

The Pattern of Cut Throat Injuries in the University of Port-Harcourt Teaching Hospital, Portharcourt

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Abstract

Background: The incidence of cut throat injuries irrespective of the cause is on the increase worldwide but they are underreported in Nigeria. The neck contains a lot of vital organs and great vessels which make the patients with injuries to the neck to present most times as emergency. The management of cut throat injuries is bedeviled with complications which can be reduced to the barest minimum if managed by the specialists.

Our aim and objectives are to determine the pattern of cut throat injuries as seen in University of Port-Harcourt Teaching Hospital (UPTH) and to highlight the factors responsible for the morbidity and the mortality associated with this condition.

Methodology: The study is a retrospective review of cut throat injuries that presented to the Ear Nose and Throat (E.N.T.) department of University of Port-Harcourt Teaching Hospital (U.P.T.H.) over a 10yr period (1995 to 2010). The accident and emergency department records; ward records and theatre registers were the main source of the information. Twenty four cases were recorded and analyzed. The data extracted for analysis were age, sex, occupation, clinical presentation, treatment, duration of stay and complications.

Results: All the patients were males; age range was 26-45 years. The commonest age group affected was 31-35 years, suicide accounted for 60% of cases. Majority (62.5%) of patients were unemployed. Lacerations of the anterior aspect of the neck, aphonia with exposure of the thyroid cartilage were the commonest clinical features. Majority (58.3%) of the patients had complications following treatment while two patients had mortality.

Conclusion: Cut throat injuries require a multidisciplinary approach and could be managed with better prognosis if the patients present early to the hospital and are given prompt attention. Poor socioeconomic status and poverty have been associated with a high incidence of cut throat injuries.

Key words: Cut throat injuries, Suicide, Homicide, Multidisciplinary management

Date Accepted for Publication: 18th April 2010

NigerJMed 2010: 264 - 270

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Introduction

Open injury to the neck is referred to as cut throat injury. It is an important cause of morbidity and mortality worldwide¹. Majority of cut throat injuries occur either from suicidal or homicidal tendencies¹. The incidence of suicidal and homicidal cut throat injuries is on the increase worldwide, including India where one million people die annually due to suicides and homicides alone². Most of the injuries occur in the anterior triangle of the neck¹. The neck contains a lot of vital organs and great vessels which make the patients with injuries to the neck to present most times as an emergency². Injuries to the middle portion of the anterior triangle area are more sinister because it houses the aero-digestive tracts and major blood vessels¹. The superior and inferior aspects of the triangle are rarely involved in these injuries¹.

Cut throat injuries can be suicidal, accidental or homicidal. Suicidal cut throat injuries are underreported in Nigeria and are usually situated higher up in the neck and are characterized by hesitation or tentative cuts while homicidal cut throat injuries are deep, situated lower down in the neck and are cuts made without hesitation^{3,4}. The incidence of accidental cut throat injuries in our society is also low³. It commonly occurs from road traffic accidents. Majority of the patients with cut throat injuries succumb to their injuries before presenting to a health facility⁵. The few that are taken to the hospital present sometimes with frightening clinical features such as profuse bleeding from the site of injury when the major vessels are involved and exposure of the cartilaginous framework of the larynx⁶. The major challenges in these injuries are those of severe hemorrhage which could prove rapidly fatal and airway obstruction^{1,6}. The thrust of the management therefore is in securing an airway and maintaining haemostasis. It may often necessitate resuscitation when the patient is in shock and emergency tracheostomy to relieve airway obstruction before surgical exploration of the wound and repair of the transected tissues⁷. However, in infected wounds, a debrimo of the wound should be carried out and patient covered with broad spectrum antibiotics⁷.

Laryngo-tracheal stenosis which can be a long term morbidity suffered by patients usually follows poor surgical repair of the involved tissues^{3,8}. Cut throat injuries particularly the ones with suicide as the motivating factor usually require interdisciplinary treatment that should involve the otolaryngologist, anesthetist and psychiatrist^{3,8}. This study is aimed at looking at the pattern of cut throat injuries as seen in University of Port-Harcourt Teaching Hospital (UPTH) and to highlight the factors responsible for the morbidity and the mortality associated with this condition.

Patient and methods

This is a retrospective review of all cut throat injuries that presented to the E.N.T. department of U.P.T.H. over a 10yr period (1995- 2010) was done. Most of these patients presented through the accident and emergency department. The ward medical records and theatre registers were the main source of the information in this study. Twenty four cases were recorded within this period of study and all were involved in this study. The data extracted for analysis were age, sex, clinical presentation, treatment, duration of stay and complications.

Results

There were 24 cases reviewed and analyzed. All patients were males. The age ranged from 26- 45 years, the commonest age group affected was 31-35 years. The study revealed that suicide accounted for 60% of cases of cut throat injuries while the remaining 40% was due to homicide. 40% of the patients who had suicidal cut throat injuries had a background history of psychiatry ill health. The Majority (62.5%) of the patients was unemployed.

