abstract

Transthoracic Echocardiography Guided Running of Veno Arterial Extracorporeal membranous oxygenation in cardiogenic shock

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- **Introduction.** Cardiogenic shock is a physiologic state in which end-organ tissue hypoperfusion is a result of cardiac dysfunction**.** Mechanical circulatory support devices can provide cardiovascular support without worsening myocardial ischemia and may also decrease myocardial oxygen demand. (VA ECMO) support is increasingly being used in such patients, and echocardiography plays an important role in the management of these patients

- **Aim of study:** Detect the ability to introduce (VA ECMO) as temporary extracorporeal life support system (ECLS) in our unit. And to Demonstrate the role of IABP and ECMO in cardiogenic shock.

- **Methods.** Our study enrolled 21 patients supported by IABP counterpulsation and 7 patients supported by VA ECMO.
- **Results.** Our study showed no statistically significant difference in patients before and after initiation of IABP support regarding MAP [60 ±15 and 65.1±18.9, P value 0.129], and base deficit [-12.9±4.7 and -12.5±5.3, P value 0.332]. Our study showed statistically significant difference in patients before and after initiation of VA ECMO support regarding MAP [42.6±9.7 and 57.9 ±7.6, P value 0.005]**,** and base

deficit [-10.6 ±4.2 and -6.3 ±7.4, P value 0.038].Mortality was 76% in IABP group and 100% in VA ECMO group.

- **Conclusion.** Echocardiography is useful in pre ECMO assessment of patients, cannulation, monitoring of patient on ECMO, detecting complications and detect the possibility of weaning of support. VA ECMO can provide circulatory support to patients with cardiogenic shock and decrease inotropic and vasopressors requirements

. **key words**: **Transthoracic Echocardiography Guided Running of Veno Arterial**