

# UTMB Clinical Cases - 19 Feb 1996

Review:

Resistance - Flow + Pressure

Compliance -

Pulse <sup>healthy</sup>

- 23 Y.O., 76 kg male med student participated in a study -
  - Ⓐ panel shows V.S. p Test
  - Ⓑ panel shows V.S. 11 mins in test - ~~to~~ S.O.B., Flushed

$$70 \text{ ml} \times 180/\text{min} = 12,600 \text{ min}$$

$$90 \text{ ml} \times 180/\text{min} = 16,200 \text{ min}$$

A. 1 yr later 70 Kg + H.R., is now 60 BPM

- 40 YO Black male - Asymptomatic - unremarkable  
 Rx - Suggine BP/HR 150/100 - 74  
 P.P. - MBP - 116.7 P.R. =  $\frac{116.7}{4.81} = 24.3$

$$S.V. 65 \text{ ml} \times 74 = 4.81 \text{ L/min}$$

1<sup>st</sup> DX, Cause

- 50 Y.O. W.F. ± Hx of heart trouble, (m), limited activity - dyspnea O.E. - 60 Kg.

BP 160/40 75 HR PP- 120 MBP- 80

Guesstimate S.V. - 210

CO - 15,750 -

Eff. C.O. - ?

Equiv. Resistance

Sys. Resistance -  $16 \frac{\text{mmHg}}{1/\text{min}}$

$$\frac{80}{15.75} = 5.08 \frac{\text{mmHg}}{1/\text{min}}$$

$$\frac{80}{16} = 5 \text{ l/min}$$

Cases - 2

4. <sup>Twin</sup> ~~Widow~~ sister - also Hx of heart trouble  
(m) 58 Kg.

BP 105/80 HR-75 HR

PP 25 - 88 MBP

$\frac{25}{40}$

Est - S.V. 43.75 & C.O. = 3.3 L/min

Act - S.V. 200 ml. EFF C.O. 15 L/min

5. 30 Y.O. W.F. slender W.F. -  
Cardiac exam unremarkable exc.  
B.P. 150/75 H.R. - 80

PP - 75 MBP - 100

6. <sup>35% O.</sup> ~~Young~~ male scientist - field trip 7 days

Rapid H.R., cold sweat dizzy -

Normal Exercise tolerance yesterday -

lost 4+ # wt.

HR - 85 (60N) BP - ~~105/75~~<sup>105</sup>

↑ - 130 85/70

→ 70 12 hrs BP - 120/80

80 115/80