Journal of Clinical Pathology and Forensic Medicine Vol. 2(3), pp. 16 - 20, May 2011
Available online at http://www.academicjournals.org/JCPFM
ISSN 2I41-2405 ©2011 Academic Journals

Case Report

Medicolegal notes in injuries, an emerging clinical importance

Silas O.A.[1]*, Adoga A. A.[2], Dauda A. M.[1], Echejoh G. O.[1], Menasseh M. N.[1] and Olu-Silas R. A.[3]

[1]Pathology Department, Jos University Teaching Hospital (JUTH), Jos.
[2]Surgery Department, Jos University Teaching Hospital (JUTH), Jos.
[3]Attorney Generals Office, Plateau State Ministry of Justice, Jos.

Accepted 11 April, 2011

Injuries should not be managed surgically or with the use of drugs only as studies show that a lot of injures are suicidal or homicidal rather than accidental and the skill of doctors in obtaining medicolegal notes will go a long way to stop attempted suicides and attempted homicides subsequently leading to death and assist the law to identify culprits as not all injuries are accidental.

Key words: Injuries, homicides, suicides, death.

INTRODUCTION

Injury is also known as trauma or wound and can be defined legally as any harm whatsoever in nature caused illegally to the body, mind, reputation or property (Bhullar, 2007). Medicolegally (clinically) it is defined as breach or dissolution of the natural continuity of any of the tissues of a living body by actual physical violence. The legal aspect views trauma in two forms, simple and grievous while medicolegally trauma has various types' mechanical, thermal, chemical, electrical/lightening, radiation (Bhullar, 2007). The mode of injury could be suicidal, homicidal or accidental. Doctors should therefore be abreast with medico-legal procedures to identify and differentiate failed homicidal, suicidal from accidental cases. This will go a long way to wholishically manage a patient, as they may eventually succeed in their attempts leading to deaths if not properly managed. Injuries of medicalegal importance include:

1. Hesitation cuts/tentative cuts: These are parallel superficial cuts suggestive of suicidal nature, seen in the (precordial area), wrist etc.
2. Defense cuts are incised wounds suggestive of homicidal motive or assault with sharp weapon, seen on a victim on the forearms and hands, while making either an attempt to grab the weapon by its blade or protect himself from the attack.

Injuries could also give clues on weapon causing the wound, time since injury, site of impact and direction of force. These are all vital signs doctors should be abreast with as they are of medicolegal value.

The pattern of injury is of great importance in determining whether the wound is self inflicted or not. Self - inflicted wounds show obvious deliberation and although they are occasionally inflicted in an attempt to achieve publicity, their pattern will be similar to that seen in deliberate attempts at self destruction.

Non fatal self inflicted incised wounds are not uncommon in cases where suicide has been achieved by some other means. Cutting one's throat is a form of suicide common in men than women. Most commonly the preliminary non-fatal injuries consist of a number of superficial incisions across the front of the wrist but they may appear elsewhere on the body.

Characteristic features are that the cut area is bared, the wounds are usually tentative in nature, multiple and parallel or in parallel groups. Another feature of self inflicted incised wounds is that the clothing is removed from the part of the body which is injured and no damage is done to its features. Defence wounds are not uncommon upon victims of assaults with sharp penetrating or cutting instruments. They arise when the victim attempts

*Corresponding author. E-mail: drgbenga@yahoo.com.

to defend and are common on the palmer surfaces of hands when there has been an attempt to grab the weapon or upon the arms when the victim has attempted to ward off the weapon. Incised wounds are usually suicidal, than homicidal and only occasional accidental. Self-inflicted incised wounds are superficial, multiple, grouped together, parallel to each other, placed on the approachable parts of the body, more commonly on the anterior aspects of the forearms. Inner aspects of thigh and lateral aspects of upper arms and the wounds are directed towards centre of the body. Homicidal incised wounds may be on any part of the body, including the unapproachable parts. More than one severe wound at more than one site is common. Accidental wounds may be present any where on the body and may be of any severity. There is no mark of resistance on the body or no sign of struggle at the place. Many doctors are ignorant of the legal outcome of their medicolegal reports (Karlsson, 1998).

