

## Multiple Suicidal Attempts by a Pregnant Lady: A Case Report

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### ABSTRACT

Emergency Medicine always has varieties of cases. And it challenges the skills of treating physicians in day-to-day practice. Every suspicious case reflects with medicolegal presentation. In this article, author presenting an interesting rare case of multiple suicidal attempts during the course of pregnancy. A married pregnant 20 years old woman first; she attempted hanging by tying coconut rope to the ceiling followed by consuming Kerosene. She was admitted in the hospital with the history of Poisoning. On examination and personal history she revealed the facts. The case was further complicated due to pregnancy. On her admission she was five months pregnant. She was provided medical, obstetrical and psychiatric consultations. After discharge she was followed for the outcome delivery. She delivered a full term normal male baby. Neither she nor her relatives revealed the reason of her suicidal attempts. The case is discussed with the appropriate case histories.

**Key Words:** Suicidal attempt, hanging, kerosene poisoning, pregnancy.

### INTRODUCTION

The new era is known to be an era of psychological stresses. Adults are noted to be the commonest victim of such situations. Middle and low socio-economic families (in Indian) are susceptible to various stresses. Suicide is opted as an ultimate solution, by the said population. Ingestion of poisons, burns, hanging and drowning are some of the preferably adopted ways of committing suicide.<sup>1</sup>

In the available medical literature, there are studies involving normal delivery and other risk factors but poisoning and hanging during the pregnancy is discussed here.

### CASE REPORT

A 20 years pregnant woman was admitted to the I.C.U. on 02.01.2008 with history of poisoning. On examination, we noticed intermittent marks of hanging around neck. Anteriorly it was present above the level of thyroid cartilage. On right side it was extending from the midline towards the lower border of the mandible, of size 10 x 3 cm. It was running upward and backward. Laterally it was present along the lower border of mandible on either side of size 9.5 x 1.8 cm on right and 12 x 2.5 cm on left side. It was reddish brown in colour; suggesting a fresh hanging mark. Hanging mark was absent posteriorly. With the above findings we interviewed the patient in taking confidence. She revealed that she had tried multiple attempts for suicide during this course of pregnancy. First, she attempted hanging by tying coconut rope to the ceiling. But she felt down since the rope got broken. Then she further attempted suicide by consuming Kerosene, of unknown quantity.

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Initially her vital parameters were very poor. She was semiconscious and in a state of shock. Her blood pressure was 80/60 mm of Hg. She had tachycardia. Her chest examination revealed bilateral crepitations with few rhonchi. On palpation five months pregnancy was noted. During neurological examination she had hypotonia and sluggish reflexes. Plantars were equivocal. Her Glasgow Coma Scale (GCS) was between 8 to 9.

She was immediately intubated (Photograph 1) and put on artificial respiration (SIMV Mode of Ventilator). She was given sufficient IV fluids and a seven-day course of appropriate antibiotics (Cefotaxime and Metrogl) for kerosene related aspiration pneumonia. Suction and nebulization was done as and when required. In view of pregnant uterus Obstetrician's opinion was taken. Obstetrician noticed viable foetus. Foetal heart sounds (F.H.S.) were normal indicating no foetal distress.

Meanwhile her investigations were done, which were as follows -

1. X-ray chest was suggestive of "Chemical aspiration pneumonia" (Photograph 2).

### 3. Hemogram

Details	Patient's Values	Normal values
Hb	11.8 gm%	12-16 gm%
TLC	19000 / cu mm	4000-11000 /cumm
Serum Creatinine	1.2 mg/dl	0.7-1.4 mg/dl

### 4. Blood Gas Analysis Varies between:

Details	Patient's Values*	Normal values
pH	7.35-7.46	7.38 - 7.44
pCO <sub>2</sub>	26-33 mm of Hg	40 + 2 mm of Hg
pO <sub>2</sub>	103-99 mm of Hg	95 + 5 mm of Hg
sO <sub>2</sub>	98-95%	97 + 2%
HCO <sub>3</sub>	14-19 mmol/L	24 + 2 meq/L
ABE	10 to -3 V mmol/L	-----

\*Values were noted in this range during multiple investigations

2. USG Abdomen was suggestive of "A single intrauterine foetus of 23.1Wk + 1 Wk.

On the 2<sup>nd</sup> day she regained consciousness. Her blood pressure and arterial blood gas parameters were normal. She gradually weaned off the ventilatory support. Her chest findings were persistent therefore the antibiotics were continued for seven days. The ventilator support was withdrawn on 3<sup>rd</sup> day. She was subsequently extubated.

