

# PATIENT RECOVERY

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Motec Life – UK

Delivered at Jirapa, Upper West, Ghana


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# IDEAL RECOVERY SET UP

- ▶ **Dedicated** area for recovery in the theatre suite
  - ▶ Recovery nurses – trained experienced
  - ▶ One nurse to one patient remaining with patient until consciousness and airway reflexes return
  - ▶ All beds and trolleys should tip head down and have side bars and pillows
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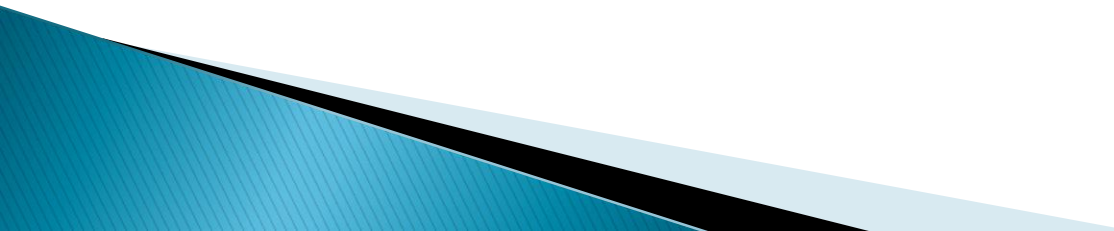
# IDEAL RECOVERY SET UP contd

- ▶ Each bed space should have:
  - ▶ Oxygen supply with appropriate face mask
  - ▶ Self inflating resuscitation bag and mask
  - ▶ Pulse oximeter
  - ▶ BP machine
  - ▶ Suction apparatus
  - ▶ Surgical emergency cover and theatre staff available anytime for complications and emergencies
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# RECOVERY



# PATIENT IN THEATRE


- ▶ Closely supervised – patient is anaesthetised but safe with presence of anaesthetist, nurses, surgeons
  - ▶ Monitored – BP, HR, oxygen saturations, ECG
  - ▶ On oxygen
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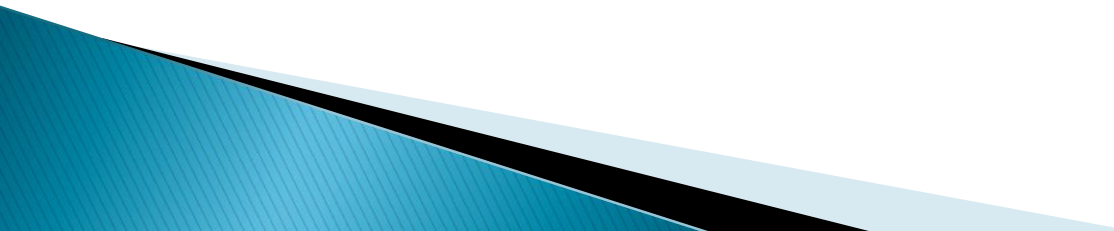
# ANAESTHETIC SUPERVISION



# EARLY RECOVERY PERIOD

- ▶ Recovery starts as soon as patient leaves operating table and the direct supervision of the anaesthetist
  - ▶ Patient handed over to qualified recovery nurse in dedicated recovery area
  - ▶ Long cases – straight onto bed
  - ▶ Short case – trolley
  - ▶ Very obese – trolley
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# PATIENT HANDOVER

