



**A pump by any other name
would pump as well.....**

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**We always
wish we had a
crystal ball....**

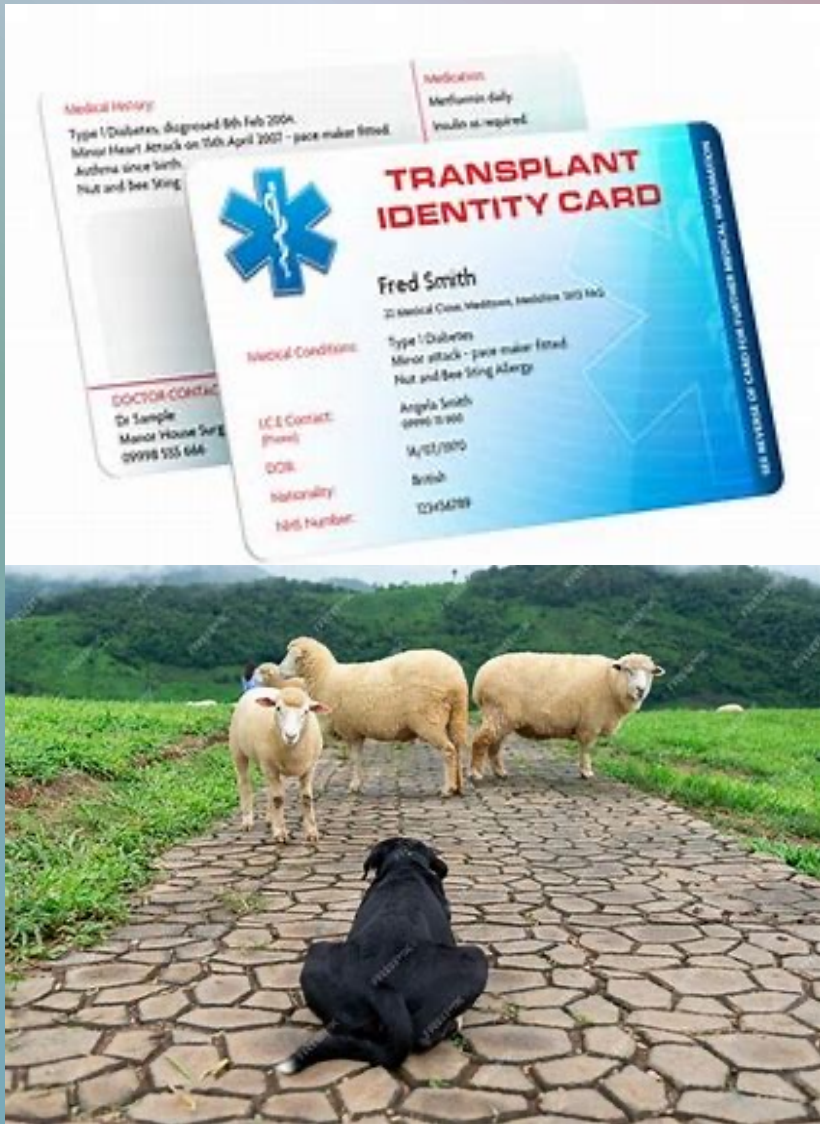


If we only knew...



But what about the other way around? What if we could prevent disaster....



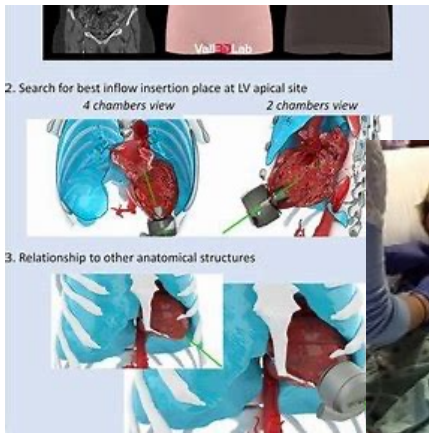


**We don't need a
crystal ball for CHF**

The tortoise..

