme des femmes tandis que 23 (23,2%) n'ont pas pu être classées. La plupart des blessures ont été causées par des traumatismes contondants, des coups de feu et des incendies, souvent avec incinération.

Conclusion: Les décès dans les prisons et des autres lieux de détention ont été attribués principalement aux armes à feu; les victimes d'Ikorodu ont été principalement blessées par balle, apparemment parce que les affrontements SE sont déroulés entre groupes rivaux. Les victimes d'Agege ont été en grande partie incinérées, probablement précédées d'une combinaison de traumatismes contondants et tranchants; ces cas résultaient vraisemblablement d'affrontements communautaires. Généralement, les bouleversements différents, bien qu'apparemment simultanés, ont été annoncés et soutenus par des activités différentes, SE manifestant ainsi par des modèles de blessures squelettiques variables.

Keywords: EndSARS, mass upheavals, postmortem radiology, skeletal injuries

INTRODUCTION

The most recent wave of anti-government agitation in Nigeria started on October 7, 2020, in Lagos, spreading to other major cities, including the capital, Abuja. [1-3] The profiling of young men as fraudsters by a special squad of the Nigerian Police known as the special anti-robbery squad (SARS), simply because they wear dreadlocks, use cellular phones and laptops, or drive luxurious cars, was the root cause of the mass upheaval. Despite several calls to ban the SARS between 2016 and 2019 by the citizenry and some legislators, the squad remained operational. The bone of contention is the strong allegation of extrajudicial killings by the SARS. This led to a new call for its disbandment with the hashtag "EndSARS," which eventually climaxed in mass unrest by mainly the youths, in Lagos and its environs between October 7 and 29, 2020. This snowballed quickly into the call for good governance. Despite the supposed government's disbandment of SARS on October 11, 2020, the protest persisted.^[1-3] The security operatives responded on October 20, 2020, by allegedly using tear gas, rubber bullets, and allegedly live ammunitions on the demonstrators which resulted in multiple types of injuries and deaths. [1-3] Simultaneously, there were uprisings, agitations, and clashes in other parts

of Lagos and its environs; most of these involved the police, while some other areas did not reveal a striking presence of these security officials. These clashes occurred at Lekki Toll Gate, Lagos Island, Oyingbo, Surulere, Mushin, Ikotun, Somolu, Alausa, Agege, and Ikorodu. Prison riots were reported at Ikoyi and Kirikiri correctional facilities. There has been blame sharing by both parties with public and international outcry, necessitating the setting up of a judicial panel of inquiry in the Lagos State and some other parts of the country. The present documentation is restricted to the Lagos State; other states of the federation did not investigate deaths that occurred in their jurisdictions as a result of the upheaval.

MATERIALS AND METHODS

The team of forensic and anatomic pathologists was instructed by the Coroner to conduct medicolegal investigations of the mass disasters with the aim of determining the cause and manner of death; this was apart from the disaster victim identification. Toward the latter, materials for DNA profiling were collected at autopsy, in addition to dental chartings; however, further processing could not be done because the government apparently did not consider it necessary to identify the victims. The

government also did not fund any ballistic studies to determine any peculiarities of the ammunitions recovered, especially the bullets.

The bodies/body parts had been labeled, photographed, embalmed, and stored in five mortuaries across the state. The mortuaries included those in the Lagos Island General Hospital (5), Mainland Hospital, Yaba (83), Lagos State University Teaching Hospital, Ikeja (3), Isolo General Hospital (2), and Ikorodu General Hospital (6). Subsequent examination by the team of forensic and anatomic pathologists, radiologists, and dental surgeons was carried out in the Department of Pathology and Forensic Medicine, Lagos State University Teaching Hospital.

Toward determining the cause of death, the various injuries sustained by the victims had to be documented.

The bodies (many of which were moderately to markedly putrefied) were subjected by the team of radiologists and radiographers to the digital skeletal survey, over 10 days (October 26, 2020–November 4, 2020), using a Philips Practix 360 Mobile X-Ray machine, manufactured in February 2014. All the bodies/body parts brought were included in the study. During the radiographic examination, the skull views were done in the anteroposterior and lateral projections, while the chest, abdomen, pelvis, and spine were in the anteroposterior projections. The appendicular skeleton views were anteroposterior and lateral. Each radiograph was reported by at least two radiologists, to improve on the diagnostic accuracy. The data obtained from the mortuary notes and the film reports were documented.