Obstetrician's findings and supported U.S.G. concluded live foetus of 24 weeks gestation. Psychiatrist's consultation was taken in view of suicidal attempts. She was discharged after one week and advised for regular follow up. But as usual she did not turn up so we followed at her mother's home. She delivered male child, after normal home delivery. Both mother and child were healthy as last seen in May 2008. (Photograph 3)

## 5. Other investigations

Details	Patient's Values	Normal values
Sr. Potassium	3.3 meq/L	3.5-5 meq/L
Bleeding Time	2'=00"	2-7 min.
Clotting Time	5'=30"	4-9 min.
INR	1.0	1.0

## 6. Urine

Details	Patient's Values	Normal values
Specific Gravity	1.010	1.001 - 1.035
pH	7.5	5.0 - 9.0
Albumin	++	-----
Sugar	Nil	-----

## DISCUSSION

Suicides have been increasing day by day in young people during the past three decades. This has led to increase public and policy concern.<sup>1</sup> Risk factor domains can be enlisted as a consequence of adverse life sequences<sup>1</sup>, socio-cultural factors like transgenerational cultural conflicts, psychosocial problems, media exposure, unemployment, social distress and family structure.<sup>2</sup> In addition to these Annette Beautrais<sup>1</sup> enlisted social and educational disadvantage, childhood and family adversity, psychopathology, individual and personal vulnerabilities, exposure to stressful life events and lastly social, cultural and contextual factors.<sup>1</sup> In suicides, ingestion of poisonous substances is most popular followed by hanging.<sup>2</sup>

There are many reported cases of survival after hanging. Kodikara S<sup>3</sup> reported a case of attempted suicidal by hanging that survived after resuscitation, without any adverse neurological outcome. A study conducted by Karanth S et al<sup>4</sup> indicates that a delayed presentation to a medical facility and a low GCS at presentation predict a poor outcome in suicidal hanging cases. Matsuyama T et al<sup>5</sup> counted Hanging time,

presence of Cardio-pulmonary Assistance (CPA) at the scene and on arrival, and GCS on arrival as prognostic factors of outcome in hanging.

Akdemir G, & Ergüngör F<sup>6</sup> reported woman with a score of 7 on the GCS, who had attempted suicide by hanging. CT scan showed bitemporal hippocampal atrophy and SPECT showed non-activated area on right temporal and temporo-occipital regions. There have been few reports of involvement of the brain parenchyma in attempted suicide by hanging shown on CT, all showing ischaemic lesions. But multifocal intracerebral haematomas due to hanging on CT was first reported by Brancatelli G et al.<sup>7</sup>

There are noted cases of regained consciousness in hanging even after the phase of unconsciousness. Delayed deaths are also possible after survival in hanging. Various factors like complete or partial hanging, type and situation of ligature and type of knot determines the degree and rapidity of the asphyxial symptoms.<sup>8</sup>

Pregnancy itself is a complicated process and if the hanging and the poisoning further complicate it, then the question will arise; whether it (hanging or poisoning) is going to affect the health of the developing foetus? There are so many factors, which determine the fate of the embryo. There

was an unusual case reported by Beherab et al<sup>9</sup>, about a pregnant woman who delivered a healthy male baby, following suicide by hanging. At the scene, the lady was found hanging in her house. The live healthy newborn baby was found lying on the ground with the umbilical cord in situ and placenta inside the uterus.<sup>9</sup>

Kerosene is an aliphatic hydrocarbon. Ingestion of kerosene causes hypoxia mainly due to CNS depression. The usual symptoms are giddiness, blurred vision, cyanosed face, dyspnoea and drowsiness. Coma may precede death. Aspiration of kerosene and its fumes produces chemical pneumonitis. Kerosene spreads easily and rapidly in the lungs due to its low surface tension. Maintaining ventilatory status during treatment and oxygen supplementation is of greater help.<sup>10</sup>

### CONCLUSION

Incidence of suicide is coupled with stressful events. Survival after the episode of hanging depends on various factors like, complete or partial hanging, type and situation of ligature, type of knot and the delay for hospitalisation. The prognosis is good in cases of early hospitalisation without any major neurological deficit. Outcome of the pregnancy may not be hampered in early recovery. Respiratory distress due to hanging and pulmonary oedema as snag of kerosene poisoning, may not affect the health of the developing foetus. The further research is incalculably rewarding in such cases.

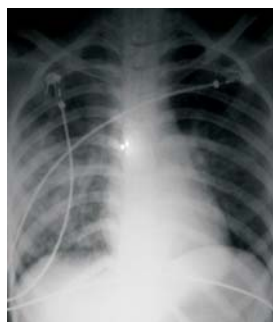
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Photograph 1



Photograph 2



Photograph 3

