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## ABSTRACT

**Objective:** To evaluate the cause and pattern of cut throat injury.

**Study Design:** Prospective study

**Place and Duration of Study:** This study was conducted in Abbasi Shaheed Hospital and Karachi Medical and Dental College from 01.09.2012 to 31.08.2013.

**Materials and Methods:** Total number of patients with cut throat were 42 patients, in which 33 were selected in this study. During this period, those patients who came in emergency room in Abbasi Shaheed Hospital with cut throat injury were included in this study.

**Results:** In this study male were 24 patients (72.72%) and female were 9 (27.27%). Male female ratio was 2.66:1. Maximum incidence of age was between 21-30-years 9 cases (27.27%). Accidental cause was the main cause of cut throat with 19 patients 57.57%. In 9 (27.27%) cases of suicidal, 7 (77.77%) patients was history of psychiatric illness. Zone II was the commonest site which was 20 cases (60.60%) Skin and soft tissue is the commonest structure involved which was 20 cases (60.60%). 26 patients (78.78%) were discharge from ward after treatment.

**Conclusion:** Proper assessment the cause and accurate treatment may prevent complication

**Key Words:** Cut throat injury, Neck injury, Neck trauma, Penetrating neck injury.

## INTRODUCTION

Cut throat injuries and associated death are very common in our society<sup>1</sup>. Cut throat may define as an "injury inflicted by cutting or stabbing with a sharp instrument<sup>2</sup>. The injuries may be open or incised or incised looking injury in the neck due to sharp objects which may be superficial or penetrating in nature may be described by the term cut throat injuries<sup>3,4</sup>. Basic knowledge of the anatomy of neck is essential to understand for the assessment of injury and management<sup>5</sup>. Neck is divided into three zones. Zone I extend from thoracic outlet and clavicle to cricoid cartilage, with in this zone lie great vessels, trachea, esophagus, upper mediastinum, lung apices and thoracic duct. Zone II extend from cricoid to angle of the mandible and structures are carotid and vertebral arteries, jugular veins, pharynx, larynx, esophagus and trachea. Zone III from angle of mandible to skull base and structures include distal extracranial carotid and vertebral arteries and segment of the jugular veins. Zone I and Zone III are protected by bone while Zone II are not protected by bone, so risk of injury is different in three zone<sup>4,6</sup>.

Cut throat injury requires multidisciplinary approach for effective management. Cut throat injury may be homicidal, suicidal and accidental<sup>7</sup>. This requires the close collaboration of otorhinolaryngologist, anesthetic and psychiatrist<sup>8</sup>. Anesthetic secures compromised airway. Otorhinolaryngologist assesses the injuries and repairs the injury. All the cases of cut throat patients are attempted to suicide should have a psychiatric consultation<sup>9</sup>, because there is a possibility of a second attempt. Similarly, victims of homicidal cut throat need

psychological support to overcome the trauma<sup>10</sup>. Globally trauma currently account 10% of all disability adjusted life years lost and this is expected to increase to 20% by 2020<sup>11</sup>. In our country, there is no wide scale study done. A retrospective study on cut throat injury was done in a limited way<sup>1</sup>.

## MATERIALS AND METHODS

This prospective study was conducted in Abbasi Shaheed Hospital and Karachi Medical and Dental College during the period of 1/9/2012 to 31/08/2013. During this period, total number of patients with cut throat was 42 patients, in which 33 were selected in this study. Patients who came in emergency room in Abbasi Shaheed Hospital and Karachi Medical and Dental college with cut throat injury were included in this study. All the patients were properly assessed and properly examination done. Opinion was taken from anesthetic for compromised airway. After assessment of the injury repair the wound. Detail Performa prepared for the study, in which detail history was taken and examination findings were noted after taking consent from patients and attendant. Psychiatrist opinion was taken in homicidal, suicidal and accidental cases to prevent second attempt and to overcome the trauma. Relevant investigations were done where needed.

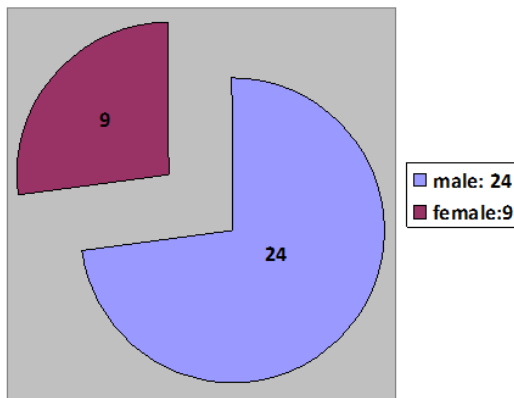
**Inclusion Criteria:** All patients who came with cut throat included in this study.

**Exclusion Criteria:** Patients were excluded from this study who

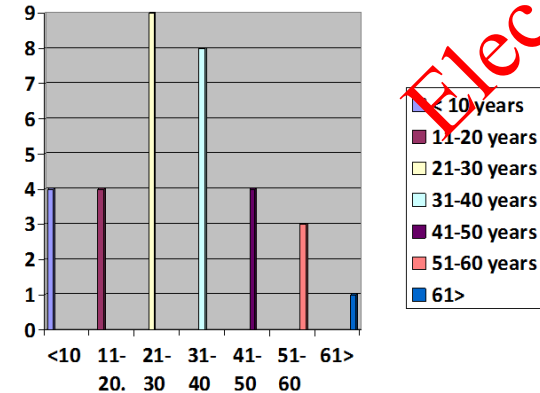
- Refer from other hospital after repair the wound.
- Received superficial abrasion or cut in throat.

