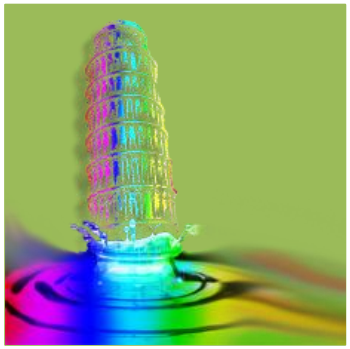
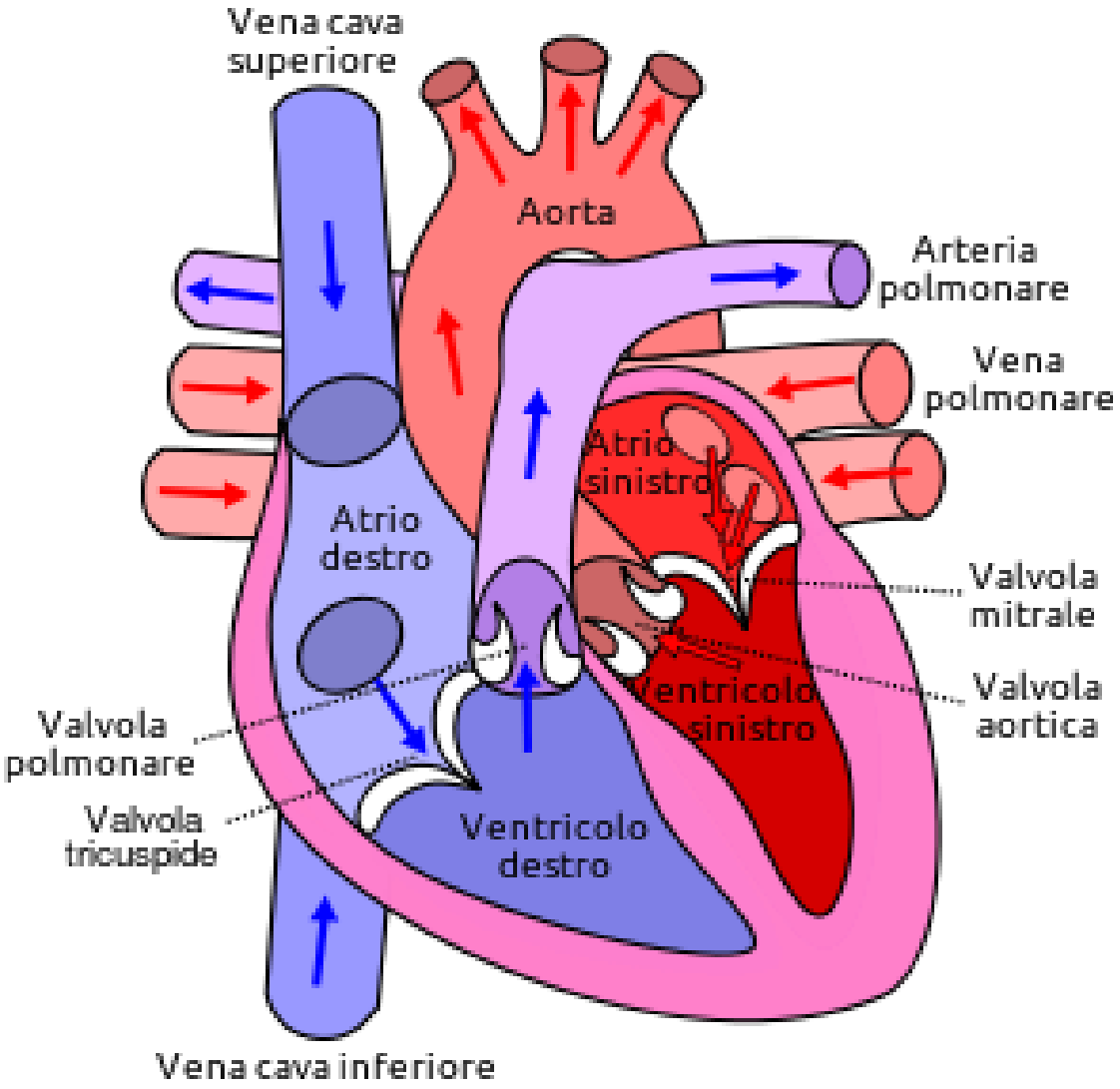
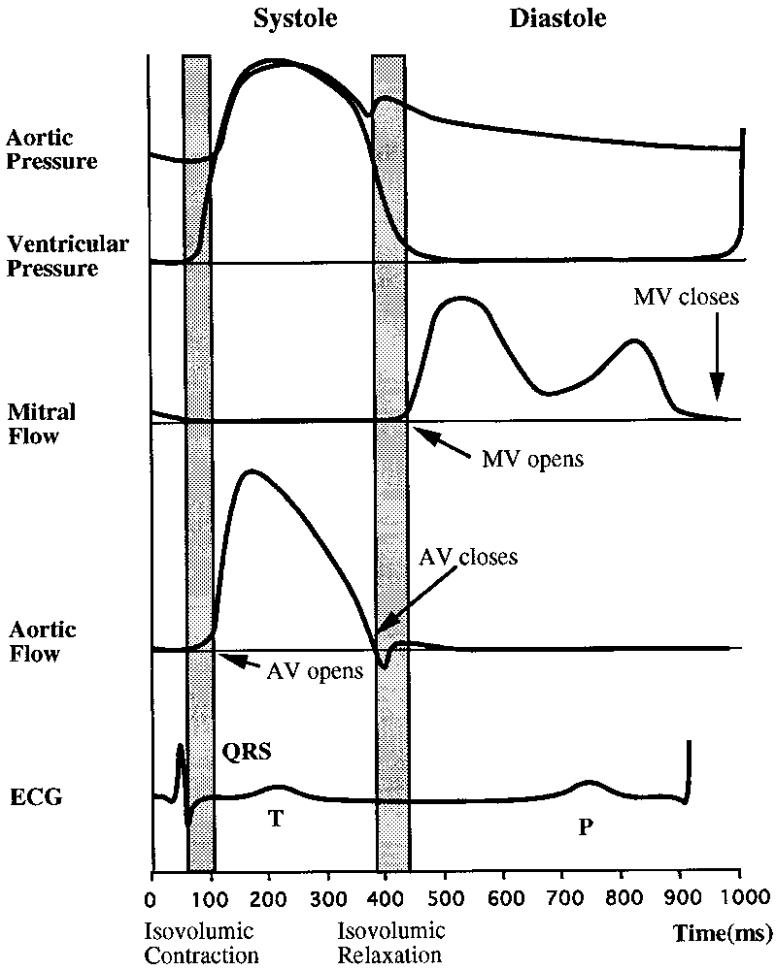
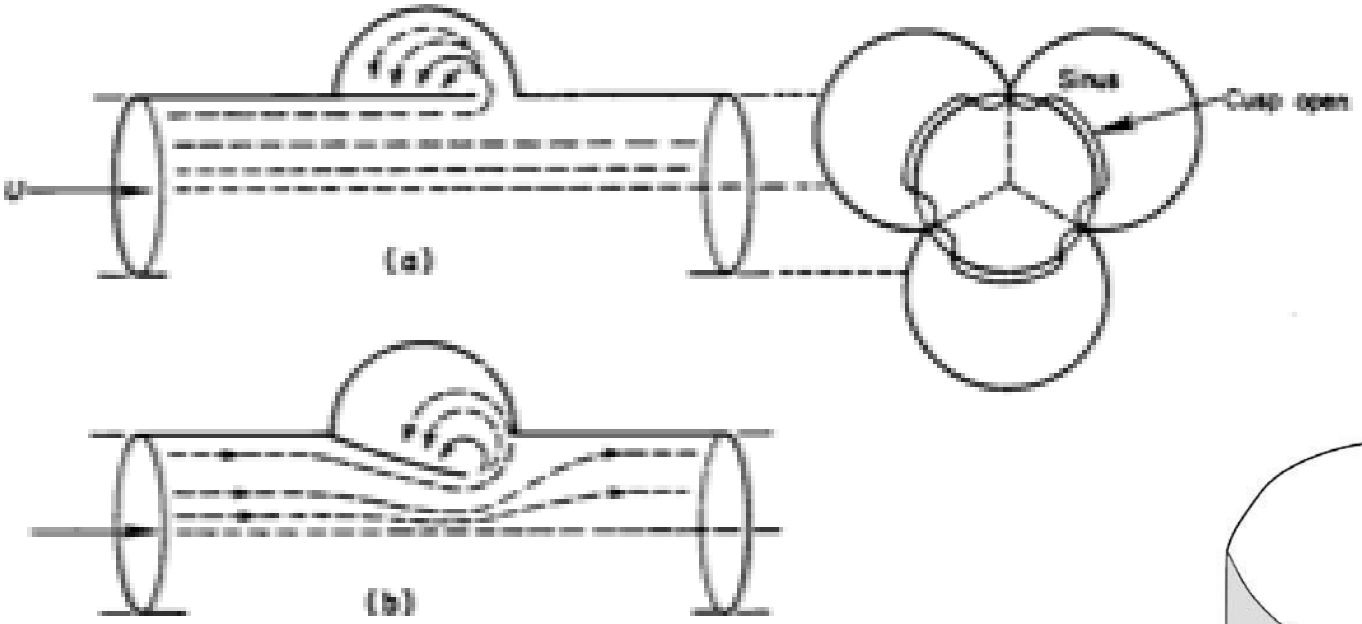