RESULTS

Ninety-nine bodies/body parts were studied. Twenty-two bodies were burnt beyond recognition, making it difficult radiologically to recognize the gender of these victims. From the radiologic standpoint, there were 75 (~75.7%) males and 2 (~2.0%) females, while the remaining 23 (~23.2%) were victims with unrecognized gender. Contrastingly, using anthropological parameters, a forensic autopsy identified 98 males and 1 female.

Figure 1 shows that the anatomical site with most injuries (alone or in combination with other sites) was the skull (68.5%); other sites in decreasing order include the chest (65.8%), pelvis (45.2%), right upper limb (42.5%), abdomen (41.1%), and the left upper limb (34.2%) among others. The average number of affected anatomical sites with injuries is two per victim.

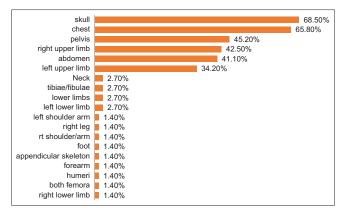


Figure 1: Chart showing the anatomical sites of injuries

Gunshot injuries were radiologically recorded in 39 (39.4%) victims; pellets [Figures 2 and 3] and bullets were observed [Figure 4]. Postmortem examination actually recorded 58 firearm injuries; the difference is due to the identification of entry and exit wounds without any residual ammunition within the body. It is noteworthy that the autopsy revealed 52 of the firearm injuries to be located in the upper part of the body, four were in the lower extremities, and two involved both areas.

Severe skeletal fragmentations were observed in 23 (~23.2%) victims which preclude gender determination; postmortem examination of the remains revealed marked charring in 20 of them. Twelve victims (12.1%) demonstrated radiologically recognizable strictly blunt-force injuries; these victims were distributed in all geographic locations. The fracture sites included the skull [Figure 4], axial skeleton, and limbs; some of these were associated with firearm injuries. Sharp-force injuries were seen in 13 (13.1%) of the victims during postmortem examination; one of the victims had been decapitated.

The autopsy revealed that 57 (58.2%) males suffered gunshot injuries; these victims, who are from Lekki, Ikoyi, and Kirikiri prisons and some police stations, were injured by rifled weapons, while those from Ikorodu, parts of Lagos Island, and the Mainland suffered shotgun injuries. The only female whose body was allegedly recovered from around one of the police stations suffered gunshot injuries from a rifled weapon. The charred bodies were predominantly from the Fagba area of Agege; metallic rings and strips were observed to be embedded around six of them [Figures 5 and 6]. These metallic rings and strips are consistent with those normally embedded within the vehicle tyres; apparently, the victims had the tyres hung around them when the bodies were set on fire.

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Figure 2: Radiographs showing small round pellets in the skull, neck, chest, and abdomen



Figure 4: Comminuted and depressed skull fractures. A bullet fragment is seen in the posterior cranial fossa (orange arrow)



Figure 6: Radiograph showing the same metallic strips around the head-and-neck areas

The radiographs also revealed occasional features of pneumoencephalon apparently due to postmortem putrefaction [Figure 7].



Figure 3: Shotgun pellets in the arm and around the elbow joint



Figure 5: Radiograph of the body bag containing charred and fragmented bones with irregularly running metallic strips derived from burnt tyres

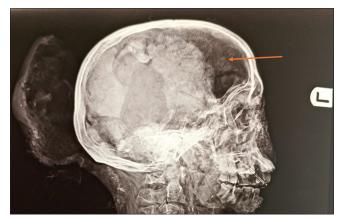


Figure 7: Pneumoencephalon – A postmortem artifact (orange arrow)

DISCUSSION

Protests against a supposedly notorious police unit (SARS) which started on October 7, 2020, metamorphosed into

a broader movement, demanding good governance, and eventually posing a challenge to the Government of Africa's most populous country, Nigeria.

Despite the curfew and a stay-at-home order of the Lagos State Government on October 20, 2020, with the banning of rallies and protests, civil disturbance continued. The protests turned deadly with security agencies allegedly responding with force using tear gas, rubber bullets, and live ammunitions, with reports of injuries, arrests, and killings of unarmed civilians.[1-3] The right to peaceful demonstration is enshrined in the Nigerian constitution; therefore, the ban on peaceful protest was perceived by the youths as an infringement on their fundamental human rights, supposedly informing their flouting of the order.[4] The combined effect of Sections 39 and 40 of the 1999 Constitution as well as Article 11 of the African Charter on Human and Peoples' Rights Act (Cap A9) Laws of the Federation of Nigeria, 2004, allows for the rights of people to assemble freely.^[4] However, the thrust of this paper is on the radiologically observed injuries and whatever peculiarities.

