

A CASE REPORT ON: MANAGEMENT AND COMPLICATION OF HANGING

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DOI: 10.47750/pnr.2022.13.S07.160

Abstract

Background: The process of breathing, or the exchange of air between the atmosphere and the lungs' alveoli, is impaired in cases of hanging by a neck rope, which results in asphyxia and death. **Main symptoms and important findings:** A 27-year-old male was admitted to a rural hospital with complaints of hanging from a fan at home after a fight with his wife, with unconscious state, and one episode of seizure associated with up rolling off the eyeball, frothing from the mouth, and tonic-clonic movement. There was previous deliberate self-harm. Given low GCS, the patient was immediately intubated with ET TUBE 7.5 and taken on mechanical ventilation on volume control mode with peep 5, RR 16, Spo2 100%, TV 360 ml. rapid antigen test was done which came out to be negative and ECG done and show sign of tachycardia. Chest and spine X-RAY was done. CT brain done and the finding was normal. EEG was done and show the finding was beta activity and no epileptiform changes. An orthopedic physician's opinion was taken and to continue Philadelphia collar for 4 weeks was advised. **The main diagnosis, therapeutic interventions, and outcomes:** After a physical examination and investigations doctor diagnosed a case of hanging with depression. Medical management was provided with Inj. Ceftriaxone 1 gm intravenous twice a day for 9 days, Inj. Pan 40 mg intravenous once a day, Inj. Emset 4 mg three times a day, Inj. Levipril 500 mg twice a day, Inj. Dexa 6 mg once a day for 5 days, Nebulization With Duolin And Budecort three times a day, intravenous fluids given. Now his outcomes were good. His complications were reduced. **Conclusion:** Hanging is a complicated case and produces more complications but early diagnosis management can secure the life of a patient and reduce the complication of hanging.

Keywords: Management, Complication, Hanging, Epileptiform.

INTRODUCTION

A person is suspended by a rope or noose around the neck. When used historically, the term "hanging" also applied to executions by crucifixion and impalement, in which the body would hang in midair. However, this definition of hanging from the Oxford English Dictionary is "putting to death by dangling by the neck." In many countries and regions today, hanging is still a common form of capital punishment that has been utilized since the Middle Ages¹. Homer's Odyssey contains the earliest written account of a hanging execution (Book XXII). In this specific definition the Instead of the term "hung," the past tense and past participle are referred to as "hunged." A common method of suicide is hanging, which involves tying a ligature around the victim's neck to render them unconscious before they pass away completely or partially suspended¹.

On a raised support, such as a stool, ladder, wagon, or other vehicles, the condemned prisoner performs the short drop hanging technique. After that, the person hanging from the rope is drawn away from the support. The rope around the neck becomes more constricted because of the weight of the corpse hanging by the neck, leading to death by strangling. This usually takes between five and twenty minutes. Short drops are still utilized in suicides and extralegal hangings, which lack the specialized equipment and drop-length calculation tables used in current methods. The Short drops were first used before 1850. Self-harm frequently involves hanging².

Compared to weapons or poisons, hanging supplies are considerably more easily available to the average individual. The supplies needed for suicide by hanging are much more freely accessible to the average person than firearms or poisons. Suicidal inmates frequently commit suicide by hanging because the complete suspension is not necessary (see suicide watch)³.

A hanging style that resembles complete suspension is produced by self-strangulation using a ligature around the neck and the partial weight of the body (partial suspension) to tighten the ligature. The victim is found when a partial suspension of suicidal hanging occurs. Standing with both feet on the ground, crouching, or kneeling. Sometimes partial suspension or weight-bearing is applied to the ligature in jails, mental institutions, and other places⁴. Where the removal of high ligature points makes it difficult to offer adequate suspension support (such as hooks or pipes)⁵.

OBSERVATIONS: Figure 1 illustrates the ligature material (nylon rope) tied around the neck and their mark, the injuries, and the ligature mark. Figure 2 shows the measurement.



Figure 1. Mark (o) around the neck of the decrease with a circular, continuous, horizontal severe ligature.

Patient-specific information:

A 27 years old male was admitted to Rural Hospital. The patient was brought to the hospital by his brother with complaints of hanging from a fan at home around after a fight with his wife. A case of hanging with depression was identified by the doctor following a medical examination and investigations. The patient has a history of deliberate self-harm. Also absent were any prior or present surgical histories, as well as any medical histories such as those for diabetes mellitus, TB, asthma, etc.

The primary concern and symptoms of the patient:

The patient was visited in casualty with complaints of hanging from a fan at home around 12:30 pm after a fight with his wife, with an unconscious state, the patient had one episode of seizure associated with unrolling of the eyeball, frothing from the mouth, and tonic, clonic movement.

Medical, family, and psychosocial history: The current instance has no prior medical history and comes from a nuclear family with four other people. Except for the sufferer, every member of the family is healthy. At the moment of admittance, the patient is unconscious. He kept up strong ties with the medical staff, the nurses, and the other patients.

Relevant past interventions with outcomes:

The patient was admitted to a civil hospital for additional treatment on November 30, 2021, due to a history of willful self-harm. However, after treatment, his outcome was satisfactory. After several particular tests and investigations, substantial harm was found on the lower side of the umbilical region.