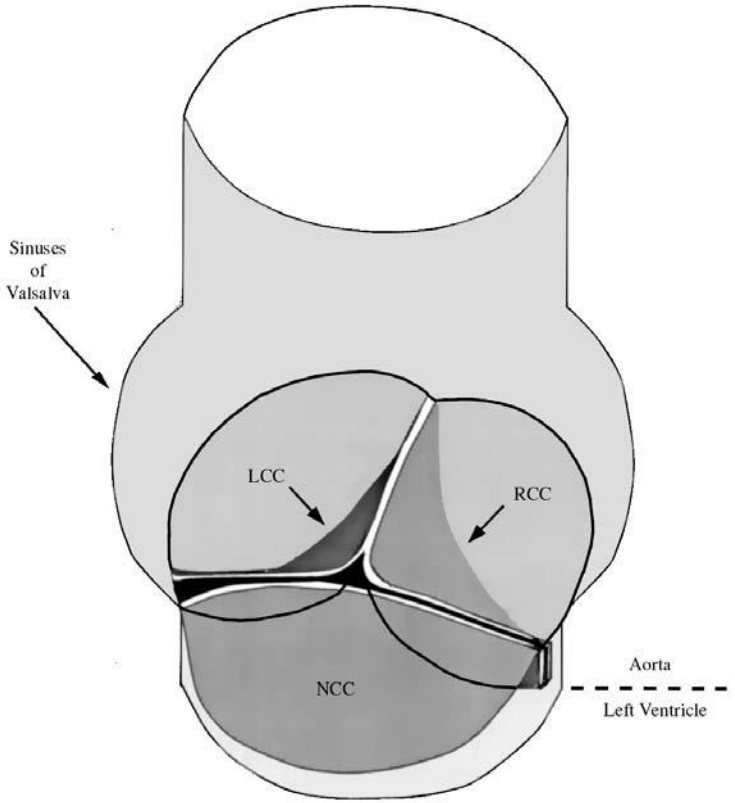
Protesi valvolari

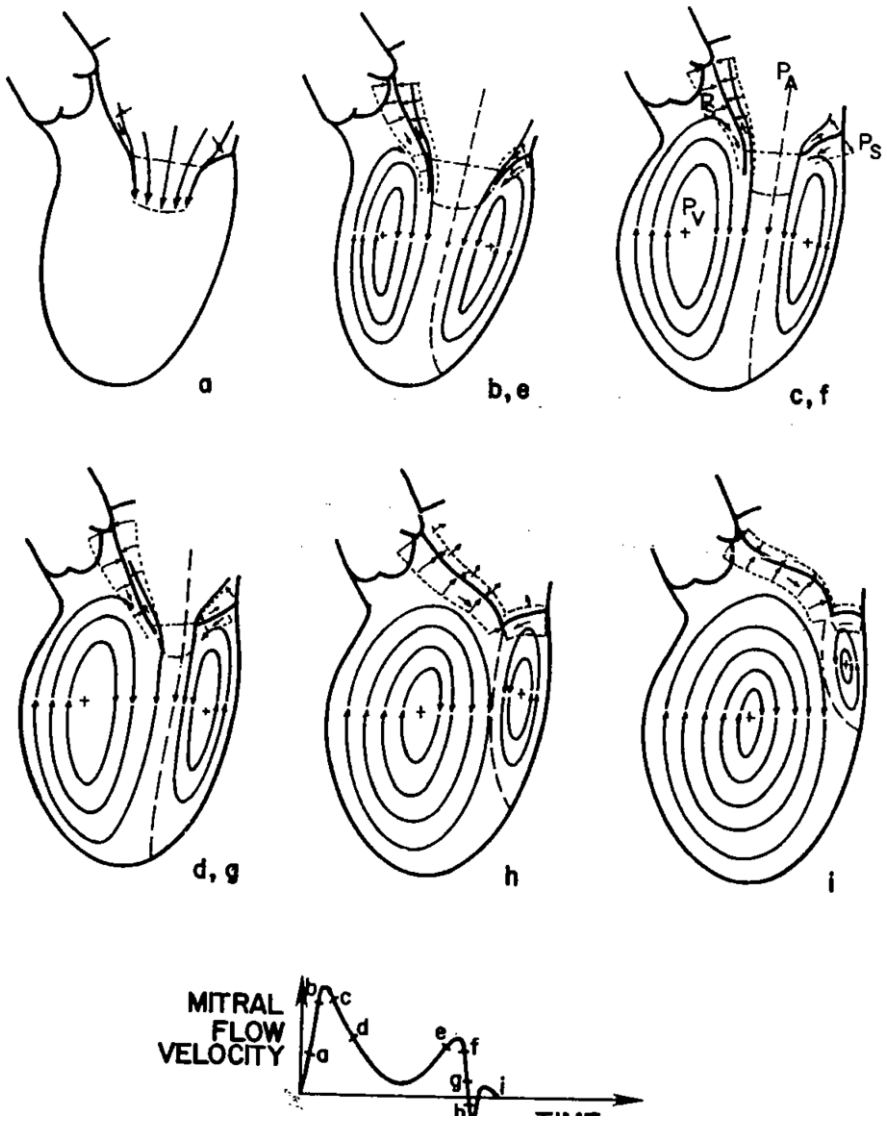
g.vozzi@centropiaggio.unipi.it

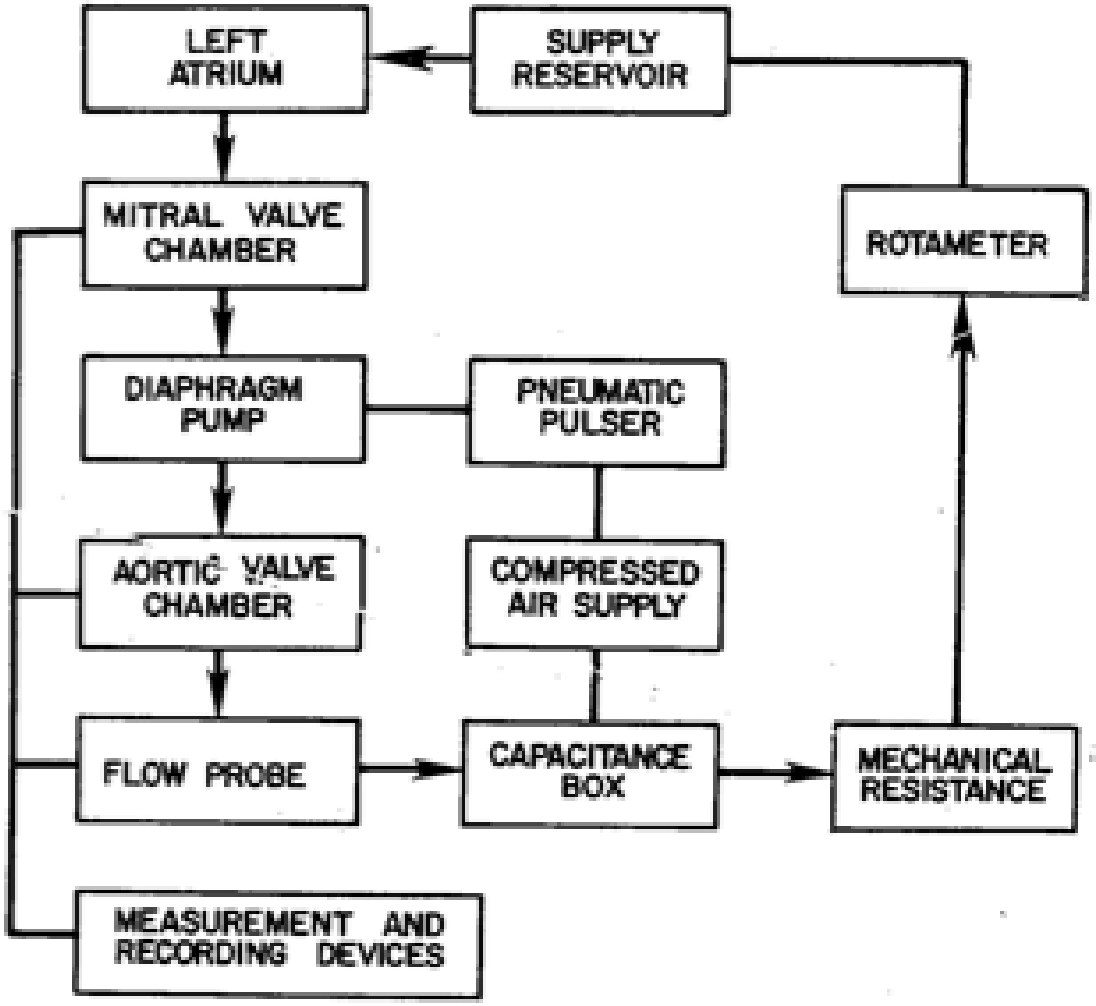

