arsak
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CytoSorbents™

# CytoSorb Therapy

## Decision support for septic & vasoplegic shock patients

# CytoSorb Therapy - Initiation

**Patient's condition**

**Stable** → **Unstable** → **Shock** → **Refractory septic / vasoplegic shock**

Diagnosis

**Best results achieved when CytoSorb begun within 24 hrs.**

MAP normal

MAP low
< 65 mmHg

Vasopressors start

*Sepsis bundle*
*Catecholamine-/ Volume therapy*

*Arterial line, Central Venous Catheter, Antibiotics, Source control*

Vasopressors continue

Lactate
> 2mmol/l

*Differentiated volume-/ Catecholamine therapy*

*Adv. hemodyn. monitoring*

*Organ support (Ventilation, CRRT)*

***CytoSorb?***
*(early use in anticipation of ongoing deterioration)*

Vasopressors
NE > 0.3 ug/kg/min

Capillary leak
e.g. ELWI > 10 ml/kg

Lactate further
elevated/increasing

IL-6 (>500 pg/ml)
PCT (> 3uG/l)
*if measured*

*Extracorp. circuit available/indicated*
- CRRT
- ECMO
- Hemoperfusion

**› Start CytoSorb**


**Risk: MODS / Mortality**

**Therapeutic target: Shock reversal**

# CytoSorb Therapy - Initiation

**Time since start of CytoSorb Therapy**

**0 hrs.** → **12 hrs.** → **24 hrs.** → **Day 2,3,...**

**Beginning of hemo-dynamic stabilization**

Norepinephrine dose / lactate ↓↓

› **Continue monitoring**

**Ongoing instability**

Decrease of NE dose by less than 20% in the last 12 hrs

› **Consider new adsoeber**


**Sufficient stabilization**

Decrease of NE dose by more than 90% from basline

**End CytoSorb Therapy**

**Insufficient stabilization**

Decrease of NE dose by less than 90% of baseline and lactate > 2.0 mmol/l

› **Consider new adsoeber**


**Re-evaluate every 12 to 24 hrs.**

**Ongoing (hemodynamic) instability despite 2 adsorbers in 24 hrs.**

**Consider ending CytoSorb Therapy**

**Adequate source control?**

**This chart is based on clinical data and best practice gained with CytoSorb 300 and is not transferable to any other blood purification device**

# Potential Indications for CytoSorbs Therapy in the Intensive Care Unit:

- Refractory septic shock
- Vasoplegic shock e.g. postoperatively, with ECMO therapy
- Toxic shock syndrome
- Necrotizing fasciitis
- Meningococcal sepsis
- Hemophagocytic lymphphistiocytosis (HLH)
- Pancreatitis
- Burns
- Trauma
- Liver failure (removal of bilirubin)
- Rhabdomyolysis (removal of myoglobin)

Visit http://literature.cytosorb.com
for an overview of all references


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