



## A STUDY OF INCREASING INCIDENCE OF CUT THROAT INJURIES AND THEIR MANAGEMENT

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### ABSTRACT

**INTRODUCTION:** Cut throat injuries are defined as incised injuries or those resembling incised injuries in the neck inflicted by sharp objects. They may be due to accident, homicide or suicide. They are potentially dangerous and require emergency treatment.

**AIM:** The aim of this study is to evaluate the incidence, age, sex distribution, cause and management of cut throat injuries in government general hospital, Guntur.

**METHODS:** This study was conducted from April 2019 to October 2019 and a total of 15 cases of cut throat injuries were included. The evaluation of the patients was done which begins with primary survey giving importance to airway, circulation, disability and exposure. Detailed clinical examination of the patients and necessary investigations were performed.

**RESULTS:** Out of 15 cases studied, 12 cases were males and 3 cases were females. The leading cause of cut throat injury was found to be suicide attempt. Out of 15 patients, 14 recovered completely and 1 patient died. Tracheostomy was done in 3 cases.

**CONCLUSION:** Cut throat injuries presenting as emergency require early intervention in the form of airway management and layer by layer surgical closure of the wound. All the patients who have attempted suicide should undergo psychiatric evaluation.

**KEYWORDS :** Cut throat injury, tracheostomy, psychiatry, suicide, homicide.

### INTRODUCTION

Cut throat injuries are the potentially dangerous conditions which require emergency treatment. Globally cut throat injuries account for approximately 5% to 10% of all traumatic injuries with multiple structures being injured in 30% of the patients. Now a days, the incidence of cut throat injuries is increasing partly because of increasing conflict over limited resources, poor socio economic status, poverty, unemployment, easy access to firearms, alcohol and drug addiction and increased road traffic accidents. They are variable according to their cause, extent and depth. These can be accidental or intentional. They can be due to road traffic accidents, domestic accidents, suicides or homicides using different sharp objects like blades, knives, axe, sickle, broken glass pieces. The complicated anatomy of the neck and presence of vital structures in the neck made the management of cut throat injuries difficult and challenging.

### MATERIALS AND METHODS

A prospective study was conducted at government general hospital, Guntur which is a tertiary care hospital. The study period was from April 2019 to October 2019 and a total of 15 cases of cut throat injuries were included in the study.

#### Inclusion criteria:

- All patients with cut throat injuries who came to casualty, GGH, Guntur and who gave consent for the study. Consent was taken from the patient or from their parents or guardian in case of minor or attendants.
- Patients of the age group 11 to 60 years were included in the study.

#### Exclusion criteria:

- All unconscious patients.
- Patients who refused to give consent for the study.

Data was categorised according to name, age, sex, mechanism of injury, site and extent of injury, treatment given, duration of hospital stay and final outcome of the patient. Patients were admitted in the emergency department where preliminary assessment, basic resuscitative measures and medicolegal formalities were carried out. After taking the consent, patients were taken to the operation theatre where the cutthroat injuries were explored and repaired surgically. 5 cases were repaired under general anaesthesia and 10 cases were carried out under mild sedation with local infiltration (1% lignocaine and adrenaline). Patients who made suicidal attempt were referred to psychiatrist for evaluation and counselling.

### IMAGE-1



### IMAGE-2



### RESULTS

In our study, out of 15 cases, 12 cases were males and 3 cases were females. Suicidal attempt was the most common cause of cut throat injuries followed by homicide. Motives behind suicidal cut throat injuries were found to be drug addiction, psychiatric illness and interpersonal conflicts. Accidental cut throat injuries were due to road traffic accidents. Blade was the common object used followed by knife. All the patients presented with open wounds and active bleed was present in 7 cases. Major vessels were involved in 4 cases and were ligated. Airway was involved in 3 cases for whom tracheostomy was done along with surgical repair of the cut throat injury. Zone II (mid portion of the neck) was the most common zone involved in our study. Blood transfusion was done in 7 cases. Decannulation of the tracheostomy tube was done one week after the tracheostomy. Wound

haematoma occurred in 1 patient 4 days after the repair of cut throat injury for which incision and drainage was done under general anaesthesia. 1 patient died due to septic shock and remaining all the patients recovered well and discharged. All the patients who attempted suicide underwent psychiatry consultation.

**Table-1 Distribution of patients according to age**

Age in years	No. of cases	Percentage of cases
11-20	2	13.3%
21-30	6	40%
31-40	6	40%
41-50	0	0
51-60	1	6.6%

**Table-2 Aetiology Of Cut Throat Injuries**

Aetiology	No. of cases
Suicide	8
Homicide	6
Accident	1
Total	15

**Table-3 Object involved in cut throat injury**

Object involved	No. of cases
Blade	8
Knife	4
Beer bottle	1
Sickle	1

## DISCUSSION

Management of cut throat injuries is a challenging task due to complicated anatomy of the neck and presence of vital structures like larynx, trachea, carotid arteries and nerves. Cut throat injuries are scarcely reported in medical literature. In our study, out of 15 cases, 12 were males and 3 were females. Male to female ratio was 4:1. Our results were similar to the other previous studies. Aich et al studied 67 cut throat cases, in which 47 were males and 20 were females. Majority of cases were young adults between 21 to 30 years of age. Adoga et al published a case series of 3 patients with cut throat injuries and all the 3 had suicidal attempt. Mohanty et al studied 588 suicide victims, marital disharmony (55%), financial burden (37%), were the main reasons for suicide attempts. Accordingly, in a study by Nason et al, the location of injury was zone I ( lower neck) in 20 cases (15%), zone II ( mid portion of neck) in 108 cases (81%) and zone III ( upper neck) in 5 cases (4%) which were similar to our study in which zone II was the most commonly involved region.

## CONCLUSION

Incidence of cut throat injuries and its morbidities are increasing in the present day life. In conclusion, according to our study suicide attempt is the commonest cause of cut throat injuries. Male to female ratio is 4:1 and majority of these injuries were involving zone II of the neck. All the cases were treated by emergency surgical repair of the cut throat injury and tracheostomy was done in 3 cases. Victims of cut throat injuries need psychiatry consultation to avoid second attempt and accordingly we have arranged for the same.

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