Cut throat injuries are not a common form of suicidal but homicidal injury (Karlsson, (1998).

Modern criminal investigation is teamwork of several experts in close collaboration with law enforcement agencies with common objective to arrive at the truth. The role of forensic expert is to help in the administration of justice. The increasing criminal behavior of the injured, the easy access to courts, as well as easy availability of legal assistance has brought new dimensions to the medico-legal work and the legal expectations from a medical man, therefore, have also changed in equal proportions (Fukube et al.,2008). Medical officers are required to be trained on how to write a medico-legal certificate or report to assist the law. They could be required to stand as expert witness in courts of law, thus medico legal injuries are of forensic significance as medico-legal reports on injuries could help authorities and courts of law to arrive at logical conclusions. The doctor could be called to serve as an expert witness (Fukube et al., 2008). Injuries sustained from sharp weapons could be suicidal, homicidal, self-suffered, self-sustained or accidental but certain medico-legal parameter definitely help to diagnose the nature or modeof these injures.

CASES

Case 1

A 35-year-old unemployed man of the Tiv ethnic group was referred to us from the General Hospital of a neighboring state with a 12-h history of a self-inflicted anterior neck injury. He gave inability to secure a job and fend for his family as the reason for attempting to take his life. He denied substance abuse.

On examination, we saw a conscious young man who was not in respiratory distress. He had a 14 cm anterior neck laceration involving the hypopharynx, severing the lower third of epiglottis, exposing his laryngeal inlet with hesitant cuts on the skin of the neck. He was prepared for and had tracheostomy and primary wound closure. Tetanus prophylaxis was given to him from the referring hospital. Parenteral ceftriaxone, metronidazole and pentazocine were commenced. Nasogastric tube was passed intra-operatively following repairs and removed on the 7th postoperative day.

Psychiatric review revealed his act was premeditated: He work up early hours of the morning and slit his throat in the bathroom where he was discovered by his wife at about 5 a.m. No prior behavioral changes were noticed by family members. There was no family history of psychiatric illness, self injury or poisoning. His intent was to kill himself because he has been unable to provide even food for himself and family, as he had been unemployed for about 2 years. He was calm but withdrawn at review and an impression of attempted suicide by cutthroat injury in a depressed man was made. All sharps and potentially harmful object were removed from his bedside and family members were always at his bedside to monitor him. He was commenced on setraline tablets. Stitches were removed on the 5th post-operative day. He was decannulated on the 7th post-operative day with re-establishment of phonation, swallowing and breathing and discharged on the 15th post-operative day.

Otolaryngologic and psychiatric follow up has been uneventful for 30 months.

Case 2

A 27 year-old unemployed male of the Hausa ethnic group was referred from a General Hospital in a neighboring state to the accident and emergency unit of Jos University Teaching Hospital (JUTH), Jos four days following an attempted suicide with an anterior neck laceration. There was an antecedent history of depression with delusion of three years duration for which he was receiving amitriptyline tablets from the psychiatrists. No history of substance abuse.

Examination revealed a pale febrile man who was not in respiratory distress with a 12 cm transverse jagged edged anterior neck laceration exposing the hypopharynx and laryngeal inlet. The sternocleidomatoid muscles and carotid sheaths were covered with slough and necrotic tissue. He was transfused two units of whole blood and had intranistered and wound debridement and closure was done. Nasogastric tube and inserted intraoperatively following repair. Parenteral ceftriaxone and metronidazole were commenced preoperatively and continued postoperatively along with pentazocine for analgesia. He was weaned off tracheosteomy with restoration of phonation and breathing on the 5th postoperative day. Stitches were removed on the 5th postoperative day. The nasogastric tube was removed on the 7th postoperative