**RESULTS**

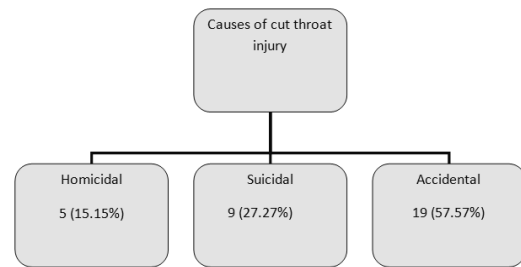
Pie chart 01 shows male and female comparison, male were 24 (72.72%) and female were 9 (27.27%). Male female ratio was 2.66:1. Bar chart shows age incidence, maximum incidence of age was between 21-30-years 9 patients (27.27%) followed by 31-40-years of age 8 (24.24%). Diagram shows that accidental injury was the main cause of cut throat, 19 patients (57.57%). In table 01, out of 9 (27.27%) cases of suicidal cause, 7 (77.77%) patients were the history of psychiatric illness. In pie chart 02, Zone II was the commonest site which was 20 cases (60.60%) followed by Zone III, 11 cases (33.33%). In table 02, Skin and soft tissue is the commonest structure involved which was in 20 patients (60.60%). 26 patients (78.78%) were discharge from ward after treatment and only 2 (2.06%) patients expired during treatment shows in table 03.



**Pie Chart No.1: Male Female Ratio**



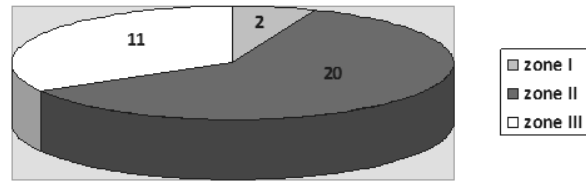
**Bar Chart: Age Incidence**



**Diagram: Causes of cut throat injury**

**Table No. 01: Psychiatric illness**

Psychiatric illness		No psychiatric illness
7 (77.77%)		2 (22.22%)
Male	Female	
5 (71.42%)	2 (28.57%)	



**Pie Chart No.2: Zone Involvement**

**Table No. 02: Structure involved**

Skin	02 (6.06%)
Skin and soft tissue	20 (60.60%)
Skin, soft tissue and cartilage	11(33.33%)

**Table No.3: Outcome**

Discharge	26(78.78%)
Expired during treatment	2(6.06%)
Brought dead	5 (15.15%)

**DISCUSSION**

Cut throat injury is a major health problem. WHO study shows, each year 5 million people around the world die as a result of this injury. As per WHO, it is estimated that for a every death 10-20 gets hospitalized and 50-100 receives emergency care<sup>12, 13</sup>. Unfortunately, few medical literatures are available. We should know the cause behind the incidence, for proper assessment, management and rehabilitation; it can be accidental, homicidal or suicidal. Every case should take opinion from Psychiatrist to prevent second attempt in case of suicidal and overcome the trauma in accidental cases. So, in this study evaluate the cause of cut throat injury and pattern of injury.

In this study, total number of patients were 33 in which 24 (72.22%) were male and 9 (27.27%) were female. Male female ratio was 2.66:1. Ozdemir B study showed male predominates with 60% cases female were 40%<sup>14</sup>. Most of the victims between the age group of 21-30 years of age (27.27%) followed by 31-40 years of age (24.24%). One study showed maximum number of victims was between the age group of 21-30 years of age. The reason is that between this age group tolerance level is less. Only one case (3.03%) found above the age of 61 above. Common causes of cut throat injury was accidental (57.57%) followed by suicidal (27.27%). Out of 9 cases of suicidal, 7 (77.77%) cases had a history of psychiatrist illness. One study showed, more than 90 percent people who kill themselves have a diagnosable mental disorder, most commonly a depressive disorder or a substance abuse disorder<sup>15</sup>. Psychiatrist opinion is very important part to prevent

second attempt. In suicidal cut throat, male were more as compared to female (77.77%). According to Kochanek KD four time as many men as women die by suicide<sup>16</sup>. Accidental and homicidal cases also need psychiatric opinion. Because, Post traumatic disorder can develop at any age, including childhood, but median age of onset is 23 years<sup>17</sup>. One study showed, about 19% of Vietnam veterans experienced Post traumatic disorder at some point after the war<sup>18</sup>. A study reported 25 % of patients having made a second attempt of suicide<sup>10</sup>. Zone II is the most common area involved (60.60%). Manilal Aich, et al. found commonest site was zone II which was (74.62%)<sup>9</sup>. Most of the patients came with skin and soft tissue injury 60.60% followed by skin, soft tissue cartilage involvement was 33.33%. 78.72% patients were discharge well after treatment. Only 2 (6.06%) cases were expired during treatment. Prompt assessment and early management not only prevent death but also prevent complication.<sup>19</sup>

## CONCLUSION

Incidence of cut throat injury is increasing now days. Incidence of complications and death may be decreased by early recognition, prompt treatment to the patients. Every patients should take psychiatric opinion to prevent second attempt and overcome the trauma.

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