

# **NOVALUNG ILA ACTIVE®ASSISTED RESPIRATORY SUPPORT IN A PATIENT WITH PULMONARY INFILTRATES AND HEPATIC ABSCESS**

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## ***Introduction***

Extracorporeal respiratory support facilitates ultraprotective ventilation in ARDS.

## ***Objective***

To describe a case of veno-venous pump-driven gas exchange with Novalung Ila Activve® (Novalung Germany) in a 2nd level hospital.

## ***Materials And Methods***

A 43 yo male complaining severe dyspnea was admitted to ER. CT scan revealed bilateral lung infiltrates and hepatic abscess. Due to severe hypoxia he was transferred to ICU, ventilated according to ARDS-NET and treated with vancomycin plus meropenem. Gas exchange deteriorated, so, after percutaneous tracheostomy, lung support with Novalung Ila Activve® was instituted on day 2 and ultra-protective ventilation maintained. NovaPort®Twin 24F (Novalung, Germany), cannula was inserted in right femoral vein. Lung support was started at 2l/min blood flow and 8l/min gas flow; aPTT 55 sec was maintained with heparin infusion.

## ***Results***

Extracorporeal support was maintained for 10 days. Hemodynamic stability was constantly observed. Respiratory acidosis resolution and progressive increase in PaO<sub>2</sub> was obtained. On day 4 percutaneous hepatic abscess drainage was performed after temporary stopping of anticoagulation. A *K Pneumoniae* susceptible to ongoing therapy was isolated from blood and from hepatic abscess. Radiological improvement of both pulmonary and hepatic lesions was demonstrated; extracorporeal support was progressively reduced and discontinued on day 10. Patient was decannulated on day 21 and transferred to normal ward on day 28.

## ***Conclusions***

Novalung Ila Activve® allowed prompt resolution of severe respiratory failure. It reduces the potential disadvantages of ECMO (hemodynamic instability, bleeding, high costs, need of specialized staff). Moreover, it requires minimal doses of anticoagulation, allowing execution of percutaneous techniques.