Safe Surgery and Safe Anaesthesia for Patient Safety

Check List before inducing anaesthesia:

- An experienced and trained assistant is available to help you with induction.

- You have the *correct patient* scheduled for the *correct operation* on the *correct side*.

- Patient has been properly prepared for the operation and has had no food or drink for the appropriate period of time.

- Check the patient's progress through the hospital up to this moment and then check that your actions will be the right ones.

- Adequate intravenous access is obtained.

- The patient is lying on a table that can be rapidly tilted into a head-down position in case of sudden hypotension or vomiting.

- **Check your equipment** before you give an anaesthetic:
  - All the apparatus you intend to use, or might need, is available and working;
Check List before inducing anaesthesia (continued)

- If you are using compressed gases, there is enough gas and a reserve oxygen cylinder;
- Anaesthetic vaporizers are connected;
- Breathing system that delivers gas to the patient is securely and correctly assembled;
- Breathing circuits are clean;
- Resuscitation apparatus is present and working;
- Laryngoscope, tracheal tubes and suction apparatus are ready and are decontaminated;
- Needles and syringes are sterile: never use the same syringe or needle for more than one patient;
- Drugs you intend to use are drawn up into labelled syringes;
- Any other drugs you might need are in the room.
Operating Room (O.R.)

The operating theatre is a room specifically for use by the anaesthesia and surgical teams and must not be used for other purposes.

O.R. requires:
- Good lighting and ventilation
- Dedicated equipment for procedures
- Equipment to monitor patients, as required for the procedure
- Drugs and other consumables for routine and emergency use.

Ensure that procedures are established for the correct use of the O.R. and all staff is trained to follow them:

- Keep all doors to the O.R. closed, except as needed for the passage of equipment, personnel and the patient
- Store some sutures and extra equipment in the O.R. to decrease the need for people to enter and leave the O.R. during a case
- Keep to a minimum the number of people allowed to enter the O.R., especially after an operation has started
- Keep O.R. uncluttered and easy to clean
Operating Room (O.R.) (continued)

• Between cases, clean and disinfect the table and instrument surfaces

• At the end of each day, clean the O.R.: start at the top and continue to the floor, including all furniture, overhead equipment and lights, use a liquid disinfectant at a dilution recommended by the manufacturer

• Sterilize all surgical instruments and supplies after use and store them protected and ready for the next use

**Sponge and instrument counts**

• It is essential to keep track of the materials being used in the O.R. in order to avoid inadvertent disposal or the potentially disastrous loss of sponges and instruments in the wound.

• It is standard practice to count supplies (instruments, needles and sponges)
  - Before beginning a case
  - Before final closure
  - On completing the procedure.

• Aim is to ensure that materials are not left behind or lost. Pay special attention to small items and sponges.
Operating Room (O.R.) (continued)

- Create and make copies of a standard list of equipment for use as a checklist to check equipment as it is set up for the case and then as counts are completed during the case.

- Include space for suture material and other consumables added during the case.

- When trays are created with the instruments for a specific case, such as a Caesarean section, also make a checklist of the instruments included in that tray for future reference.

*Leave the O.R. ready for use in case of emergency*

Operative procedure list

- An operative procedure list is needed whenever the surgical team will perform several operations in succession. The list is a planned ordering of the cases on a given day.

- Elements such as urgency, the age of the patient, diabetes, infection and the length of the procedure should all be considered when drawing up the list.

- Operate on “clean” cases before infected cases since the potential for wound infection increases as the list proceeds.
• Also consider other factors when making up the operative list: children and diabetic patients should be operated on early in the day to avoid being subjected to prolonged periods without food.

• Ensure that between operations:
  - Operating theatre is cleaned
  - Instruments are re-sterilized
  - Fresh linen is provided.

• It is essential to have clear standard procedures for cleaning and the storage of operating room equipment; these must be followed by all staff at all times.

• The probability of wound infection increases in proportion to the number of breaches of aseptic technique and the length of the procedure.
Postoperative Management

If the patient is restless, something is wrong.

Look out for the following in recovery:

- Airway obstruction
- Hypoxia
- Haemorrhage: internal or external
- Hypotension and/or hypertension
- Postoperative pain
- Shivering, hypothermia
- Vomiting, aspiration
- Falling on the floor
- Residual narcosis.

The recovering patient is fit for the ward when:

- Awake, opens eyes
- Extubated
- Blood pressure and pulse are satisfactory
- Can lift head on command
- Not hypoxic
- Breathing quietly and comfortably
- Appropriate analgesia has been prescribed and is safely established.