2. Search for best inflow insertion place at LV apical site
4 chambers view 2 chambers view

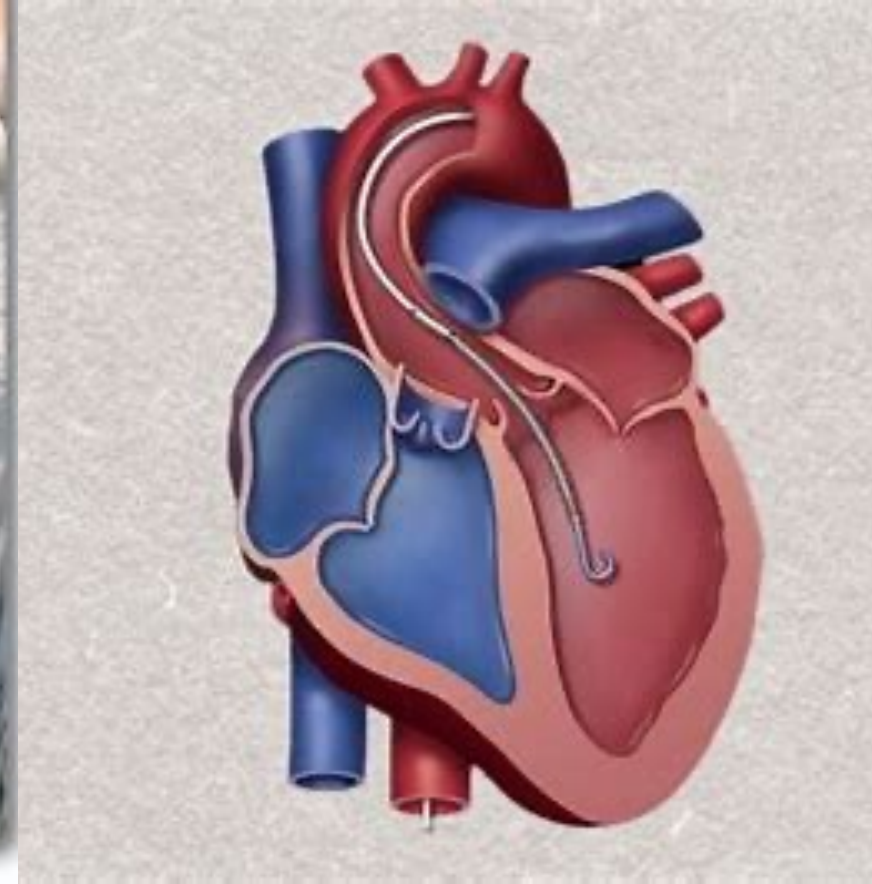
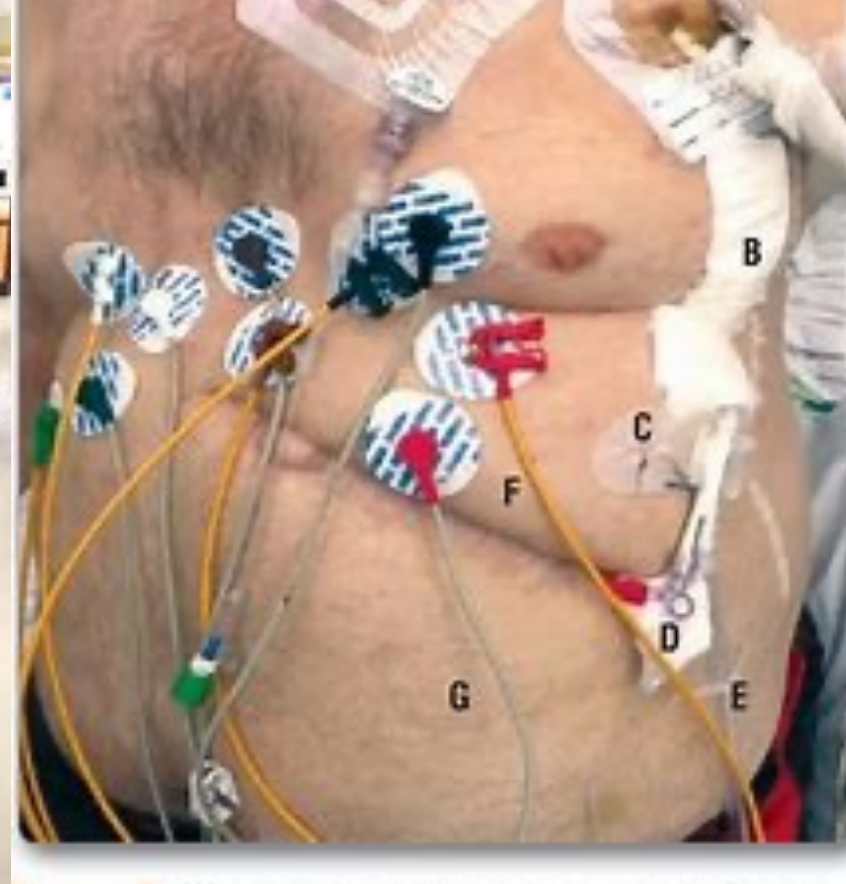
3. Relationship to other anatomical structures

