Geriatric anatomy & physiology changes

OLDER ADULTS are over 65 years

• The older adult patient typically presents for surgery with several chronic medical conditions.

• Age is not a contraindication to anesthesia and surgery . however perioperative morbidity and mortality are greater in older adults than younger surgical patients.

• The relatively increased incidence of serious physiological abnormalities in older adult patients demands careful preoperative evaluation.

Similarities between elderly and infants:

• Decreased ability to increase heart rate in response to hypovolemia, hypotension, or hypoxia

• Decreased lung compliance.

• Decreased arterial oxygen tension and Impaired ability to cough

• Decreased renal tubular function

• Increased susceptibility to hypothermia

Factors associated with an increased risk of postoperative pulmonary complications

• older age.

• chronic obstructive pulmonary disease.

• sleep apnea.

• malnutrition.

• and abdominal or thoracic surgical incisions.

Alaa Hajwal

ADVANTAGE OF REGIONAL ANESTHESIA IN GERIATRIC

1. lower incidence of postoperative thromboembolism. This is presumably due to peripheral vasodilation and maintenance of venous blood flow in the lower extremities.

2. Regional anesthesia maintains respiratory function better than general anesthesia. Unless the anesthetic level involves the intercostal musculature, ventilation and the cough reflex are well maintained.

3. Provide adequate pain relief.

4. Maintain spontaneous breathing

