ORIGINAL RESEARCH PAPER

Obstetrics & Gynaecology

'CANNOT INTUBATE AND CANNOT VENTILATE'- EMERGENCY TRACHEOSTOMY IN A CASE OF ECLAMPSIA , AS A LIFE SAVING PROCEDURE

KEY WORDS: Tracheostomy, Eclampsia, Obstetric Hysterectomy .

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ABSTRACT

INTRODUCTION: Tracheostomy is one of the oldest surgical procedures one in order to treat acute upper airway obstruction, acute / Chronic respiratory failure or require continuous and intermittent respiratory support. It involves opening front wall of trachea to establish breathing and save endangered life. There have been very few cases with Tracheostomy done in hypertensive mothers.

CASE: A 27 year old female Pregnant woman, 4th gravida came to our department with 3 episodes of Convulsions, in drowsy state. Patient was induced with catheter cerviprime gel induction in view of antepartum eclampsia. Patient was later shifted for Emergency LSCS in view of Antepartum Eclampsia with DIC. She delivered a male child , 2.4 kg, with normal APGAR scores at first and fifth minute. Post- operatively during monitoring patient went into Post partum haemorrhage , patient was taken for Emergency Exploratory Laparotomy SOS Obstetric Hysterectomy. Post operative recovery was uneventful.

CONCLUSION: Aim of this case report involves Eclamptic mother taken for Emergency LSCS, during Anaesthesia- due to difficult intubation, patient could neither be intubated nor ventilated and hence Emergency Tracheostomy was performed.

CASE

A 27 years, fourth gravida at 40 weeks of gestation who was a booked case in our ANC clinic but however did not receive regular antenatal check-ups and medications . Patient had presented with history of 3 episodes of convulsions and in a drowsy state. Patient had received primary management at nearby PHC with antihypertensives and Inj. Magnesium Sulphate (Loading dose as per Pritchard's regimen).

Patient had previous 2 Full term Normal delivery and both were uneventful. She had single visit at our hospital .On examination, Patient was in post ictal phase , drowsy with e/o swollen tongue(due to Tongue bite).Her vitals were stable and she had full term gestation with adequate liquor .On Per-Vaginal examination- 2 cm dilated with 10-20% effaced, membranes intact, station at -2 with LOA position and Pelvis adequate for baby. After complete evaluation and stabilisation , Patient was induced and was observed for progress of labour. During progress of labour there was evidence of patient being in DIC . Patient was immediately shifted for Emergency LSCS .Due to vocal cord oedema and short mouth patient could not be intubated hence decision of Emergency Tracheostomy taken by Otorhinologists.

On Monitoring there was evidence of Atonic Post-Partum Haemorrhage. Medical Management for Postpartum haemorrhage given. In spite of prompt management patient kept bleeding!

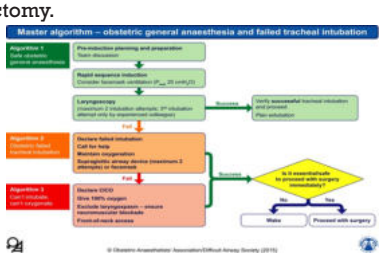
Hence, As a Life Saving Procedure, Decision of Exploratory Laparotomy SOS Obstetric Hysterectomy was taken. Post OH patient was monitored in TICU and discharged on day 14 with advice given for tracheostomy care. After 6 weeks tracheostomy tube was decannulated.

Image showing mother underwent Emergency Tracheostomy due to vocal cord Edema and Short mouth.

DISCUSSION

Oedema can be frequently associated in Hypertensive disorders of pregnancy. In certain parts, it is referred to as "Edema Proteinuria-Hypertension(EPH) – gestosis. Laryngeal oedema is one of the serious complications in Obstetrical Anaesthesia.

Two pathogenic mechanism involved in acute respiratory insufficiency in Preeclampsia. The First, Central mechanism based on vasogenic oedema, Cerebral Vasoconstriction or vasospasm, Hypertensive Encephalopathy, Cerebral Oedema, Cerebral haemorrhage and metabolic Encephalopathy, leading to central inhibition of respiratory function. The second pathogenic mechanism involves laryngeal oedema resulting due to hypoproteinaemia increasing acute respiratory insufficiency. Mostly its both mechanism responsible for respiratory insufficiency in Eclampsia or preeclampsia. Surgical techniques involved in Cannot intubate and cannot ventilate are Cricothyrotomy and Tracheostomy. Although a rare event, failed Tracheal intubation can be disastrous and hence careful preoperative assessment of the airway Is vital. For it. Both trained group of Surgeons and anaesthetist is vital. According to studies thin, soft trachea are one of the factors making this type of intervention difficult. This type of oedema as separate entity of Larynx oedema in gravidity as Laryngopathia Gravidarum. This had been one of few cases of urgent Tracheostomy in Eclamptic mothers for Emergency procedure like Obstetric Hysterectomy.



Master algorithm- Obstetric General Anaesthesia and Failed Tracheal Intubation.

CONCLUSION-

Post LSCS day 1 with Antepartum Eclampsia followed by Obstetric hysterectomy and need for urgent Tracheostomy hasn't been described in literature so far. Although a rare event, failed Tracheal intubation can be disastrous and hence careful preoperative assessment of the airway Is vital.

The mechanism responsible for acute respiratory insufficiency is multiple and mainly are due to Cerebral, Laryngeal and lung oedema. A team of efficient Gynaecologists, Anaesthesiologists and Otorhinologists is necessary.

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REFERENCES:

1. J Brimacombe - Anaesthesia and intensive care, 1992 - journals.sagepub.com
2. GM Vasdev, BA Harrison, MT Keegan, CM Burkle - Journal of anesthesia, 2008 – Springer
3. JM Davies, S Weeks, LA Crone, E Pavlin - Canadian Journal of …, 1989 - Springer
4. https://www.researchgate.net/ publication/ 260780445_The_ case_ of_ the_ urgent_tracheostomy_in_patient_with_rare_condition-_Preeclampsia.
5. file:///C:/Users/91720/Downloads/Tillmann Hein1984_ Article_ Cardiorespiratory ArrestWithLar.pdf