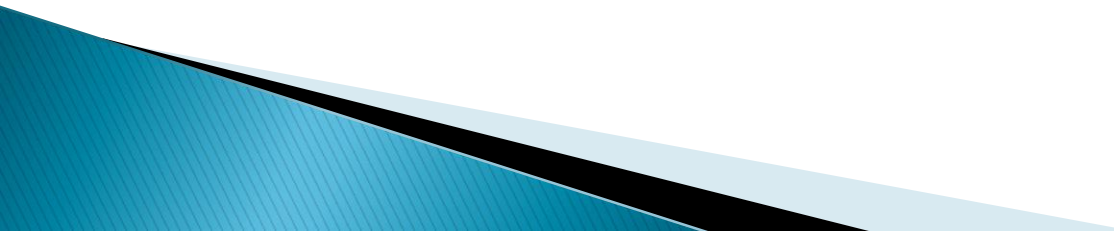
- ▶ Name and age
  - ▶ Relevant past medical history
  - ▶ Type of anaesthetic given
  - ▶ Type of operation and blood loss
  - ▶ IV fluids, blood and pain relief given during operation
  - ▶ Post-operative pain relief and IV fluids on drug chart
  - ▶ When patient can drink and eat
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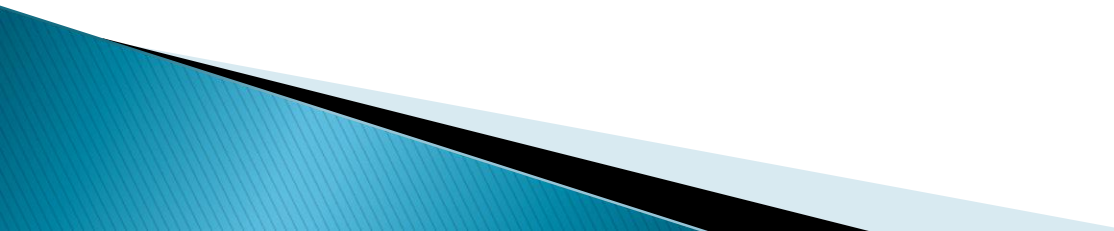
# PATIENT MONITORING

- ▶ **Monitors**
  - ▶ BP
  - ▶ HR
  - ▶ Oxygen saturation
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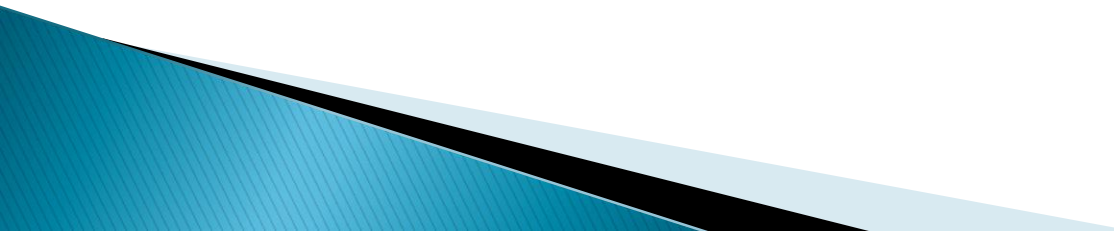
# CLINICAL OBSERVATION

- ▶ Respiratory rate and depth of ventilation
  - ▶ Peripheral circulation
  - ▶ Level of consciousness
  - ▶ Input–output chart and urine output
  - ▶ Blood sugar monitoring if necessary
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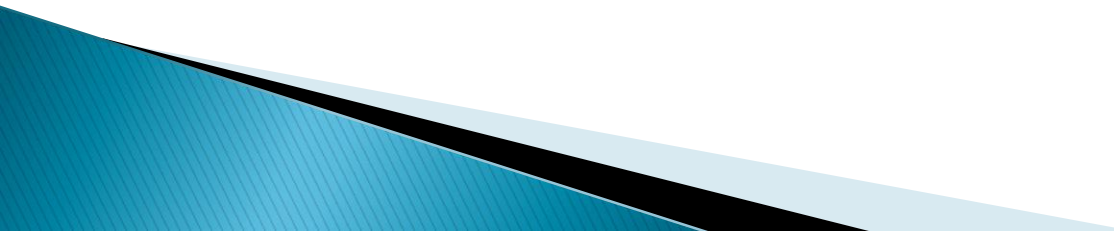
# MAJOR SURGERY/HIGH RISK

