

## CUT-THROAT — A CASE REPORT

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### SYNOPSIS

**A case of suicidal cut-throat is presented. The extent of the injury to the various cervical structures is revealed. The crucial physical signs and investigative findings indicating the sites of injury are highlighted. The line of management is discussed.**

### INTRODUCTION

Cutting one's throat as a mean of committing suicide is extremely rare compared with other more fashionable methods such as jumping from highrise buildings, ingestion of poison etc. This paper presents a case of suicidal attempt by means of cutting the throat. The extent of the injury is quite alarming considering the fact that such injury is inflicted with a stroke or two of a kitchen knife. All the cervical structures in the path of the knife commencing from the skin of the neck to short of the oesophagus are severed. Had the carotid artery and the internal jugular vein not been narrowly spared, the patient would not have survived to reach the hospital.

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## CASE REPORT

N.K., a 27 year old Thai domestic servant, was admitted to the E.N.T. department in T.T.S.H. on 23.7.84. She had attempted committing suicide by slashing her throat with a kitchen knife.

On admission, she was in shock; pulse rate 120 per minute, BP 90/50 mmHg, respiration shallow and rapid. Immediate resuscitation was instituted following which emergency exploration of the wound was carried out.

At operation, a pretty neat semicircumferential mid-level neck wound measuring 10 cm was seen cutting through all the infrahyoid skeletal muscles, the medial half of both sternomastoid muscles, the thyroid gland transversely and transecting the trachea completely between 1st and 2nd tracheal rings. The trachea was further lacerated semicircumferentially on its anterior wall between the 2nd and 3rd tracheal rings. The carotid arteries, internal jugular veins and oesophagus were narrowly missed.

The cut muscles were resutured. The cut ends of the thyroid gland were sutured with continuous 30 catgut. The transected trachea was reanastomosed with interrupted 30 dexon placed circumferentially at an interval of about 3 to 4 mm, the lacerated portion was also closed with interrupted 30 dexon. A tracheostomy was created below the 3rd tracheal ring. The neck wound was cleansed with hydrogen peroxide, drains inserted and the wound closed.

Her post-operative recovery was uneventful. On the 24th post-operative day, a direct laryngoscopy with tracheoscopy was carried out under general anaesthesia. The larynx was found to be normal. A neat thin ring of scar was seen at the site of the anastomosis. It was not causing any stenosis. A small piece of granulation tissue was seen at the tracheostoma. This was excised and histology confirmed the nature of the tissue. Weaning of the tracheostomy was commenced on the 25th post-operative day and she was decannulated on the 27th post-operative day without any respiratory obstruction. Four weeks following her dramatic admission, she was discharged from the hospital. Long term follow-up of the patient was unfortunately not feasible as her employer packed her off to Thailand the next day after her discharge from the hospital.

## DISCUSSION

In a case of cut-throat or penetrating wound of the neck by a foreign body, one should bear in mind the possibility of injury to the following vital structures: pharynx, larynx, trachea, oesophagus, major cervical

vessels, nerve roots and spinal cord. Clinical examination and investigation should gear towards detecting any injury to these structures. Investigative procedures should as far as possible include X-ray of the neck and chest, Ba swallow, direct laryngoscopy, tracheoscopy and oesophagoscopy.

Bubbling of air through the neck wound indicates perforation of either the larynx or trachea. The presence of retropharyngeal air seen in the lateral view of a neck X-ray indicates perforation of either the pharynx or oesophagus. Le May (1) in a study of 25 cases of penetrating missile wound of the neck in Vietnam during the Vietnam War found the presence of retropharyngeal air a good indication of perforation of the pharynx or oesophagus. The presence of a perforation of the pharynx or oesophagus may also be demonstrated by a leak in the Ba swallow. However, negative result does not rule out the possibility of a perforation.

In the reanastomosis of a transected trachea, most authors advocate the use of absorbable suture. Bryce (2) uses one or two stainless steel wires in addition to absorbable suture to provide strength. He keeps the head of the patient flexed post-operatively for a week to 10 days by means of a suture from the chin to the sternum to relieve tension on the anastomosis. In cases in which a segment of the badly traumatised trachea needs to be resected, it is generally agreed that the maximal length of trachea resectable is 7 cm. The cut ends of the trachea need to be mobilised for reanastomosis by mobilising it in the neck, by a laryngeal release procedure as described by Dedo (4) or in addition by splitting the sternum and mobilising the main stem bronchi. Combination of the three procedures can achieve a mobilisation of the trachea for a distance of 7 cm. In mobilising the cervical trachea, one needs to bear in mind that the blood supply to the trachea is placed laterally deriving from the inferior thyroid artery and right bronchial artery. Mobilisation should therefore be in an anterior and posterior plane only, leaving the lateral fibrous attachment untouched.

## REFERENCES

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