## **SUMMARY**

Ambulatory surgery stands for surgical procedures performed outside the conventional hospital environment. It offers a number of advantages for the patient, health care providers. As they benefit from day case surgery because it decreases separation from their home and family, reduces postoperative complications compared to traditional hospital admissions, there is less preoperative lab testing and reduced demand for postoperative medications.

Ambulatory surgery does not relay on the availability of a hospital bed and may permit the patient greater flexibility in selecting the time of their operation.

Children are excellent candidates for ambulatory surgery.

Most children are healthy and most surgical procedures performed on them are simple with prompt recovery.

Patient's preparation begins with the history and medical examination. The physical examination should focus upon airway anatomy and the cardiovascular system. As regards fasting: a new policy has shortened fasting for clear fluids 2-3 hours prior to scheduled induction of anesthesia.

Pharmacological premedication in the form of oral midazolam is now popular in pediatric anesthesia in a dose of 0.5mg/kg 30

minutes before induction. Oral ketamine 60 mg/kg provides predictable sedation within 20 minutes. Oral transmucosal fentanyl citrate in a dose of 15-20  $\mu$ g/kg produces preoperative sedation.

The ideal general anesthetic technique for pediatric ambulatory surgery provides a rapid smooth onset, ease in adjustment of anesthetic depth during surgery, prompt emergence and rapid recovery without pain, vomiting and other unpleasant side effects.

Many anesthetic techniques are used for day case surgery including general anesthesia either by inhalational methods using nitrous, halothane, isoflurane, desflurane and sevoflurane or intravenous induction agents as thiopental, and propofol.

Regional techniques in the form of caudal block or penile block and ilioinguinal and iliohypogastric nerve block.

The postoperative recovery period is the most vulnerable period for children undergoing ambulatory surgery. The most common problems encountered in post anesthetic care unit (PACU) are airway obstruction, laryngospasm, hypoxemia, pain, vomiting and croup the role of anesthesiologist is to manage any problem in the PACU before discharging of child.

Criteria established to assess inpatient postoperative recovery have been successfully modified and applied in out patient settings.

The incorporation of an appropriate scoring tool to evaluate for home readiness.

The criteria for discharge include level of consciousness, physical activity, hemodynamic stability, oxygen saturation, postoperative pain assessment, postoperative emetic symptoms, and respiratory stability.