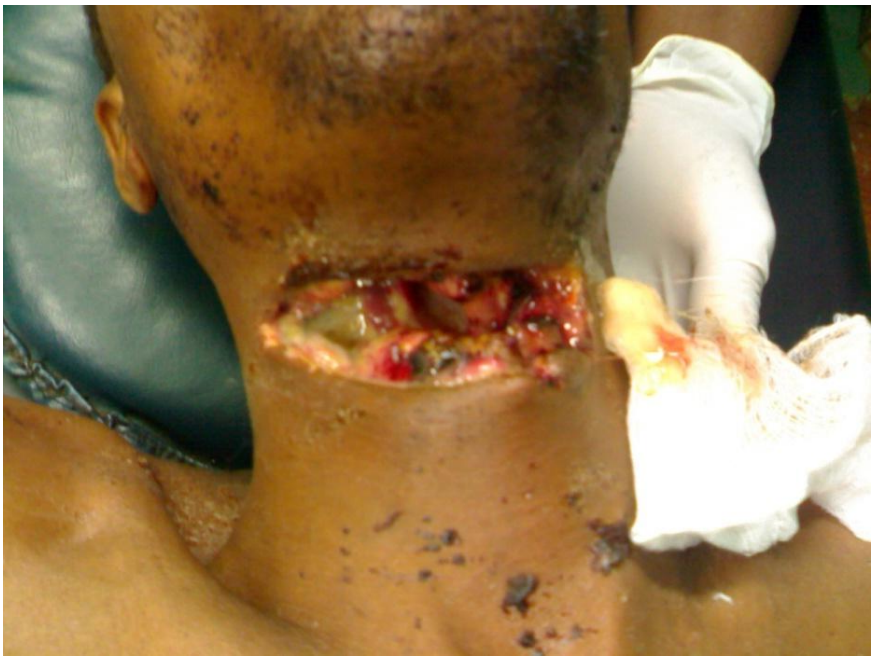

Figure 1. Showing cutthroat injury.

day.

Psychiatric reviewed he had mentioned committing suicide to some family members several months before his brother discovered him with a slit throat at the back of his father's house. He had attempted poisoning himself two week prior to this incident stating his inability to secure a job several years after graduating from the university as the reason for the attempt. He was calm at review but withdrawn and a diagnosis of depression with cutthroat injury from attempted suicide was made and was continued on antidepressants while being monitored closely by relatives and kept from potentially harmful objects. He was discharged on the 12th postoperative day.

Follow up in the clinic has been uneventful for 22 months.

Case 3

A 55-year-old unemployed Hausa man presented to us with 24 h history of a self-inflicted anterior neck wound from a suicidal attempt.

He has 12 children from 2 wives and the unavailability of funds to cater for his family was the reason he gave for attempting to take his life. He denied substance abuse. No family history of psychiatric disorder. No history of self-injury or poisoning. He was discovered by his children in his bedroom in a pool of blood with a slit throat. Examination a revealed a pale middle aged man who was not dyspnoeic with a 14 cm anterior neck laceration exposing his hypopharynx and larynx (Figure 1). Tetanus prophylaxis and parenteral antibiotics were given. He was transfused 2 units of whole blood and given tracheostomy. His wound was repaired under general anesthesia administered via the tracheostomy tube. Nasogastric tube was inserted intraoperatively following repair (Figure 2). He was commenced on parenteral ciprofloxacin, metronidazole and pentazocine postoperatively. Stitches were removed and decannulation process started on the 5th postoperative day and completed alongside nasogastric tube removal uneventfully on the 7th postoperative day. He started having psychiatric care and supervision immediately postoperative and was given. Follow up in the clinic has been uneventful for 6 months after discharge on the 14th postoperative day.

DISCUSSION

From case 1, it is observed that the observed medicolegal examination shows presence of tentative wounds on the neck, absence of defense wounds and absence of corresponding tears on the clothing. This helps to rule out homicidal issues and embraces attempted suicide. No toxicological study done however to rule out drug abuse as such toxicological laboratory is found only in a state in Nigeria from our centre, it is also very costly. However, most reports from western world and Asia shows that cut throats are usually homicidal rather than suicidal as easier faster and less traumatic means of suicide are readily available in these regions (Karlsson, 1998; Fukube et al., 2008).

Figure 2. Showing post cutthroat injury repair.

In case 2, tentative and defense wounds were absent but patient had history of attempted self poisoning prior to the cut throat and positive psychiatric history with use of antidepresent. This is consistent with other studies that show increased incidence of attempt at suicide by patients with psychiatric history (Fukube et al., 2008)). Thus such patients should be closely monitored by relative against suicidal acts. With increased incidence of psychiatric illness in our country, all effort should be made to stop this possible complication of psychiatric illness.

