MATERIAL AND METHODS
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The present study was conducted on 90 young pregnant patients of ASA grade I and II, scheduled for elective caesarean section under general anaesthesia, admitted in the department of Gynaecology and Obstetrics, M.L.B. Medical college and Hospital, Jhansi.

Criteria for including the patients in the study are:

1. Patient with no antipartum haemorrhage.
2. Patient with no cardiac disease like valvular heart disease.
3. Patient with no foetal distress.
4. Patient with no pregnancy induced hypertension or eclampsia.
5. Patient with no full stomach.
6. Patient with no associated medical problems – like diabetes, liver disease etc.

Each selected patient was randomly assigned to one of the three following group, containing 30 patients each and depending on the induction agent used.

Group I - Thiopentone sodium 2.5% 5mg/kg body weight
Group II - Propofol 0.5% 2 mg/kg body weight
Group III - Propofol 1% 2 mg/kg body weight
1. Any disease of respiratory system, cardiovascular system, Hepato billiary system, renal and central nervous system present or past.

2. Any drug allergies.

3. Previous drug intake.

4. Course of present pregnancy

5. Course of previous pregnancies and complication thereof if any.

6. Any previous anaesthetic administration.

7. Any drug abuse or addiction or habituation.

8. Social and economic status.

They were then subjected to the following scheduled clinical examination.

**General Examination :-**

1. Pulse :- rate, rhythm, volume, character, and synchronicity with other side.

2. BP – Systolic and diastolic both.

3. Body weight in kg.

4. Temperature

5. Hydration of patients

8. Icterus

9. Assessment of airway by adequate mouth opening and neck movement.

10. Edema.

11. Any spinal deformity like kyphosis, scoliosis etc.

**Systemic Examination:**

Respiratory system - rate, rhythm, movement of chest, palpation, percussion and auscultation

Cardiovascular system - Inspection, palpation of the precordium and auscultation of heart sounds in all four cardiac areas-like mitral, tricuspid, aortic and pulmonary area.

Abdominal examination - Inspection and palpation for any fluid or organomegaly

**C.N.S. examination:**

1. Sensory system - The sensation of touch, pain, temperature position, vibration and cortical senses were tested in all patients.

2. Motor System:-
(b) Deep tendon Reflexes—like biceps, triceps, knee jerk, ankle jerk were tested.

Patients were then investigated as follows :-

1. Blood examination - Hb% TLC, DLC, Sugar, Urea and Creatinine

2. Urine examination -
   a) Routine Sugar
      Albumin
   b) Microscopic

3. EKG in all leads

4. Chest X-Ray (PA view)

5. Special investigations as and when indicated.

**Pre-medication:**

All patients were assured and reassured during pre-anaesthetic check up. Proposed technique of anaesthesia was explained to everyone in detail and a written and informed consent obtained. Patients were kept fasting for 8 to 12 hours prior to surgery. Injection Metoclopramide 0.2 mg/kg body weight and injection Ranitidine 1.0 mg kg-1 body weight were given intramuscularly 45min before induction of anaesthesia. Injection Atropine 15µg/kg body weight was given intravenously 5 minutes before induction of
anaesthesia inside the operation theatre through an I/V line preset using 5% Dextrose solution.

**Induction:-**

Preoxygenation was done with 100% oxygen for 3-5 minutes. Patients were induced by either Thiopentone sodium 5 mg kg-1 body weight (Group-I) or Propofol 2 mg kg-1 body weight 0.5% solution (by adding equal amount of 5% dextrose) (Group – II) or Propofol 1% (Group-III) through slow I/v injection over a period of 30 seconds. Ventilation was assisted with 100% of oxygen as and when apnoea occurred. Laryngoscopy was then performed under the effect of suxamethonium in doses of 1.5 mg kg-1 body weight and proper size endotrachial tube introduced atraumatically. Patients were then connected to Boyle’s Basic Anaesthetic machine via Bain’s rebreathing anaesthetic circuit and I.P.P.V started.

**Maintenance:-**

Anaesthesia was maintained with O₂ and N₂O in a ratio of 40:60 and Vecuronium bromide (non-depolarising muscle relaxant) and intermittent positive pressure ventilation.

**Reversal:-**

On completion of surgery residual neuro muscular block was reversed by Neostegmine (45 μg/kg body weight) and Atropine (25 μg/kg body weight) I/V slowly.
Observation:-

During induction following data were observed and recorded

1) Pain on injection

2) Induction time in seconds from injection to spontaneous closure or loss of eyelid reflex.

3) Pulse rate.

4) Blood pressure – Systolic and Diastolic, during induction during laryngoscopy and then at regular interval till the end of surgery.

5) Arterial Oxygen saturation.

6) Abnormal limb movements

7) Presence or absence of apnoea

8) Side effects if any like cough and hiccup.

9) Apgar scores

10) Post operatively patients were enquired about acceptance with particular reference to induction phase and any incidence of awareness during anaesthesia.