

## **Levels of Surgical Complexity\***

### **Level 1**

- Minimal risk to the patient independent of anesthesia
- Minimally invasive procedures with little or no blood loss
- Often done in an office setting with the operating room principally for anesthesia and monitoring

Includes: Breast biopsy, removal of minor skin or subcutaneous lesions, myringotomy tubes, hysteroscopy, cystoscopy, fiberoptic bronchoscopy

### **Level 2**

- Minimal to moderately invasive procedure
- Blood loss less than 500 cc
- Mild risk to patient independent of anesthesia

Includes: Diagnostic laparoscopy, dilatation, and curettage, fallopian tubal ligation, arthroscopy, inguinal hernia repair, laparoscopic lysis of adhesions, tonsillectomy/adenoidectomy, umbilical hernia repair, septoplasty/rhinoplasty, percutaneous lung biopsy, expensive superficial procedures

### **Level 3**

- Moderate to significantly invasive procedure
- Blood loss potential 500-1,500 cc
- Moderate risk to patient independent of anesthesia

Includes: hysterectomy, myomectomy, cholecystectomy, laminectomy, hip/knee replacement, major laparoscopic procedures, resection/reconstructive surgery of the digestive tract

Excludes: Open thoracic or intracranial procedure

### **Level 4**

- Highly invasive procedure
- Blood loss greater than 1,500 cc
- Major risk to patient independent of anesthesia

Includes: Major orthopedic-spinal reconstruction, major reconstruction of the gastrointestinal tract, major vascular repair without postoperative ICU stay

### **Level 5**

- Highly invasive procedure
- Blood loss greater than 1,500 cc
- Critical risk to patient independent of anesthesia
- Usual postoperative ICU stay with invasive monitoring

Includes: Cardiothoracic procedure, intracranial procedure, major procedure on the oropharynx, major vascular skeletal, neurologic repair

\* Adapted from *L. R. Pasternak: Screening Patients- Strategies and Studies*. In *Ambulatory Anesthesiology- A problem-oriented approach*. Ed. By Kathryn McGoldrick. Williams and Wilkins 1995.