# End of Life Care for Patient with Advanced Heart Failure

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# Disclosures None

#### Introduction

- Why is a cardiologist speaking on end of life care?
- Identifying the heart failure patient at "end of life" (identification of the stage D HF patient)
- Options for the stage D patient
- Non-hospice HF Palliative Care Program at Peace Health North Cascade Cardiology

## A Cardiologist Speaking on Palliative Care ??

- Puzzling?
- Suspicious ??
- Absurd ???

# Absurd ? Almost as absurd as having a pet kangaroo!



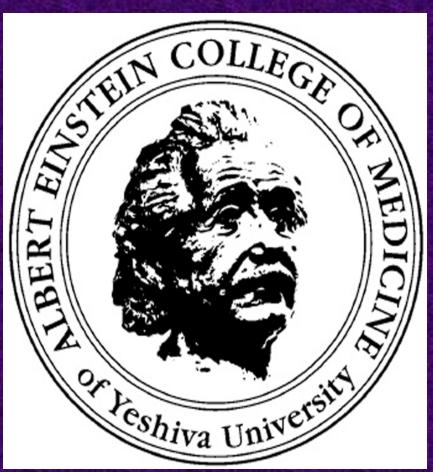


## A Cardiologist speaking on Palliative Care ??

- Why not ??
- Curative and comfort care are not mutually exclusive.

#### Why do you want to be a doctor?

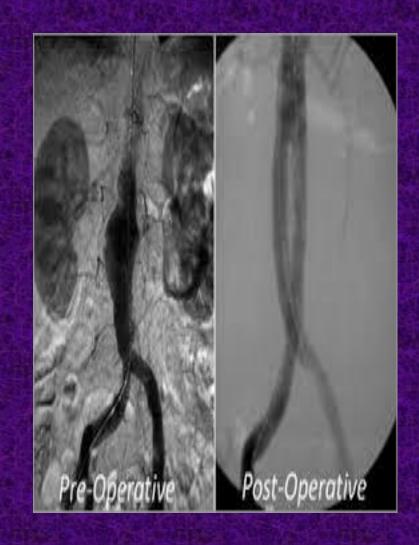




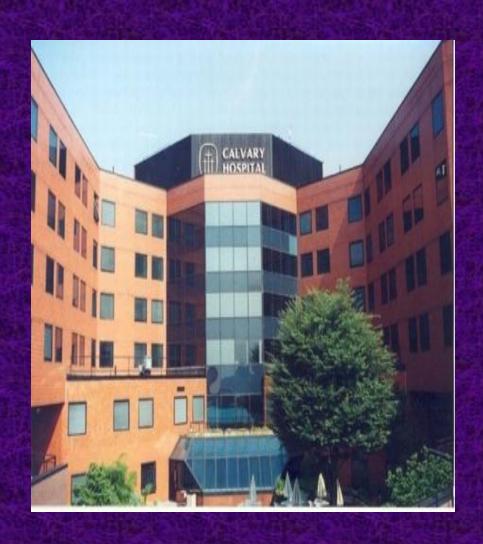
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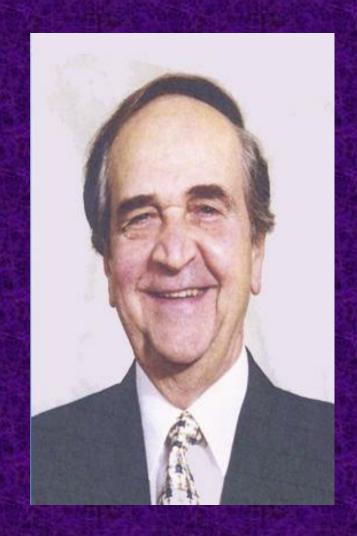


**Figure 2.** Antero-posterior angiographic projection of the left circumflex artery showing the under-expanded stent in the obtuse marginal at the current procedure 2011.