In case 3, there were neither tentative injuries nor defence wounds but patient was overwhelmed by the difficult economic situation with its attendant depressive consequences. Frustration from negative economic situations tilting patients negatively with suicidal attempts has also being observed in some studies (Fukube et al.,(2008); Dabgkas, 1924).

Our medical personnel should be well educated on medicolegal aspects of injuries as only such expertise could help distinguish homicidal from suicidal and accidental injuries. This will bring a different but interesting and revealing dimension to management of injuries of medico-legal importance so as to assist the law enforcement agents in determining the truth surrounding such injuries. Many surprises could be found with

increasing incidence of psychiatric illness resulting from drug abuse; consequently laboratories should be well equipped for toxicological studies. Overall, the medicolegal observations of certain injuries by medical personnel will go a long way to whollistically manage a patient apart from surgical repair and drugs but will help law enforcement agents track down possible culprits of homicide, arrest drug cartels and discover people with psychiatric illnesses. Medical training should emphasis in their curriculum forensic/medicologal medicine due to the proliferation and use of narcotics, increase in psychiatric disorders, and increased homicidal cases in our society (Dabgkas, 1924).

Studies conducted in most parts of the world shows that most suicidal injuries were more in males than females (Fukube et al.,(2008); Dabgkas, 1924). Most of these injuries were on the upper limbs. Tentative wounds are commonly seen in cases of suicidal injuries while defence wounds are common in homicidal injuries (Dabgkas, 1924). In a study conducted by Adego Eferakeya at Benin City Nigeria, it was noted that mental illness was commonest predisposing factor to suicide attempts (Adego, 1984). A later study carried out in same city saw cases of homicide being greater than suicide due to proliferation of small arms in that locality (Akhiwu et al., 2000).

With the influx of small fire arms into Africa generally and Nigeria specifically, a new mode of injury for both homicidal and suicidal cases will be expected in the coming years as more people gain access to these weapons. Government should step up efforts to reduce availability of drugs with psychoneurotic effects, regulate and arrest illegal acquization of firearms. More psychiatrist should be engaged to assist in detecting and managing mental illness as this is a major cause of suicidal attempts. Medical education and practice should inculcate the role of forensics in injury management as attempted suicide, attempted homicide could be stopped from graduating to actual death.

CONCLUSION

Injuries are not always to be considered accidental as they could be homicidal or suicidal. Medical practitioners should be well equipped with medicolegal skills to disifer these modes of injuries as it can assist law enforcement agents in determining the truth in this wise the doctor could be called to serve as an expert witness. Management of patients with injuries should also involve medicolegal notes to rule out possible attempted suicide or homicide as further psychiatric or legal help could prevent inevitable deaths.

REFERENCES

Adego EE (1984). Drugs and suicide attempts in Benin city Nigeria. Br. J. Psych., 145: 70-73

Akhiwu WO, Nwosu SO, Aligbe JU (2000).Homicide and suicide in Benin City Nigeria. Anil Aggrawals Internet. Forensic Med. Toxicol.,1: 2

Bhullar DS, Aggarwal KK (2007). Medicolegal diagnosis and pattern of injuries with sharp weapons. SS J. Indian Forensic Med., 29: 4.

Dabgkas JA Kerry.(1924). 3 cases of medico-legal interest. Br. Med. J., 2(3336): 1042 – 1043.

Karlsson T (1998). Homicidal and suicidal sharp force fatalities in Stockholm Sweden. Forensic Sci. int., 93(1): 21 – 32.

Out of 100 cores examined between 2006 – 2007 who sustained injures with sharp. Weapons 58% were age go 21 – 40 years, males (92%), single injures (80%) and with light sharp weapons. Upper limbs (47%), head (17%), mixed type (14%). Nature was homicidal (60%), fabricated (34%)

Fukube T, Hayashi Y, Ishida Hitoshi K, Mariko K, Akihiko K (2008). Retrospective study on suicidal cases by sharp forces injuries, J. Forensic Leg. Med., 15(3): 163 – 167.