Supplemental Material

1. Our ECMO Initiation and Application Protocol

Peripheral cannulation, routinely performed under ultrasound guidance, was preferred for vascular cannulation in extracorporeal membrane oxygenation (ECMO) support therapy. ECMO support was applied with a 2-cannula method (Maquet, Livanova, or Edwards brand cannulas). Femoro-internal jugular V-V ECMO was applied by placing the drainage cannula preferably from the right or left main femoral vein and the return cannula from the right internal jugular vein. According to the vascular size of the patients, the drainage cannula diameter was selected as 20 to 25 F and the return cannula diameter as 16 to 20 F. With the direct control radiographs, it was confirmed that the drainage cannula tip was approximately 2 cm below the diaphragm and the return cannula tip was at the junction of the superior vena cava and the right ventricle.

PLS, Maquet, or ECC.05 Sorin (LivaNova) extracorporeal circuit systems were used in our ECMO applications. ECMO initial gas flow (with 100% FiO_2) was initially set to 2-3 L min^{-1}, and then gradually adjusted to arterial $PaCO_2$ 35-50 mmHg. In addition, blood flow was started at 2 L min^{-1} and gradually increased according to oxygen demand. The aim was to maintain $SPO_2 \geq 88\%$ and $PaO_2 \geq$ 60 mmHg with lung protective mechanical ventilation with an FIO2 support of 30-50%, tidal volume 2-4 mL $kg(pbw)^{-1}$, respiratory rate (RR) 8-15 min (or 8-30 min with spontaneous breaths), driving pressure ≤15 cmH_2O, $P_{plat} \leq 25$ cmH_2O, PEEP 6-15 cmH_2O.

For weaning from V-V ECMO with lung recovery, blood flow was gradually reduced to 2 L min^{-1}. At the same time, ECMO gas flow was reduced to 0 L min^{-1} and FiO_2 to 21%. If acceptable arterial blood gas values ($PaO_2 \geq 70$ mmHg, $PaCO_2 < 50$ mmHg, pH 7.35-7.45) were achieved with lung protective ventilation ($FiO_2 < 50\%$, RR<30, PEEP≤10 cmH_2O, $P_{plato} \leq 28$ cmH_2O) maintained for 12-24 hours without excessive increase in respiratory labor, ECMO weaning was achieved by decanulation. If not successful, ECMO blood and gas flow values were increased again.

2. Charlson Comorbidity Indexes of the Patient

It was calculated by entering patient data from the https://www.mdcalc.com/calc/3917/charlson-comorbidity-index-cci website.

3. SOFA Scores of the Patients

It was calculated by entering patient data from the https://www.mdcalc.com/calc/691/sequential-organ-failure-assessment-sofa-score website