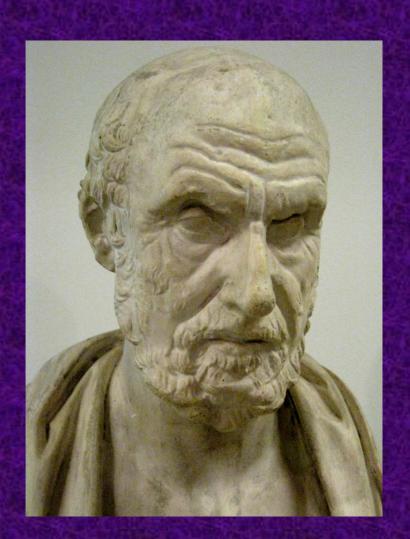
## Calvary Hospital & Mike Brescia



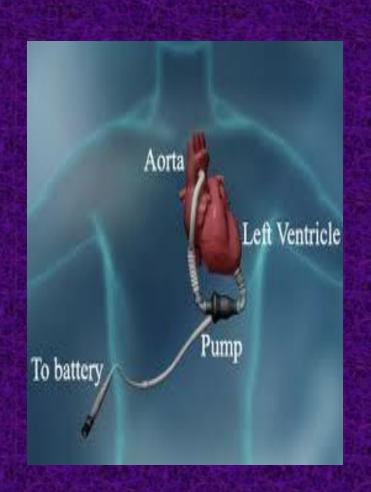


#### Lessons from Hippocrates

- While the young fear death, the old fear
- dying."
  HIPPOCRATES



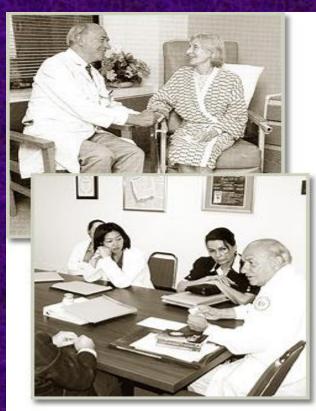
## Heart Failure Cardiologist





## Heart Failure Cardiologist & Palliative Care





"Jack" Cimino with Calvary patient (top), and with colleagues at The Palliative Care Institute.

#### **Burdens of Advanced HF:**

Incidence & Number of Deaths due to HF Compared with other common causes of death in USA(2004)

<b>Cause of Death</b>	Incidence	Deaths
Heart Failure	500,000	284,365
Lung Cancer	196,252	158,006
Breast Cancer	188,587	41,316
Prostate Cancer	189,075	29,002
HIV/AIDS	37,376	16,395

#### **HF Mortality**

- From 1994-2004 in USA national death rate decreased by 2%
- 1994-2004 deaths due to HF increased by 28%!

#### HF: A Condition of the Elderly

500,000 new cases of HF per year in US

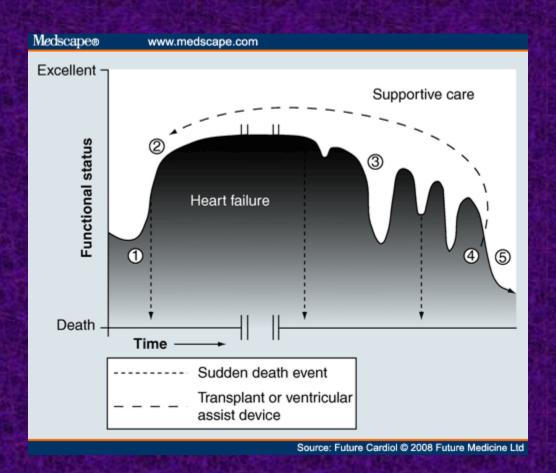
1% or 5,000 pts age **65-69** 

4% or 20,000 pts age **70 -79** 

50% or 250,000 pts

> 80

#### Heart Failure: Natural History



## 2005 ACC/AHA Guidelines : New Classification of HF

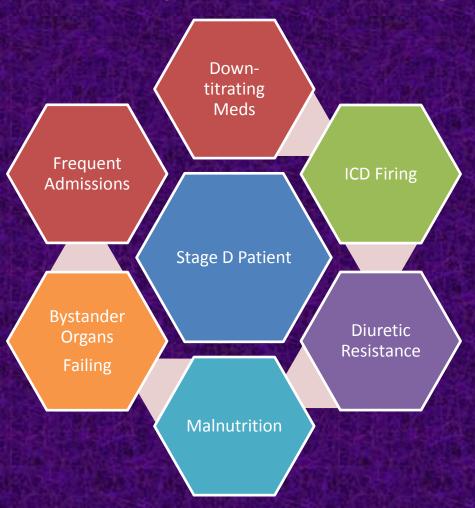
Stage	Clinical Characteristics
Α	At risk for development of heart failure but no signs and symptoms of heart failure
В	Structural heart disease WITHOUT current or prior heart failure symptoms
C	Structural heart disease WITH current or prior symptoms of heart failure
D	Refractory heart failure requiring specialized interventions

