

Extracorporeal Membrane Oxygenation: Evolution, Teamwork, and Methodology

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The aim of this educational course is to inform and improve participant's understanding of the main aspects of ECMO support. ECMO (Extracorporeal membrane oxygenation) is a method of life support, which provides oxygenation of the blood substituting for an inappropriate cardiac and/or respiratory function. COVID-19 pandemic proved that ECMO procedure can be highly successful in selected groups of patients.

ECMO should be delivered by a multi-professional team consisting of anesthesiologist, intensive care specialist, cardiac and vascular surgeons, cardiologist, perfusionist, intensive care nurses and lung disease specialist, as well as functional specialists like physiotherapists and rehabilitation specialist. Every team member should participate in theoretical lectures, bedside training and practical sessions with access to the ECMO equipment.

In course included following topics:

- Introduction to ECMO and its history. Structure of the ECMO team
- Structure of ECMO circuit and equipment. Initiation strategies
- Patient selection. ECMO indications and contraindications
- Physiological changes during ECMO; Basic principles of pharmacological and non-pharmacological ECMO treatment
- Common complications and actions during ECMO
- Criteria for discontinuation of ECMO. Ethical aspects

