ANESTHESIA FOR OFF PUMP CORONARY ARTERY BYPASS GRAFTING

Dr. Fawzia AbouL Fetouh, MD.
Prof. of Cardiothoracic Anesthesia, Cairo University

The anesthesiologist is integral to the success of beating heart CABG.
- Closed observation
- Good monitoring
- Communication with the surgeon.
- Anticipation of surgical steps.
- Skilled hemodynamic management

Preserve *normothermia*, avoiding radiant heat loss and monitoring core body temperature
- Ensure that the *heart-lung machine* and *perfusionist* are available. It is not necessary to prime the heart-lung machine.
- Ensure the availability of *defibrillator* on the operating table.

*Ensure Full oxygenation with adequate Level of*
- *Analgesia*, a volatile agent as isoflurane, propofol infusion is used.
- Constant state of *Muscle relaxation*
- *Vasodilatation*, Nitroglycerin is infused (0.5-1 mcg / Kg),
- *Diuresis* at the end of surgery

The standard monitoring techniques in open heart surgery.
- CVP or Pulmonary artery catheter which is needed only in critical cases.
- TEE is limited in OPCAB cases by the difficulty in obtaining useful information while the heart is retracted.
- ST segment analysis is highly indicated

Stress points in OPCAB anesthesia
- Cell membrane stabilization.
- Volume management.
- Blood pressure management.
- ST analysis.
- Anticoagulation.
- Consider fast track anesthesia

Conclusion
The anesthesiologist is integral to the success of beating heart CABG. In contrast to conventional CABG procedures, OPCAB requires the anesthesiologist to proactively maintain stable hemodynamics and rhythm in an environment that changes rapidly because of regional ischemia and cardiac manipulation.

The anesthesiologist's active role during beating heart CABG requires a new level of communication with the surgeon.
*Off-pump Coronary surgery is here to stay.*