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Case Report

Successful management of suicidal cut throat injury with internal jugular, tracheal and esophageal transection: A case report

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Introduction

Cut throat injuries are uncommon mode of committing suicides in Indian subcontinent. These injuries are usually superficial with multiple hesitation marks [1]. We hereby present a case of suicidal cut throat injury in a psychiatric patient with right internal jugular, tracheal and esophageal transection. Patient was successfully managed with primary vascular, tracheal and esophageal repairs following emergency room resuscitation. Such presentation of suicidal injuries is rare in terms of its mode and successful outcome and hence reported.

Case report

A 20 years old male was admitted to our emergency room in a state of shock and respiratory distress with a deep stab wound in his neck after attempting suicide. Patient had a history of being treated for major depression with poor follow up and drug compliance. As per the patient's sister who was the eye witness for the incident, suicide was committed using a sharp pointed kitchen knife which was stabbed by the patient in front and mid part of the neck. His vitals at the time of presentation were: pulse not palpable, blood pressure of 60/40 mm Hg, heart rate 150/min and undetectable saturation in extremities. A large hematoma was present over anterior aspect of neck. Tracheal end with air gushing was evident in between hematoma.

Emergency room resuscitation was started. Cervical spine was stabilized. Airway was secured using 7 Fr uncuffed tracheostomy tube which was inserted in the distal tracheal end by emergency trauma team (Fig. 1). Bilateral saphenous cut downs were done and intravenous crystalloids were started. Laceration in the neck was packed and patient was shifted to emergency operation theatre.

Emergency neck exploration was started by a team of surgeons under general anesthesia. Exploration of the neck revealed partial transection of the right internal jugular vein which was clamped and repaired using lateral prolene 6-O sutures. Hemostasis was achieved and tracheostomy tube was changed to 7.5 Fr cuffed tube for better ventilation. Vitals of the patient were stabilized by this time with intra-arterial pressures of 110/70 and heart rate of 98/min. Wound was thereafter carefully examined to reveal complete transection of trachea at the level of first tracheal ring and complete transection of cervical esophagus (Fig. 2). Platysma was found to

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Fig. 1. Showing airway management by 7 Fr tracheostomy tube inserted in the distal trachea and neck packed and pressurized to achieve hemostasis while the patient was shifted to operation theatre.

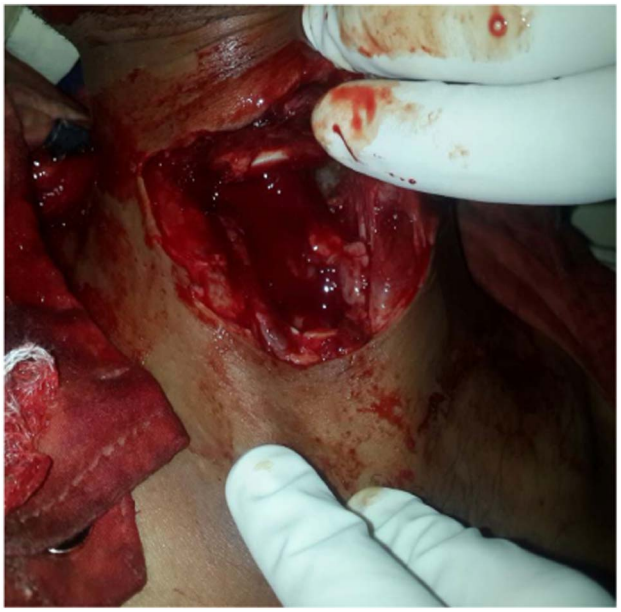

Fig. 2. Showing deep anterior neck wound, repaired right internal jugular vein, transected trachea (tracheostomy tube temporarily removed) and completely transected cervical esophagus.

be incised by the sharp stab but bilateral sternocleidomastoids were found to be intact.

Esophagus was repaired by absorbable 3-0 polygalactin round body sutures using interrupted sutures over a nasogastric tube in an end to end fashion (Figs. 3 & 4). Following esophageal reconstruction tracheal transection was repaired. Posterior layer of transected trachea was repaired using interrupted 3-0 polypropylene sutures while keeping tracheostomy in situ (Fig. 5). Surgical knots were carefully kept outside the lumen. After completion of posterior layer tracheostomy tube was withdrawn and a 7.5 Fr endotracheal tube was carefully inserted per orally into the distal tracheal rent. Rest of the tracheal anastomosis was completed over the endotracheal tube (Fig. 6). Keeping in view of healthy tracheal and esophageal ends no muscle flap was kept in between esophageal and tracheal anastomosis.

Following completion of tracheal reconstruction over endotracheal tube, distal trachesostomy was done using cuffed 7.5 Fr tracheostomy tube and endotracheal tube was gently removed. Platysma was repaired; subcutaneous and skin closure was done in layers. A 12 Fr suction drain was placed in sub platysmal plane. Ryles tube was fixed and was kept in situ for 15 days. At 15 days contrast enhanced CT scan of neck was done which revealed healed tracheal and esophageal anastomosis with no evidence of contrast leak. Following which Ryles tube was removed and patient was allowed liquid and semisolid diet. Down gradation of tracheostomy