- ▶ Continuous measurement of the following:
  - ▶ ECG
  - ▶ Intra-arterial BP
  - ▶ CVP – central venous pressure
  - ▶ Urine output
  - ▶ Input-output chart
  - ▶ Drains and wound blood loss
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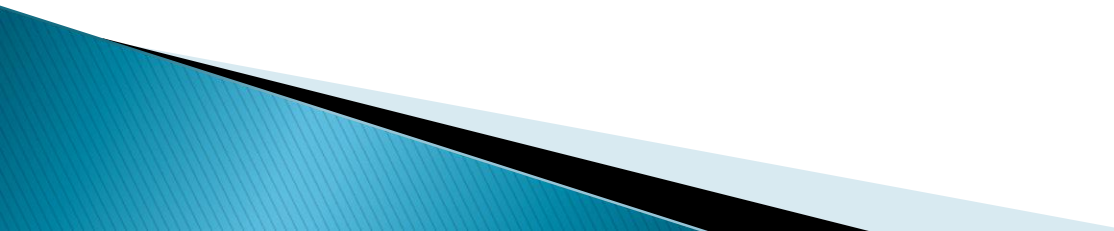
# SYSTEMS AFFECTED

- ▶ Respiratory system
  - ▶ Cardiovascular
  - ▶ Central nervous system
  
  - ▶ Gastro-intestinal system
  - ▶ Haematological
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# RECOVERY MANAGEMENT

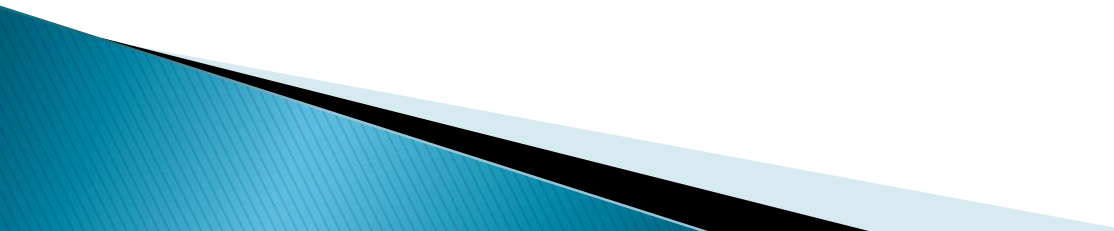
- ▶ A – Airway
  - ▶ B – Breathing
  - ▶ C – Circulation
  - ▶ D – Drugs
  - ▶ E – Exposure
  - ▶ Level of consciousness
  - ▶ Positioning of patient
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# A – AIRWAY

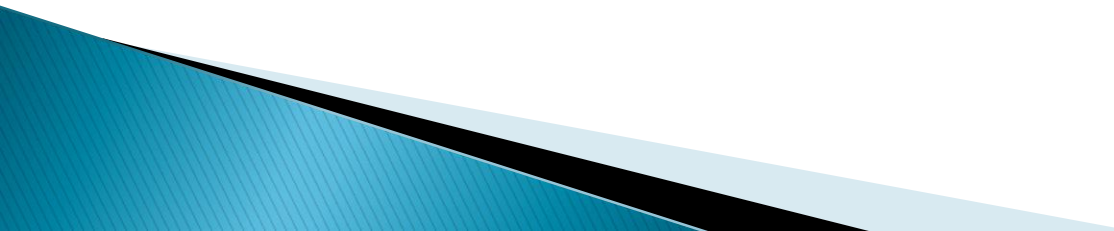
- ▶ Patent airway
  - ▶ Listen for or feel for respiration
  - ▶ Use of oxygen
  - ▶ Correct airway obstruction – tongue, blood secretions, laryngospasm, swelling
  - ▶ Use of airway adjunct
- 



