

ECMO Update and COVID

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April 7, 2020



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Disclosure

- None
- ECMO outside of CPB is an off-label use of technology
- And –it's a team sport

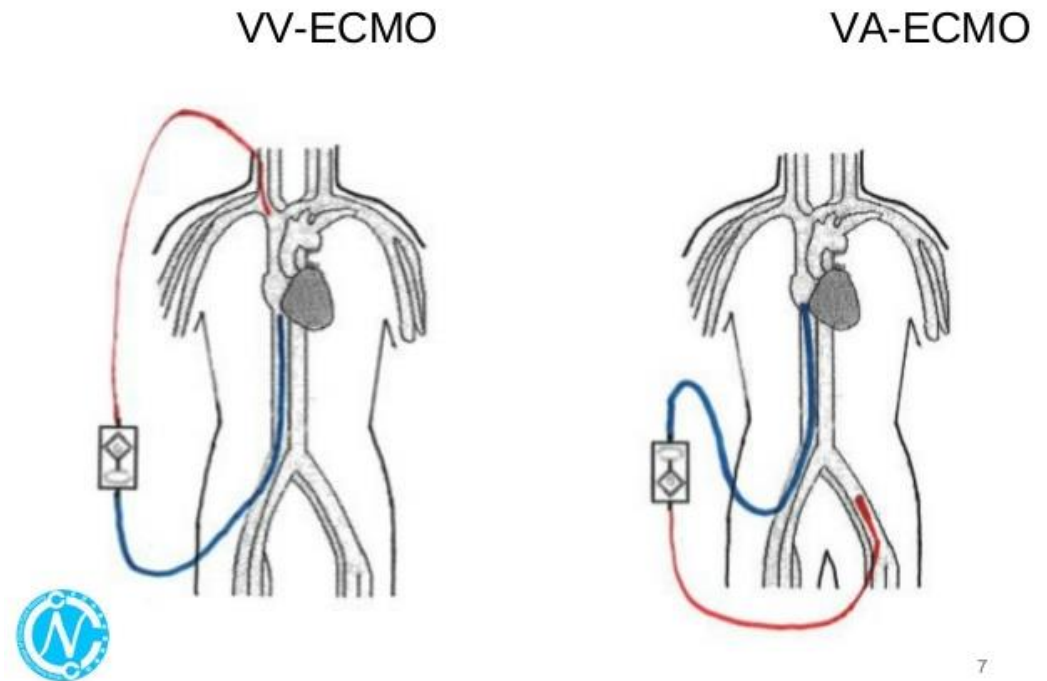


Case

- 53 yo M
- Several day history of symptoms
- Rapid respiratory decline
- Transferred for ECMO
- Noted: Low EF, on inotropes, risk factors
- Due to cardiac dysfunction-> VAV



- VV replaces some of lung function
- VA replaces some of heart and lung function
 - Not good if heart is working

