

Focus projects, research and teaching

Focus projects

1. The anaesthetists and perfusionists have paid close attention to the work of fine-tuning techniques and managing extracorporeal circulation (Miniaturised-CEC, bedside coagulation tests). Special attention has been devoted to the development and use of extracorporeal circulation and life support systems both pre- and post-op.
2. Special care has been taken to ensure that the appointed medical staff is capable of carrying out transesophageal and transthoracic echocardiograms both in the operating theatre and the critical area, thus improving the diagnostic quality of the service
3. There are currently a number of projects in hand:
 - the creation, training and perfecting of a team of specialists capable of providing cardio-circulatory and/or respiratory support systems also outside the facility (in 2009-2010, five such systems were established in nearby hospitals);
 - participation in the regional project “Humanisation and dignity of treatment in intensive care”, with special reference to end-of-life and delirium care;
 - participation in the regional Laser project for the early recognition of sepsis and the definition of inter-hospital treatment guidelines for tackling the condition.

Teaching

1. Participation in the running of the mini-CEC training course in collaboration with Medtronic;
2. participation in the internal training of medical and nursing staff;
3. provision of courses and lessons in the school of specialisation in anaesthesia and reanimation at the University of Modena;
4. training for anaesthetists in percutaneous aortic valve replacement.

Lines of research

1. Use of particular coagulation tests associated with the mini-CEC to reduce the quantities of hemocomponents being used;
2. Use of biochemical markers during sepsis to maximise the effects of antibiotics;
3. Use of various forms extracorporeal life support;
4. Use of advanced hemodynamic monitoring with a view to improving the outcome for patients undergoing major general surgery.