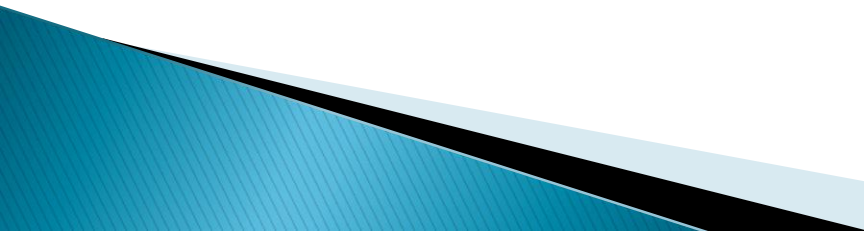
# B – BREATHING

- ▶ Rate
  - ▶ Rhythm
  - ▶ Depth
  - ▶ Regularity
  - ▶ Saturation/ Respiratory rate
  - ▶ Colour
  - ▶ Need for oxygen
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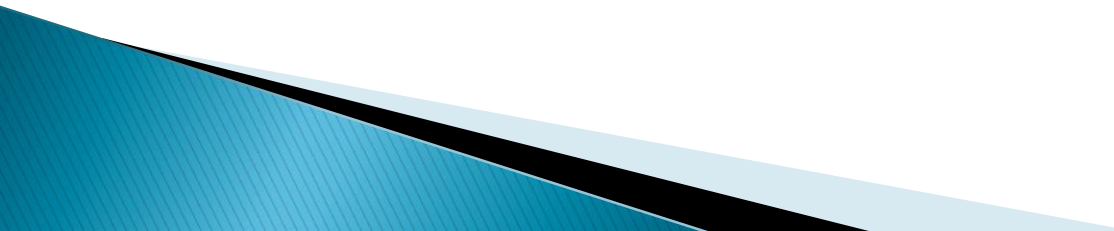
# BREATHING

- ▶ Residual GA drugs – sedatives, opioids
  - ▶ High spinal block – intercostal muscles and diaphragm paralysis
  - ▶ Sedation
  - ▶ Residual muscle relaxant
  - ▶ Medical condition of the patient
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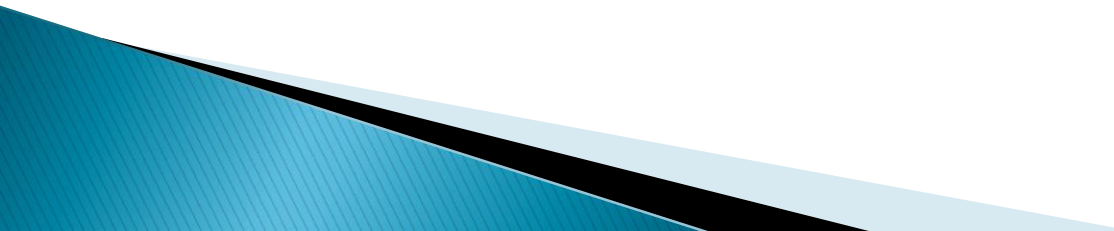
# C – CIRCULATION

- ▶ BP
  - ▶ Heart rate
  - ▶ Colour of peripheries
  - ▶ Temperature of peripheries
  - ▶ Peripheral perfusion
  - ▶ Peripheral pulses
  - ▶ Urine output
  - ▶ Fluid input–output chart – IV fluids, oral fluids, blood, urine, drain output, vomit
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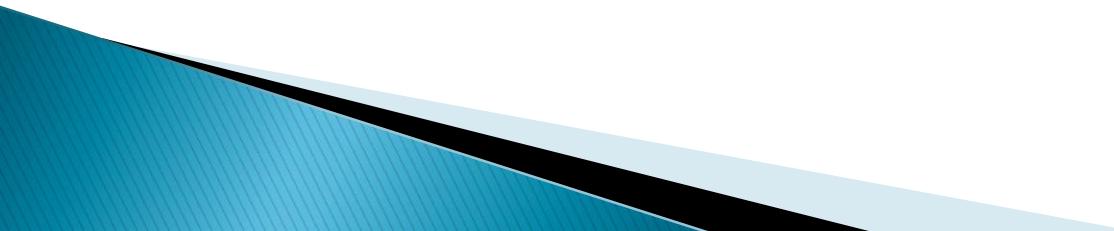
# CIRCULATION

