

PUMPLESS EXTRACORPOREAL LUNG ASSIST AND ADULT RESPIRATORY DISTRESS SYNDROME

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Objective

To present safety and efficacy of pumpless extracorporeal lung assist in severe acute respiratory failure.

Study Design

Single arm observational study.

Study Population

10 adult patients with severe ARDS.

Methods

Patients fulfilling fast or slow entry criteria of the US-ECMO study were enrolled. Patients with cardiac failure were excluded. 1 patient in whom ECMO had failed was switched to pumpless lung assist.

Results

Neither platelet count nor haemolysis were significantly affected by iLA. None of the patients had iLA-induced major or minor bleeding. 8 out of 10 patients were weaned from iLA therapy, 7 were discharged from hospital. 3 patients died. (1 pt.: 8 days after iLA from multiple organ failure. 2 pt.: during iLA) No device or procedure associated complications were reported.

Commentary

This report on the first patients treated with an prototype of Novalung® iLA demonstrates a potential benefit of interventional lung assist in severe ARDS. The authors point out that iLA is easier to operate and more cost efficient and requires no transfusions as opposed to ECMO.