Table I: Patient age Distribution

AGE (YEARS)	NO. OF CASES	PERCENTAGE (%)
26-30	6	25.00
31-35	8	33.33
36-40	5	20.83
41-45	5	20.83

n=24

Table II shows patient occupation

PATIENT OCCUPATION	NO. OF CASES	PERCENTAGE (%)
UNEMPLOYED	15	62.5
PETTY TRADERS	6	25
APPRENTICE LEARNING A TRADE	3	12.5

n=24

Table III: shows clinical presentations

Clinical presentations	No. of cases	Percentage (%)
Laceration of anterior neck, aphonia, with air bubbling through the wound exposing the thyroid cartilage	8	33.3
Laceration of anterior neck, aphonia and painful distress	6	25.0
Laceration of anterior neck, aphonia, with severe bleeding and irrational behaviour	4	16.7
Partly sutured laceration of anterior neck, restlessness Haemoptysis	3	12.5
Septic laceration of anterior neck exposing trachea rings, aphonia and fever	3	12.5

n=24

Table IV: shows treatment, duration of hospital stay and complications

Treatment	No. of cases	Percentage (%)	Duration of hospital stay	Complication
Tracheostomy, wound exploration and repair of wound in layers with passage of nasogastric tube	10	41.7	30 days	None
No tracheostomy, wound not explored but repaired in layers, Naso-gastric tube not passed initially.	7	29.2	28 days	Subcutaneous emphysema, Pharyngo cutaneous fistula which closed spontaneously
Wound debridement and repair, passage of nasogastric tube and then tracheostomy	3	12.5	60 days	Subglottic stenosis with difficulty in decannulation
Wound exploration and repair in layers, no tracheostomy, no nasogastric tube	2	8.3	14 days	Hoarseness and aspiration pneumonitis
Repair of wound in layers, tracheostomy and feeding gastrostomy	1	4.2	36 days	Oesophageal and laryngeal stenosis, patient later died at home
Resuscitation of patient by casualty officer only.	1	4.2	Less than 6 hours	Died before E.N.T surgeons reviewed patient

Discussion

Cut throat injuries irrespective of the cause remain an important public health problem worldwide^{1,2}. The study revealed that most of the patients were healthy male adults with majority in their 3rd decade¹ and this corresponds to other reports^{3,5}. 40% of the patients with suicidal cut throat injuries had previous history of psychiatry illnesses. All the patients in this study appear

to belong to the poor socioeconomic group (see table II). Psychiatric illnesses and poverty have been found by other researchers to be the main factors in suicidal cutthroat injuries^{1,8}. The patients' history whose cut throat injuries were due to homicide revealed that they were either kidnapped by ritualists or involved in communal land clashes. Besides, they had bruises on other parts of their body which also implicated homicide as a cause of the cut throat injuries⁶.

Patients with cut throat injury always present as an emergency to the hospital and are often dramatic in their presentation⁹. The clinician seeing them first should bear in mind the potential dangers posed by the patient injury to the vital structures in the neck particularly the great vessels, larynx and oesophagus⁹⁻¹⁰. Haemostasis must be maintained and airway secured as quickly as possible⁹. Besides, wound exploration should be carried out to ascertain the extent of injury before repair¹⁰. Resuscitation of the patient should be given priority and should be done without delay to avoid mortality. Complications arising from the injuries and treatment can be reduced to the barest minimum if the patients are well managed³. This study agrees with the work of other researchers⁹⁻¹⁰ who had reported that complications occurred more in patients whose wounds were not explored before they were repaired and those who did not have the passage of nasogastric tube and tracheostomy done for them (see table IV).

In the management of these patients, the main challenge was securing the airway and maintaining haemostasis. However, not all the patients in this study had tracheostomy done. Some of them presented first to a

health facility where the wounds were sutured before they were referred to the U.P.T.H. Majority of the patients with open neck wounds had neck exploration and definitive repair of the wounds. Psychiatry assessment was carried out for all patients with suicidal cut throat injuries. This form of management is not new it agrees with the management that has been reported by other researchers⁵⁻⁸.

Majority (58.3%) of the patients had complications following treatment except those who presented early to the hospital and were seen by the specialists. Two patients died due to associated complications and poor treatment. The first patient died within 6 hours of his presentation to the accident and emergency while he was being resuscitated. It was possible his injury involved a major neck vessel and must have died from irreversible shock due to severe hemorrhage. The second patient died at home 2 weeks after he signed against medical advice. His cut throat injury was homicidal and was complicated by severe stenosis of the upper third of the esophagus and subglottic stenosis of the larynx. He left the hospital with permanent tracheostomy and feeding gastrostomy. The news of his death was only made known to the management team when his relatives brought back the tracheostomy tube to the hospital.

Conclusion

Cut throat injuries could be managed with better prognosis if the patients present early to the specialists. A multidisciplinary approach and follow up of patients are advised. The government should aim at eradicating poverty from the society and increase the standard of living of all the citizens to help reduce some of the

predisposing factors associated with cut throat injuries in our society.

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