- ▶ Low BP/Hypotension :
  - ▶ Residual IV or inhalational anaesthetic drugs.
  - ▶ Inadequate fluid input
  - ▶ Inadequate haemostasis/Continued bleeding
  - ▶ Disseminated intra-vascular coagulation
  - ▶ Pre-existing bleeding tendencies
  - ▶ Anti-coagulant drugs – warfarin, heparin, aspirin, garlic, fish oils,
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# CIRCULATION

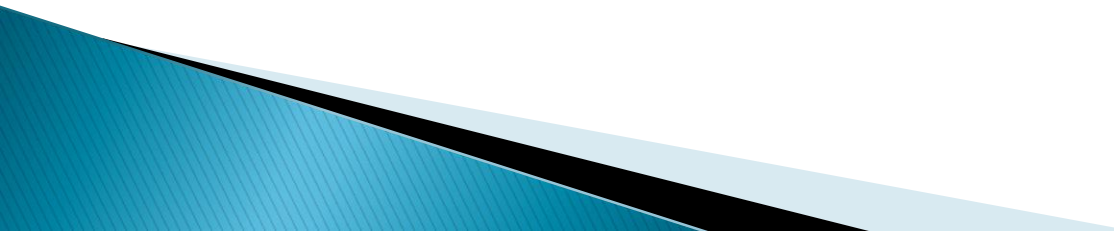
- ▶ Arrhythmias
  - ▶ Ventricular failure – LVF associated with myocardial infarctions
  - ▶ Septic shock
  
  - ▶ Hypertension from
  - ▶ Pain
  - ▶ Pre-existing uncontrolled BP
  - ▶ Hypoxaemia
- 

# D – DRUGS

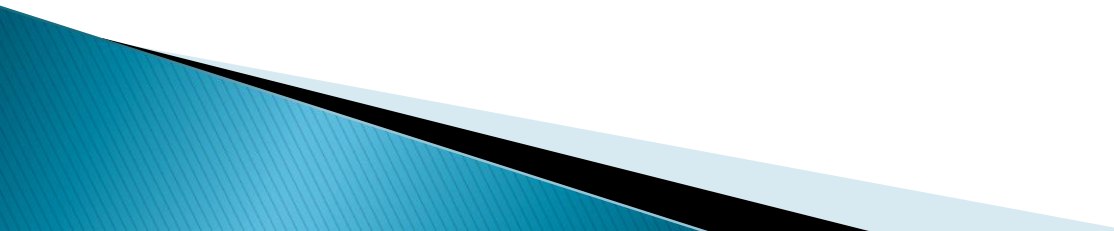
- ▶ Pain relief
  - ▶ Antibiotics
  - ▶ Anti-emetics
  - ▶ Anticoagulants
  - ▶ Patient own medications
  - ▶ IV fluids and blood
  - ▶ Oxygen
- 




# E – EXPOSURE

- ▶ Drains
  - ▶ Dressings
  - ▶ NG bag output
  - ▶ Operation site for swelling of haematoma
  - ▶ IV access sites
- 

