**Supplementary Material**

Supplementary Table 1. Case reports for extracorporeal membrane oxygenation (ECMO) use in acute right ventricular failure.

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| Case report/series | Reason for ECMO |
| Michels *et al*. [1] | infarction-related refractory right heart failure |
| Wang *et al*. [2] | occlusion of right coronary artery after aortic dissection |
| Suguta *et al*. [3] | right ventricular infarction |
| Adachi *et al*. [4] | amniotic fluid embolism |
| Phoophiboon *et al*. [5] | severe pulmonary arterial hypertension during pregnancy |
| Nakamura *et al*. [6] | acute exacerbation of chronic thromboembolic pulmonary hypertension |
| Brück *et al*. [7] | pulmonary embolism after oral contraceptives complicated by type II heparin induced thrombocytopenia |
| Pannu *et al*. [8] | right ventricular failure after protamine administration |
| Ahmad *et al*. [9] | right ventricular failure after pericardiectomy |

Supplementary Video. Right ventricular dilatation and systolic failure.



References

[1] Michels G, Krausgrill B, Rahmanian P, Wahlers T, Baldus S, Pfister R. Extracorporeal membrane oxygenation as bridge to recovery in infarction- related refractory right heart failure. Deutsche Medizinische Wochenschrift. 2013; 138: 2246–2249. (In German)

[2] Wang Y, Zhu Z, Xu R, Li D, Wang T, Liu K, *et al*. Complete occlusion of right coronary artery due to Stanford type A aortic dissection—successful treatment with Extracorporeal Membrane Oxygenation (ECMO). Brazilian Journal of Cardiovascular Surgery. 2019; 34: 491–494.

[3] Suguta M, Hoshizaki H, Anno M, Naito S, Tada H, Nogami A, *et al*. Right ventricular infarction with cardiogenic shock treated with percutaneous cardiopulmonary support. Japanese Circulation Journal. 1999; 63: 813–815.

[4] Adachi M, Adachi T, Fujita T, Hyuga S, Onishi Y, Okutomi T. Venoarterial extracorporeal membrane oxygenation as an early treatment for amniotic fluid embolism with cardiac arrest: a case report. Journal of Obstetrics and Gynaecology Research. 2021; 47: 3374–3378.

[5] Phoophiboon V, Jaimchariyatam N, Srimahachota S, Sirinawin C. Successful multimodality management of severe pulmonary arterial hypertension during pregnancy with VA-ECMO and atrial septostomy using stent. BMJ Case Reports. 2019; 12: e231916.

[6] Nakamura M, Sunagawa O, Tsuchiya H, Miyara T, Taba Y, Touma T, *et al*. Rescue balloon pulmonary angioplasty under veno-arterial extracorporeal membrane oxygenation in a patient with acute exacerbation of chronic thromboembolic pulmonary hypertension. International Heart Journal. 2015; 56: 116–120.

[7] Brück S, Skrabal C, Liebold A, Mols G, Träger K. Fulminante Lungenarterienembolie bei heparininduzierter Thrombozytopenie Typ II. AINS—AnäSthesiologie, Intensivmedizin, Notfallmedizin, Schmerztherapie. 2019; 54: 295–300. (In German)

[8] Pannu BS, Sanghavi DK, Guru PK, Reddy DR, Iyer VN. Fatal right ventricular failure and pulmonary hypertension after protamine administration during cardiac transplantation. Indian Journal of Critical Care Medicine. 2016; 20: 185–187.

[9] Ahmad H, Porter R, Yusuff H, Roman M. Extracorporeal membrane oxygenation for right ventricular failure following pericardiectomy. European Journal of Cardio-Thoracic Surgery. 2019; 56: 625–626.