Anaesthetic Management of a Complicated Bilateral Tubo-Ovarian Abscess Posted for Diagnostic Laparoscopy followed by Laparotomy

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Abstract

A middle aged female presented with abdominal distension due to tubo ovarian abscess compressing both ureters leading to Acute Kidney Injury and reactive pleural effusion posted for diagnostic laproscopy and laparotomy done under general anaesthesia with Rapid Sequence Induction. The aims of anaesthetist during surgery were 1) To maintain hemodynamic stability and prevent regurgitation. 2) To provide optimum analgesia intraoperatively and post operatively and 3) To maintain Peak Airway Pressure within normal limits to prevent the basal lung atelectasis. Intra-operatively hemodynamic vitals were monitored and airway pressures were maintained within normal limits. Intra operatively laryngospasm occurred that was treated with i.v. succinylcholine and regurgitated contents were suctioned immediately. Patient was uneventfully managed and underlying pathology was corrected. Post-operatively; patient was shifted to ICU with endotracheal tube in situ that was weaned off eventually and successfully. Thus finally meticulous and collaborative efforts of Anesthesiologist, Gynecologist and para-medical staff, such critical patient can be well managed pre, intra and postoperatively uneventfully.

Keywords : Anaesthetic, Aspiration, Laparotomy, Laryngospasm

Introduction:

A middle aged female presented with abdominal distension due to tubo ovarian abscess compressing both ureters leading to Acute Kidney Injury and reactive pleural effusion posted for diagnostic laproscopy and laparotomy done under general anaesthesia with **Rapid Sequence Induction**. Skillful personnel and utter vigilance is required to overcome challenges posed while managing such case. Thus both airway procurement as well as patient management are challenging for an Anaesthetist.

Case report:

A 42 yrs old female patient weighing 60kg was presented with history of abdominal distension with diarrhea, vomiting, decrease urine output and fever. Effort tolerance was good. Patient had no significant family history. In pre-operative investigations, Hb was 8.7 gm% with leukocytosis; total count being 19,810. Renal Function Tests showed increased creatinine to 2.05 and electrolytes were normal. Liver Function Tests were within normal limits. ECG and 2D ECHO findings were also normal. On auscultation, bilateral air entry was equal and bilateral ronchi were present. HRCT showed CP angle blunting with mild bilateral pleural effusion.

Risk of general anaesthesia explained to patient and high risk written and informed consent was taken. Pre-operative vitals were as follows: P-100/min, BP-126/84mmHg, SpO_2-94% on room air.

Anaesthetic Management: All emergency drugs and equipments to prevent aspiration were kept ready. Monitors attached and 2 IV lines were secured with wide bore canula. Premedication was done with Inj. Midazolam 1mg iv, Inj. Rantac 50mg iv, Inj. Emset 4mg iv, Inj.Glycopyrolate 0.2 mg iv, Inj. Dexona 8mg

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iv, Inj. Deriphylin 160 mg iv, Inj. Hydrocortisone 200mg iv and Inj. Fentanyl 100mcg iv. pre-oxygenation with 100% oxygen for 3minutes was given. Induction was done with Inj. Propofol 100mg iv, Inj Scoline 100mg iv. Rapid Sequence Intubation was performed. During rapid sequence intubation abdominal contents got regurgitated which were immediately suctioned and head low position was given and thus aspiration was prevented. Also patient went into laryngospasm while intubation which was managed by iv succinylcholine 10 mg. Patient was intubated with portex oral cuffed endotracheal tube size 7mm and maintained with mixture of 50% oxygen,50% N_2O and sevoflurane (2-3%) and Inj. atracurium 5mg in incremental doses.

Under all aseptic and antiseptic precautions, triple lumen CVP was inserted in Rt. Internal jugular vein with Saldinger's technique, fixed at 14 cm after free flow of blood and sterile dressing with tegaderm was applied. 2000 ml of ringer lactate, 500 ml hydroxyethyl starch, 400 ml PCV given. Total duration of surgery was 3 hrs. Approximated blood loss was 700 ml, urine output was 1200 ml while intraoperatively oxygen saturation of patient was 94% which improved after removal of intra-abdominal pathology and then increased to 99% by the end of surgery. Patient was shifted to ICU for postoperative management with endotracheal tube insitu and further management was done by intensivist.

Discussion:

Emergency laparotomy is always a challenging case for both surgeon and Anaesthetist.[1] Difficulties enhanced due to compressive effects caused by mass over abdomen.[2] Rapid sequence induction and intubation (RSII) for anesthesia is a technique designed to minimize the chance of pulmonary aspiration in patients who are at higher than normal risk.[3,4] Despite of Rapid sequence intubation, the underlying compressive pathology lead to regurgitation which was followed by laryngospasm but both these hurdles were relieved with time bound and active management of Anaesthetist. Laryngospasm was relieved by Inj. Scoline and 100% oxygen.[5] Thus patient was prevented from developing aspiration pneumonia and atelectasis like conditions. [6,7]

Conclusion:

Meticulous and collaborative efforts of Anesthesiologist, Gynecologist and para-medical staff, such critical patient can be well managed pre, intra as well as postoperatively uneventfully.

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