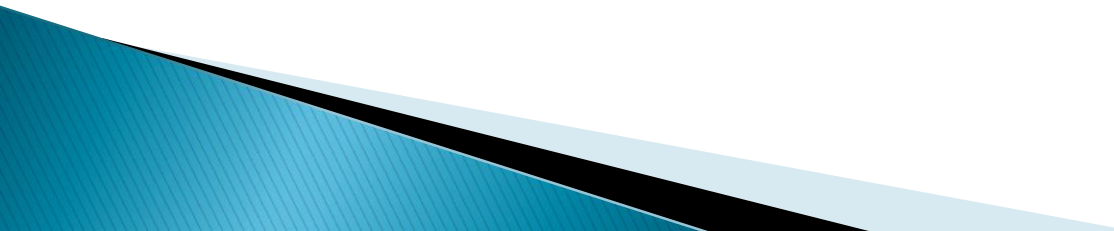
# LEVEL OF CONSCIOUSNESS

- ▶ Respond to name
  - ▶ Maintain own airway
  - ▶ Lift head off bed
  - ▶ Stick tongue out
  - ▶ Squeeze your fingers
  - ▶ Know where they are
  - ▶ Tell level of pain or comfort
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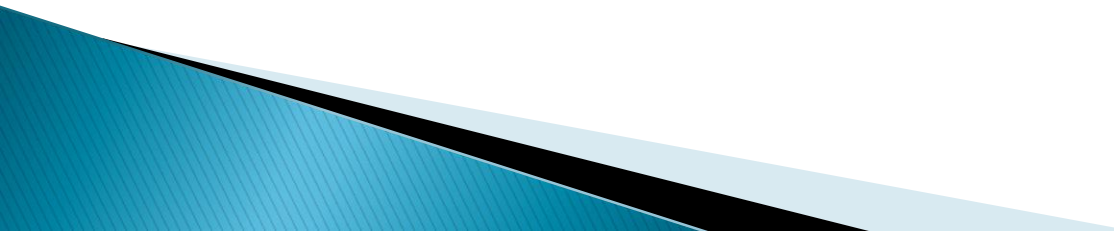
# EFFECTS ON CNS

- ▶ Impaired consciousness depends on:
  - ▶ Drugs used–volatile agents, barbiturates, long acting opioids, benzodiazepines
  - ▶ Timing of drug use: long acting drugs given towards end of procedure
  - ▶ Potent analgesia or local anaesthetic
  - ▶ Pain–speeds recovery
  - ▶ Hypoglycaemia
  - ▶ Hypoxia
  - ▶ Hypothermia
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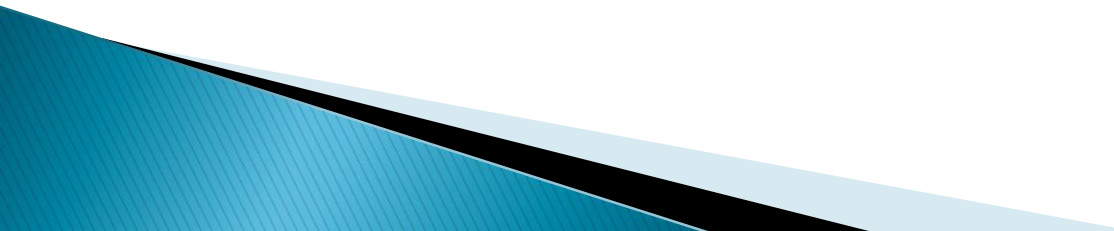
# RECOVERY DOCUMENTATION

- ▶ Pulse rate
  - ▶ BP
  - ▶ Respiratory rate
  - ▶ Temperature
  - ▶ Level of consciousness
  - ▶ Pain score
  - ▶ Sensory level in regional anaesthesia
  - ▶ Drug and fluid administration and blood loss
- 