## New York Heart Association Functional Class

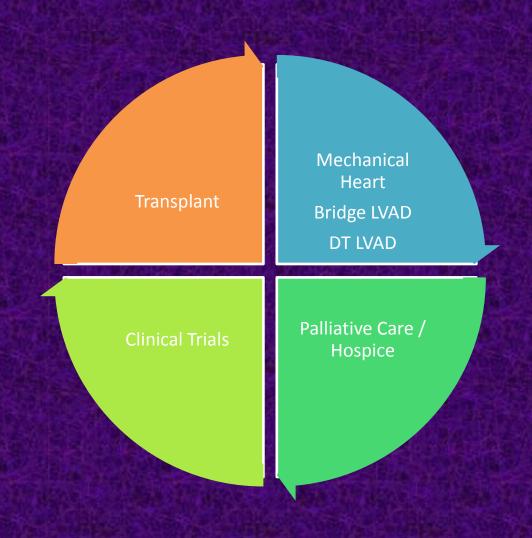
- I: No functional limitation
- II : Symptomatic with exercise
- III: Marked limitation, comfortable only at rest
- IIIa & IIIb
- -IV : Symptomatic at rest



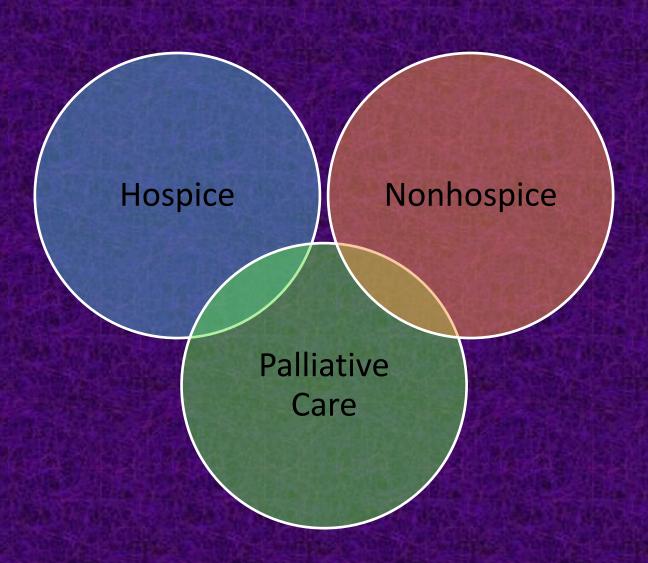
# Clues to Identifying Stage D HF in the Primary Care Setting



## **Options for Stage D Patients**



## Palliative Care



# Peace Health North Cascade Cardiology Non Hospice Palliative Heart Failure Program

- Program philosophy
  - We will take care of you throughout your entire disease process- Non-abandonment!
  - Care does not end when you are no longer a candidate for a procedure.

#### Non-hospice Palliative Care

- Independent of prognosis
- Should be incorporated into the care of all patient with chronic disease
- Disease management /"curative" medicine and "comfort care" are NOT mutually exclusive !!
- Non-abandonment

## Non-hospice Palliative Care for the patient with Advanced HF

- Intensive conventional medical management
- Focused minimally invasive interventions
- Advanced medical management
- Comorbid disease management in collaboration with PCP.
- Louis K' 50<sup>th</sup> anniversary

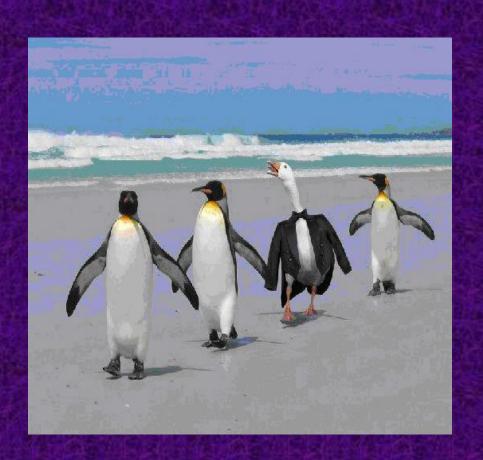
#### Beware.....