Clinical findings: Because he is asleep, the patient cannot be orientated to time, date, or location. Moderately built, he had kept up his cleanliness once he regained consciousness.

Diagnostic assessment:

Physical examination, blood investigations, and imaging study were done. Based on patient history, physical examination, neck assessment, and X-RAY show the trachea was compression.

Main investigations:

Because of low GCS, the patient was immediately intubated with ET tube 7.5 and taken on mechanical ventilation on volume control mode with peep 5, RR 16, FIO2 100%, and TV 360ml. rapid antigen test is done which came out negative, ECG was done, and show signs of tachycardia. Chest X-RAY and cervical, spine X-RAY was done. CT scan of the brain and MRI brain were done. EEG show sign of beta activity.

Diagnostic challenges:

No, challenges face during diagnostic evaluation.

Diagnosis:

A case of hanging with depression was identified by the doctor following a medical examination and inquiry.

Therapeutic intervention:

Medical management was provided to the patient. Inj. Ceftriaxone 1 gm intravenous twice a day for 9 days, Inj. Pan 40 mg intravenous once a day, Inj. Emset 4 mg intravenous three times a day, Inj. Levipril 500 mg intravenous twice a day, Inj. Dexa 6 mg intravenous once a day for 5 days, Nebulization with Duolin and Budecort given three times a day, intravenous fluids are also given. To enhance immune function. Calcium and multivitamin supplementary were given for 15 days

Follow-up and outcomes:

Doctors take follow up on daily basis and advise giving psychiatrists opinions on the treatment of depression.

Adverse and unanticipated event: No adverse and unanticipated event.

Discussion:

A 27 years old male was admitted to a rural hospital with complaints of hanging from a fan at home after a fight with his wife, with an unconscious state, and one episode of seizure associated with up rolling off the eyeball, frothing from the mouth, and tonic-clonic movement. Previous history of deliberate self-harm. After admission history taking, the Doctor diagnoses a case of hanging with depression after conducting a physical examination and doing all necessary investigations. Medical management was provided as per protocol. Now patient condition was improved. So early detection and management are very important to prevent complications and secure the life of the patient.

In roughly half of all prison suicides in England and Wales, a suspension point is used. It is a cell window bar (48 percent) 21,30 the bed 11% and cell fitting like doors (13%), pipes, closets, sinks, or toilets (13%) are additional points of suspension (5 percent). 21 As preventative measures, it has been proposed to alter the design of cell window frames, remove the bars, or cover the bars with Plexiglas6.

Utilizing recessed lighting or lighting that collapses under stress are other recommendations for eliminating suspension points28, 31. Moreover, bunk beds and laundry racks should be removed, and replaced with concrete sleeping seats. It has been advised that all possible ligature points be removed from places where 'at risk' convicts are housed. In England and Wales, one of these facilities is the scene of one out of every six prison suicides7.

The eradication of all potential suicide methods³³ was one of several modifications to cell design that Atlas pushed for in 1989, but he also argued for “safer cells.” just recently been tested in prisons in England and Wales that are ligature-free (see Appendix 2). Out of the 47 000 total cells in the jail and penal services, 3000 are now “safer cells”.

The Safer Custody Group made an effort to strike a compromise between the necessity of lowering ligature sites and of creating a nurturing environment in the process. Specific guidelines have been set to prevent ligatures from being linked to furniture and sanitary equipment⁹. ³⁴ (This is a personal conversation.) is fitted in ‘safer cells.’ The bed foundation has been secured, the lights have been recessed, and the pipes have been hidden. For hanging garments with cardboard hangers, the garment hanging space is provided with a folding rail or a shelf lip.

Washbasins feature button water controls instead of taps, and toilets have an HM Prisons' Safer Custody Group John Dohan A ventilator button is flush and translucent polycarbonate sheeting covers the bars. The pedestal is covered with acrylic resin instead of using toilet seats since they could serve as ligature points. When it was discovered that fixed plugs on washbasins may be used as ligature sites, they were recently removed. A fishing line is used to probe individual cells; if the line gets caught under shelves or pipes, gaps are filled with anti-pick mastic. (Personal communication, John Dohan, HM Prisons' Safer Custody Group)¹⁰⁻²⁵.

As a replacement for shoe laces. ²⁸ It is difficult to restrict the use of ligatures while upholding a person’s dignity, especially those that include clothing¹¹. In 1999/2000, in prison suicides in England and Wales, bedding (56 percent) and shoelaces were the most often utilized ligatures (13 percent). ²¹ As a result, a study of tearing-resistant fabric mattresses is ongoing (Personal communication from John Dohan, Safer Custody Group, HM Prisons) Fasteners with Velcro have been suggested.

Suicide prevention recommendations for prison guards have been established by the World Health Organization (WHO). These instructions cover common ligatures as well as the need of keeping ligature points to a minimum²⁶⁻³⁷.

CONCLUSION:

Hanging is a complicated case and produces more complications but early diagnosis management can secure the life of a patient and reduce the complication of hanging.

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