# EXTRA OBSERVATIONS

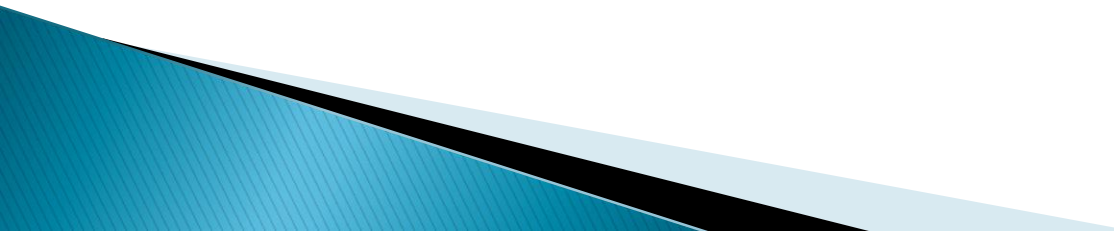
- ▶ Pain relief
  - ▶ Bleeding – drains, dressings
  - ▶ Nausea and vomiting
  - ▶ Allergic reactions – rash, swelling of face tongue with drooling of saliva and airway obstruction, redness, wheezing, low BP,
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# EXTRA OBSERVATIONS

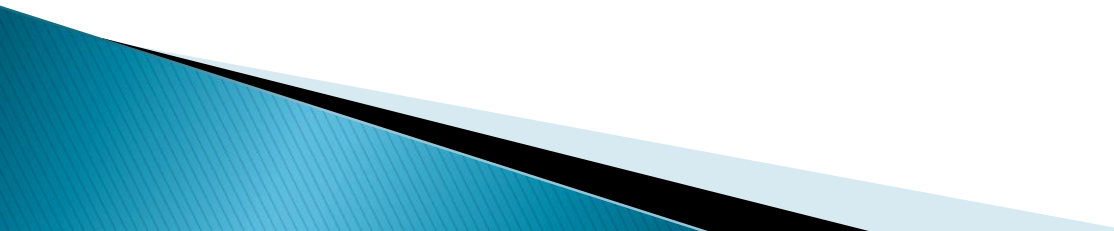
- ▶ Report deteriorating observations of CVS, CNS, GIT and respiratory system.
  - ▶ Appropriate positioning of patient in bed, on trolley
  - ▶ If in any doubt call anaesthetist or surgeon
  - ▶ Post-op medication and fluids written up
- 



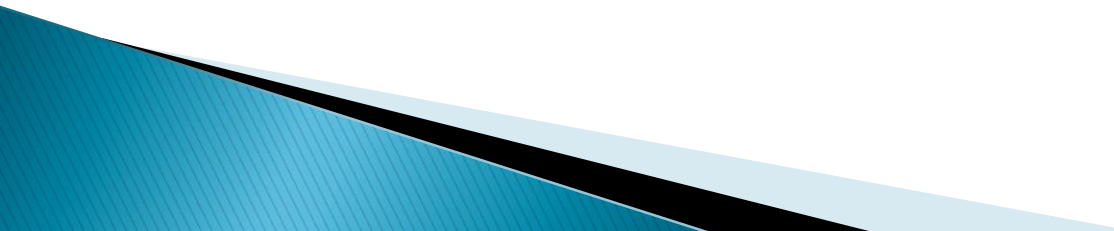
# DISCHARGE CRITERIA

- ▶ Fully conscious patient
  - ▶ Good pain relief, no nausea and vomiting
  - ▶ Maintaining own airway, good ventilation and oxygenation
  - ▶ Protective reflexes all returned – gag, cough
  - ▶ Stable BP and HR appropriate to post-op care and pre-op BP and HR values
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# DISCHARGE CRITERIA contd

- ▶ Adequate peripheral perfusion
  - ▶ Temperature within acceptable limits
  - ▶ High risk/Major surgery patients to stay in recovery 24hrs or HDU/ITU
  - ▶ Pain relief, medications and IV fluids written on drug chart
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# DISCHARGE CRITERIA contd

- ▶ Nurse takes direct care of patient in recovery but discharge is only with anaesthetist's consent .
  - ▶ Anaesthetist has responsibility towards patient for first 24 hours
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# SUCCESSFUL RECOVERY





# THANK YOU



# HIP REPLACEMENT



Bil. SC AVN diseases



Cementless – ceramic on ceramic.





# LIGNOCAINE WITH ADRENALINE!!