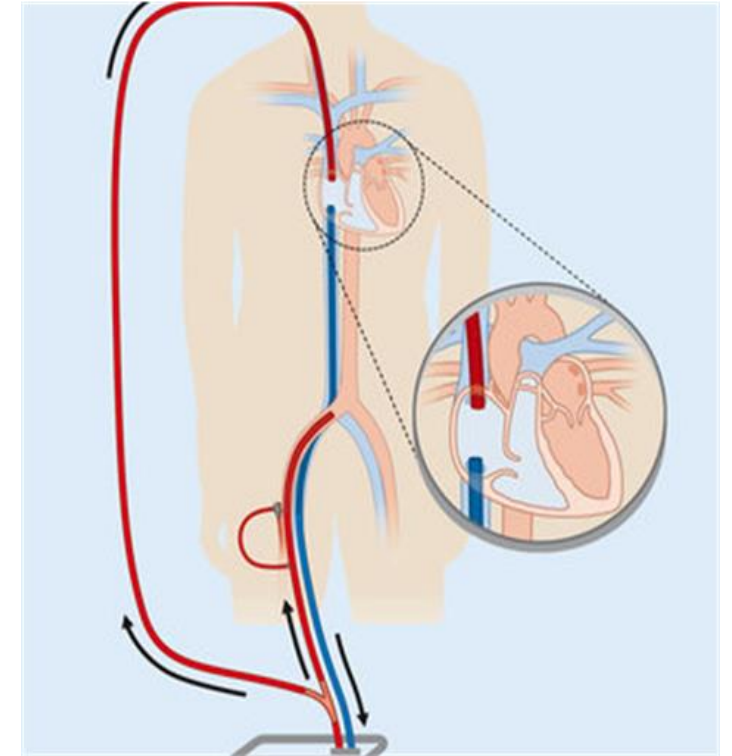


Wong, E 2014 <https://www.slideshare.net/tyfngnc/salon-1-15-kasim-1330-1400-esther-wong> [accessed April 7, 2020]



Indications for VAV

- Low EF
- Need for Inotropes
- Rising troponin

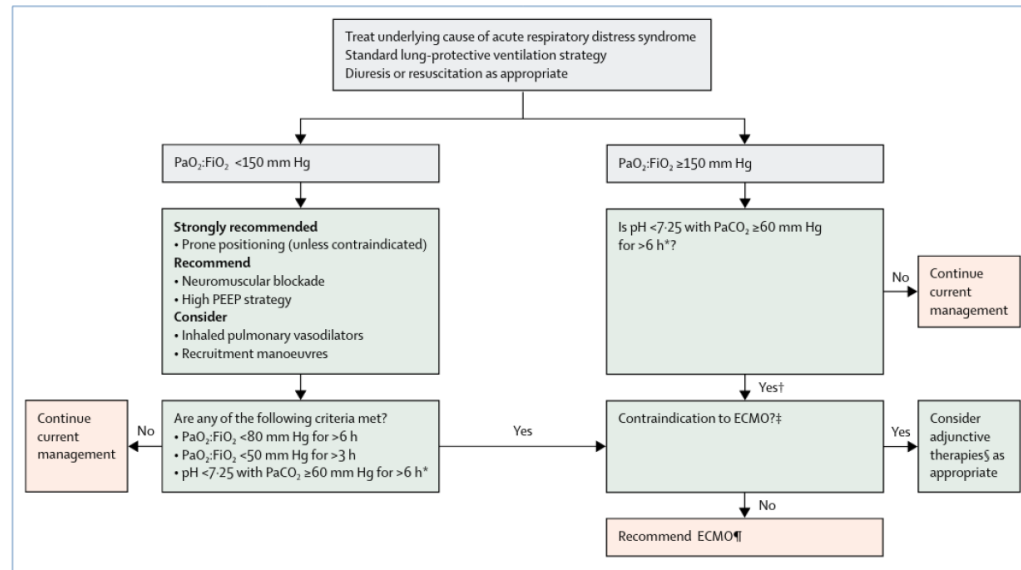


Sustained hypotension despite management

ECMO in cardiac arrest and cardiogenic shock - Scientific Figure on ResearchGate. Available from: https://www.researchgate.net/figure/eno-arterial-venous-VAV-ECMO-VAV-ECMO-drains-venous-blood-blue-from-the-right-atrium_fig3_312960804 [accessed 7 Apr, 2020]



ELSO



Current ELSO COVID Registry

VV	147 (91%)
VA	7 (4%)
VAV	2 (1%)

<https://www.else.org/Membership/CenterMap.aspx>



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IL-6 Receptor Antagonist

Results for as of 4/7/2020 06:31

	Ref. Range	3/31/2020 03:59	4/2/2020 04:03	4/4/2020 03:58
Ferritin	Latest Ref Range: 26 - 388 ng/mL	1,125 (H)	1,220 (H)	889 (H)

Results for as of 4/7/2020 06:31

	Ref. Range	3/30/2020 16:16
Interleukin 6 Blood	Latest Ref Range: <3.01 pg/mL	1,877.83 (H)

Results for as of 4/7/2020 06:31

	Ref. Range	4/3/2020 04:07	4/4/2020 03:58	4/5/2020 04:06	4/6/2020 04:23	4/7/2020 04:04
CRP Inflammation	Latest Ref Range: 0.0 - 8.0 mg/L	220.0 (H)	170.0 (H)	87.0 (H)	37.0 (H)	18.0 (H)



Thank you

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