The authors analyzed the nature and site of injuries sustained by the victims, cause of death and geographical locations, and any striking peculiarities; the injuries sustained by the only female victim were noted.

Males were more affected than females, which is similar to a previous report from Sudan. [5] This is expected because males tend to predominate at such outdoor protests.

The most common causes of death in the index study were gunshot and burn injuries, similar to the January 2011 Egyptian Uprising caused by police brutality, during which 840 people died from gunshot injuries. [6] The Nicaragua protest over social security reforms due in part to the oppressive human rights violations against peaceful protesters also led to multiple gunshot fatalities, [7] as well as the 2019 civil demonstration in Sudan. [5]

The most common anatomical site of injuries as seen in the present series in our study was the skull, with chest injuries being second; this is similar to observations in Sudan, Nicaragua, and the United States. [5,7,8] These anatomical sites might suggest an indiscriminate shooting, or shots primarily intended for these locations. The United Nations Guidelines on the use of less-lethal weapons to curb demonstrations prescribe that these weapons must be aimed at the extremities, and not the head, neck, and face; it is potentially unlawful to do otherwise. [8,9] The Floyd protest in Minnesota is, perhaps, the largest so far in the history of

protests in the United States of America.^[10] Unfortunately, the UN Guidelines were not strictly adhered to, and some victims suffered permanent disabling injuries despite the use of less-lethal weapons like rubber bullets, and "tear gas" (chemical irritants). It is, thus, noteworthy that where less-lethal weapons are used for crowd dispersal, serious and even fatal injuries can result if they are not appropriately utilized.[11,12] The firearm injuries seen in victims from Lekki, prisons, and the police stations were due to the rifled weapons, and it is logical to assume that these were inflicted by the security personnel. Security agents routinely use rifled weapons. In contrast, the firearm injuries in victims from other parts of the state involved the use of locally made shotguns with the dispersal of the pellets injuring various organs. These injuries are believed to be the result of possible clashes among rival cult groups according to police reports that accompanied the bodies to the morgue.

Linear, depressed, and comminuted depressed skull fractures were seen in the victims examined.

Some of the victims were set ablaze, with those from Fagba, at Agege, being completely charred. Radiographs of six of the latter showed the presence of metallic strips and rings apparently derived from tyres that had been worn around the victims. This feature was not observed in reports from other climes. [5-8] This peculiar finding seen at autopsy aligns with the common practice in many parts of Nigeria in which people are set ablaze using burning tyres during mob actions and other similar upheavals. These victims are often burnt while still alive, although they would have been previously severely injured and incapacitated. The upheaval at Agege was allegedly a communal/tribal clash.

CONCLUSION

The victims of the EndSARS debacle that occurred in the Lagos State exhibited varying injury patterns and causative agents, depending on where the fatality occurred. While the trigger point was the Lekki Toll Gate, demonstrations occurred simultaneously or sporadically in other locations. Rifled weapons were used on the victims in Lekki, prisons, and some police stations. Other firearm injuries due to shotguns resulted from cult clashes in Ikorodu and other parts. Blunt-force trauma was observed in all these places. However, the victims from Agege were predominantly set ablaze, presumably after incapacitation using blunt-force trauma. While the security personnel might have fired lethal rifled weapons at the victims in some locations, the upheavals in other parts of Lagos involved the use of shotguns, blunt and sharp force trauma, in addition to burning of the victims.

Limitations

A two-dimensional mobile X-ray unit was used in this study, thereby limiting diagnostic accuracy.

Recommendations

Cross-sectional imaging is the gold standard in forensic medicine; a 16-slice computerized tomography scan machine should be made available for use by the State Forensic Team to handle mass disasters, as three-dimensional imaging improves diagnostic accuracy and speed.

It is important for the government to properly fund forensic investigations when these disasters occur. No victim identification or ballistics studies of recovered missiles were conducted despite the preservation of all relevant materials by the medical personnel.

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Conflicts of interest

There are no conflicts of interest.

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