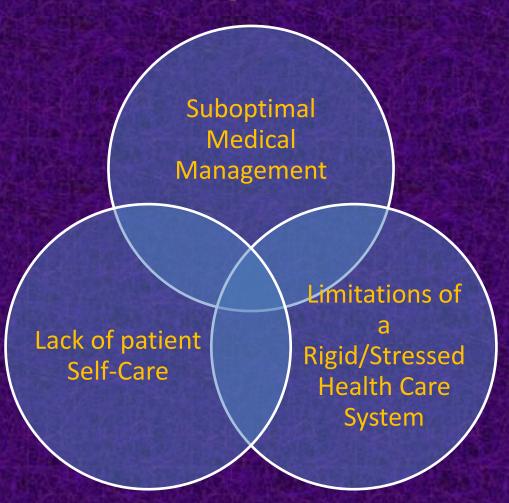


#### Beware: "Stage D Imposter"

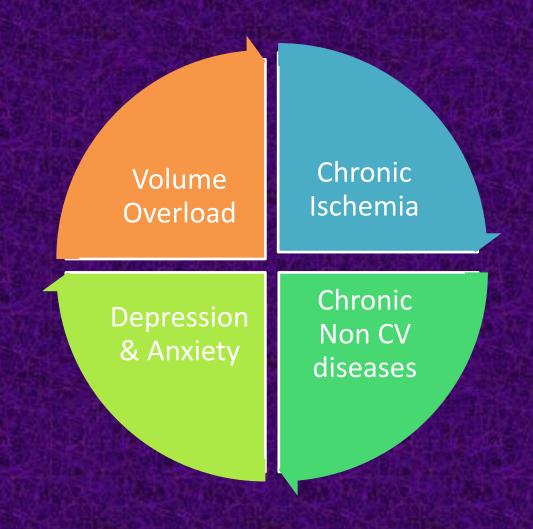
- Stage C patient but through :
  - Patient lack of self care / compliance
  - Suboptimal medical care
     / failure to follow
     evidenced based
     guidelines
  - Limitations of health care system



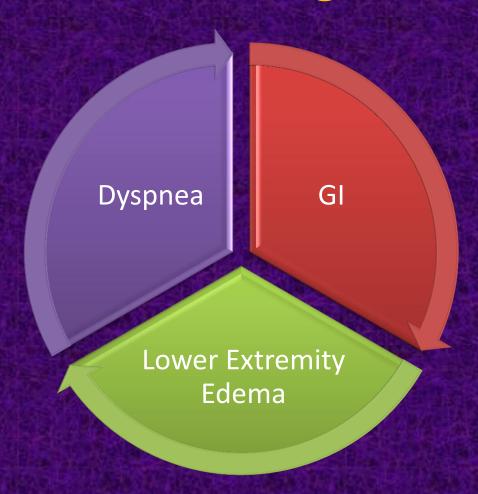
## Recipe for Making a Stage C Patient into a Stage D Patient



#### Palliative Care & Advanced HF



# "Refractory" Volume Overload and Suffering



## Management of Refractory Volume Overload In Stage D HF

- Intermittent home IV diuretics
- Bumex & Lasix poor absorption with edematous gut.....try Demadex(Torsemide)
- Sequential nephron blockade
- Intermittent or continuous Inotropes
- Re-examine diet & medication list

#### Dyspnea in Advanced HF

- Diuresis
- Thoracentesis
- Pleur-X catheter for recurrent pleural effusions
- Low dose morphine PO, SL
- BIPAP / Oxygen

#### GI Manifestations of Volume Overload

- Anorexia
- Nausea / vomiting
- Abdominal distension due to tense ascites
  - Decongest gut
  - Reperfuse gut-
    - Inotropes
    - Hunt for CMI ie. Mrs. K
  - Palliative paracentesis
  - Anti-emetics
  - Morphine

#### Chronic Ischemia & Advanced HF

#### Angina

- Decongest
- BB, nitrates, CCB
- EECP
- Morphine/Fentanyl patch
- Mesenteric Ischemia
  - Decongest, Inotropes, hunt for flow limiting lesions
- Renal
  - Decongest
  - Inotropes
  - Flow limiting lesions

#### Chronic Ischemia & Advanced HF

- Lower extremity PAD
  - Critical limb ischemia
    - Rest pain / non-healing wounds
    - Wound care specialists
    - Targeted & thoughtful endovascular procedures & surgical revascularization(??)

#### Psychiatric Issues in Advanced HF

- Depression- 50% pts with HF have clinical depression
- Anxiety
- PTSD-? Recurrent ICD discharges

## Palliative Care & Advanced Heart Failure

Focus on quality of life & symptom management

- 1. Volume Management
- 2. Thoughtful / targeted invasive procedures to maximize quality of life.
- 3. Treatment of anxiety & depression
- 4. Psychotherapy-? PTSD
- 5. Cardiac & ? Pulmonary rehab
- 6. Optimal management of non-CV chronic diseases

## Thank you

