**STANDARDS FOR BASIC ANESTHETIC MONITORING**

 **ISA KANYAKUMARI**

 Based on ***International Standards for a Safe Practice of Anaesthesia 2010*** and the ***Monitoring Standards*** prescribed by Indian Society of Anaesthesiologists (ISA) for providing Anaesthesia, we ISA Kanyakumari Branch have formed a ***Basic Anaesthesia Monitoring Standard*** to be followed by our ISA members for all Local, Regional and General Anaesthesia. The protocol was designed after taking in to consideration of our Anaesthetists request and our local hospital environment.

We are request the hospital management to provide the following basic monitors and man power for the effective administration of Anaesthesia.

**SECTION I: The Anesthesiologist**

1.1 All anesthetic procedure shall be provided by a qualified Anesthesiologist, possessing an anesthetic qualification of Diploma (D.A) or M.D. degree or D.N.B.in Anesthesiology recognized by Medical Council of India.

1.1.1 It may be noted that providing anesthesia has its own morbidity and mortality. In the interest of the patient and his outcome, it should be ensured that only qualified Anesthesiologist, who is well aware of problems and solutions shall provide anesthesia to the patient. The practice of any other persons (by Surgeon himself or nurse or technician) administering anesthesia should strongly be discouraged.

1.2 The hospital management shall be responsible for employing or providing a qualified Anesthesiologist for the surgery.

1.2.1 The hospital management should ensure that only qualified Anesthesiologist provide anesthesia in their hospital.

1.3 The hospital management shall provide an assistant to the Anesthesiologist, who may be a trainee Anesthesiologist, or a nurse or an anesthesia technician or a paramedical person trained in that job.

**Section II: Monitors and Monitoring the Patient**

A separate Anaesthesia Risk Concern to be obtained every case.

*Pre Anaesthetic Check List* and *Intra operative Anaesthesia Monitoring Chart* are must for every case.

During anesthesia, it is mandatory for all patients to be monitored for Oxygenation, Ventilation, and Circulation both clinically and with appropriate monitors.

**Basic Monitors**

1. Boyles Machine with following features

 - Hypoxic guard

 - FiO2 Monitor or Oxygen Analyser

 - Visual and audible oxygen failure alarm

 - Vapourisers – Halothane, Isoflurane , Sevoflurane – Atleast any one.

 - Uninterrupted Oxygen supply. (Either A type cylinders or Central supply)

 - Systems with interlocks (tank yokes, hose connections, etc.) should be used to prevent misconnection of gas sources.

2. Pulse Oximetry preferably with five parameters:

 - Pulse – (Heart Rate) with waveform

 - Oxygen saturation

 - ECG

 - NIBP

 - Respiration

 - Temperature

3. In addition to the above a working Sphygmomanometer and Ambu bag should be available.

4. Capnography – ET CO2 Monitor is essential for all GA cases and is mandatory for Laparoscopic Surgeries.

5. The following **Anaesthesia equipments** should be provided by the hospital management:

Complete anaesthesia, resuscitation and airway management systems

Work surface and storage

Laryngoscope, Macintosh blades, Miller blades, Polio blades and Mc Coy

Face masks (sizes 00-5)

Oral airways sizes 000-4

Magill forceps (adult and child), intubation stylet and/or bougie

Supra glottis Airways - Laryngeal Mask Airway (classic) Optional – Proseal and intubating LMA

Infra glottis Emergency Airways – Cricothyrotomy or Tracheostomy set

Paediatric anaesthesia system

Adult and paediatric breathing circuits

Adult and paediatric resuscitator sets

Pulse oximeter - spare probes, adult and paediatric

Defibrillator (one per O.R. suite / ICU)

Foot or electric suction

IV pressure infuser bag

Nerve stimulator - optional

Fibro optic Intubating Bronchoscope – in Referral hospitals.

**Equipment: disposable**

Tracheal tubes sizes 3-8.5 mm

Spinal needles of all sizes

Epidural needles and Catheters

 Nasogastric tubes of all sizes

CVP catheters

ECG electrodes

IV equipment (minimum fluids: normal saline, Ringer's lactate and dextrose 5% and adequate blood and blood components)

Paediatric infusion sets

Suction catheters

Sterile gloves sizes

Batteries

6. All Anaesthesia drugs and Emergency drugs.

7. Operating Table with tilting facilities.

8. The hospital management shall be responsible for procurement, maintenance servicing, and calibration of monitoring and other anesthetic equipments. They should procure the equipments in adequate numbers.

**Section III: Monitoring during Transportation to Post-operative Recovery Ward**

1. All patients shall be monitored continuously till he recovers from anesthesia and has intact reflexes.

2. Patients are to be transported to the post-operative recovery area by the Anesthesiologist/Assistant and the patient is handed over to the ward in charge. The summary of the anesthesia record and necessary postoperative instructions are to be handed over.

3. Patient should be under continuous observation with ECG, Pulse Oximeter and BP monitoring as needed.

4. If the clinical condition of the patient is not stable, he should be transferred to appropriate Intensive Care Unit for further management which should be equipped with a **Ventilator** with basic modes.

 We request the hospital management to look in to the matter seriously and provide adequate working environment for the safe practice of Anaesthetists.

**President ISA Kanyakumari Secretary ISA Kanyakumari**