This block contains three parts: a small ultrasound image at the top, two anatomical diagrams of the heart (4-chamber and 2-chamber views) in the middle, and another anatomical diagram at the bottom showing the heart's relationship to other structures.



The hare...





**Give me a pump ,
any temp pump**

+ And you get "prehab", higher status (without the frequent flyer miles) and a faster OHT

2018 – the Eagles won the Super Bowl, downing Tide Pods was a thing and in Oct the allocation system changed- the resurrection of the IABP

- + JAMA article 2020 by Kilic et al., showed wait list mortality and the number of pts making it to transplant both improved after the allocation system change, not in small part thanks to temp MCS surge

Kilic A, Mathier MA, Hickey, GW, Sultan I, Morell VO, Mulukutla SR, Keebler ME. Evolving trends in Adult Heart Transplant with the 2018 Heart Allocation Policy Changes. JAMA Cardiol. 2021 Feb 1;6(2):159-167.

- + JHLT article by Baran et al., reviewed multiple variants of temp MCS from ECMO to Impella, Tandem heart to IABP including the allocation system differences by country and waitlist mortality and transplant survival. He demonstrates survival ranging from 71% -100% at 1 year and makes the statement "Durable MCS patients are placed at low priority and often only receive high priority with complications...in many countries there is no crossover from the stable VAD pathway to availability of a suitable organ...rendering bridge to transplant as a false promise"
- + Baran DA, Jaiswal A, Henning F, Potapov E. Temporary Mechanical Circulatory Support: Devices, Outcomes and Future Directions. JHLT State of Art. 2022, June 41(6)678-691.

More numbers

- + Nordan et al., in a letter to the editor of JACC quoted a 3-fold increase in temp MCS after the allocation change to 44.5% while seeing a 50% decrease in durables to 21.2% with a midterm survival equivalent to pre change with decreased wait times. Even a small bias to less in hospital mortality for those with
- + IABP.
- + Nordan T, Hironaka C, Kawabori M. Temporary Mechanical Circulatory Support as Bridge to Transplant: Return of the IABP. J Am Coll Cardiol HF. 2020, Sep 8(9):785-786.

- + BUT
- + there were a few articles that showed a drop in overall 1 yr survival from 92.1% to 87.5%



But then....

- + Loyaga-Rendon et al in the Journal of Cardiac Failure this year reported an outcomes review broken down by region with some interesting findings.

Risk of death or delisting pre 2018 8.7%-12.5%, after 4.5%-9.5%

Rate of transplant pre 2018 46.6%-63.7%, after 57%-78.7%

One year survival after transplant 90.9%-93.4%, after 89.3%-94.1%

Demonstrating rate of transplant and waitlist mortality has improved with increased temp MCS with nearly the same 1 year survival , noted to have a regional variation that shows the PNW as having one of the highest 1 yr survivals.

Renzo Loyaga-Rendon, Dana Marsy, Michael Dickinson, Ryan Grayburn, Sangjin Lee, Nabin Manandhar-Shrestha, Deepak Acharya, Robert Hooker, Richard Sadler, Disparities In The Outcomes In The Waitlist And After Transplantation According To Transplant Region: Implications For A Future Allocation System, Journal of Cardiac Failure, Volume 31, Issue 1, 2025, Page 292

So what you're saying is.....

Increased use of temp MCS :

allows for higher listing status

faster time to transplant

less time to recovery from implant

more time for prehab

improved end organ function pre transplant,

and (at least in the PNW) one of the highest 1 yr post transplant survival





YOU
DECIDE!!

