

## MANAGEMENT OF SUICIDAL CUT THROAT-A CASE REPORT

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### INTRODUCTION

Suicide is one of the 10 leading causes of death in the world, accounting for more than 400,000 deaths annually<sup>1</sup>. Hanging, poisoning and fire arm are the most common methods of committing suicide in the world. Knives and razor blades are the common implements used in suicide<sup>2</sup>. Tentative marks were present in most fatalities<sup>3</sup>. Suicide by cutting one's own throat without hesitation cuts remains rare. Such life threatening injuries require emergency treatment<sup>3,4</sup>. Here we present a case of young individual presenting in ENT department Combined Military Hospital (CMH) Quetta with a suicidal cut throat injury, using a long bladed knife.

### CASE REPORT

A 23 year old Asian male was brought to the emergency of CMH Quetta with history of suicidal cut throat. He was conscious but unable to verbally communicate. After resuscitation and intubation, a detailed examination of his injury was carried out (fig-1). He had a horizontal cervical incision at the infrahyoid level in zone 2 of the neck 10 cm in length. The superior surface of the thyroid cartilage was completely exposed and the cut extended laterally to the anterior border of the sternocleidomastoid bilaterally. The incision was above the level of the vocal cords and they were intact. The hypopharynx was completely exposed with transaction of the epiglottis which was hanging by mucosal tags. Posterior pharyngeal wall was relatively spared and there was no major vascular injury as the carotids had been pushed posterolaterally during the extension of the neck. Carotid sheath was exposed on left side.

Patient was tracheotomized via the suicidal

cut and nasogastric tube was passed. Repair was done using 4/0 vicryl with extra mucosal stitches for repair of the hypopharynx, this was followed by three layer closure of the pharynx i.e. mucosa, serosa and connective tissue. During closure the avulsed epiglottis was stitched using 3/0 prolene to the thyroid cartilage. Torn muscles were approximated and closed in as anatomical manner as possible. Skin was closed using 3/0 prolene.

Patient was kept in surgical ITC, on total



**Figure-1: Photograph of suicidal cut throat (with permission of patient).**

parenteral nutrition (TPN) and broad spectrum IV antibiotics. Nasogastric feed was started on third day. Fiberoptic Nasoendoscopy done on 13th day showed mobile vocal cords. Cough reflex was present but he complained of aspiration. This was attributed to a combination of tracheotomy, muscular in-coordination due to pharyngeal repair and limited function of repaired epiglottis.

Following rehabilitation his aspiration resolved. He was decannulated on 20<sup>th</sup> day and discharged with fortnightly follow up advice.

During his stay on ENT ward he was evaluated by a psychiatrist and was diagnosed with major depressive disorder with symptoms of low mood, anhedonia and ongoing suicidal thoughts. His depressive symptoms seemed to have originated from psychosocial issues including lack of employment being a major factor in this case. He was therefore admitted to psychiatry ward to manage the depressive symptoms and ongoing risk of suicide. He was

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started on an antidepressant i.e. sertraline with limited benefit. Given the severity of depressive symptoms and ongoing suicidal thoughts he underwent ECT sessions with good effect.

He followed up after two weeks in the psychiatry ward. Tracheostomy scars as well as the cut throat scar were healing well, he was in good spirits and taking regular diet. His voice, speech and swallowing had returned to normal and he had no neurological sequelae of his suicidal cut throat.

## DISCUSSION

Suicidal attempt of cut throat nature are rare and suicidal incised wounds of the neck are typically multiple, often being characterized by a number of preliminary trial cuts called "tentative incisions." The classical description of the cut throat is of incisions starting high on the left side of the neck below the angle of the jaw, which pass obliquely across the front of the neck to end at a lower level on the right, for a right handed person<sup>1,4</sup>. However in our patient there were no tentative cuts rather a single straight cut across the neck with ragged edges on right side where the incision ended.

Management of a suicidal cut throat injury is fraught with complications and requires a multidisciplinary approach. It requires a close collaboration between the anesthetist, the otorhinolaryngologist and the psychiatrist. The location of the injury can predict risk and management<sup>5</sup>. Anatomically, the neck can be divided into three major zones for surgery. Zone-1 below cricoids to thoracic inlet, zone-2 from cricoids to the angle of mandible and zone-3 above the angle of mandible. The leading cause of death from penetrating neck injuries is hemorrhage<sup>6</sup>. Laryngeal mucosal lacerations from penetrating injury should be repaired early preferably within 24 hours<sup>5</sup>.

A study done in western Nigeria found that 53%-60% of the individuals presenting with cut throat injury were suicidal attempts and all

had a history of psychiatric illness<sup>7,8</sup>. Most of the cases of cut throat injuries occurring in Pakistan are of accidental or homicidal origin. A study done in Karachi found cut throat injury to be the cause of death in 20% of the cases but all were homicidal and study done in Faisalabad reported suicidal attempt by sharp objects to be around 4%<sup>6,9</sup>. It is thus safe to assume that suicidal cut throat injury is very rare or underreported in Pakistan and much work needs to be done to study it.

Psychiatric input and follow up should be made a necessary step in the management of suicide attempts. Beautrais found 6.7% mortality by suicide with 37% making a second attempt in 5 years<sup>10</sup>.

## CONCLUSION

Suicidal cut throat injury, though rare in our country, requires close collaboration of a multidisciplinary team. Surgical management as well as psychiatric care must go hand in hand.

## CONFLICT OF INTEREST

This study has no conflict of interest to declare by any author.

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