Vena cava superiore
Aorta
Arteria polmonare
Vena polmonare
Atrio sinistro
Atrio destro
Valvola mitrale
Valvola aortica
Ventricolo sinistro
Valvola polmonare
Valvola tricuspide
Ventricolo destro
Vena cava inferiore

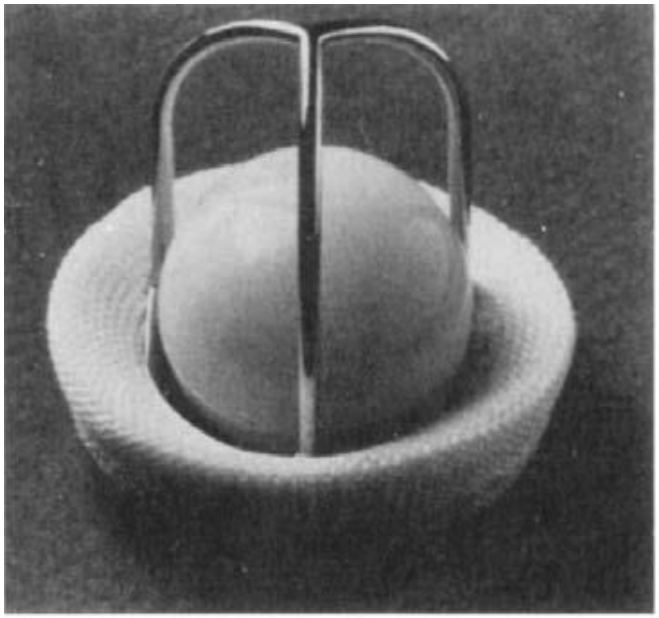

Systole
Diastole
Aortic Pressure
Ventricular Pressure
MV closes
Mitral Flow
MV opens
AV closes
Aortic Flow
AV opens
QRS
ECG
T
P
0 100 200 300 400 500 600 700 800 900 1000
Isovolumic Contraction
Isovolumic Relaxation
Time(ms)

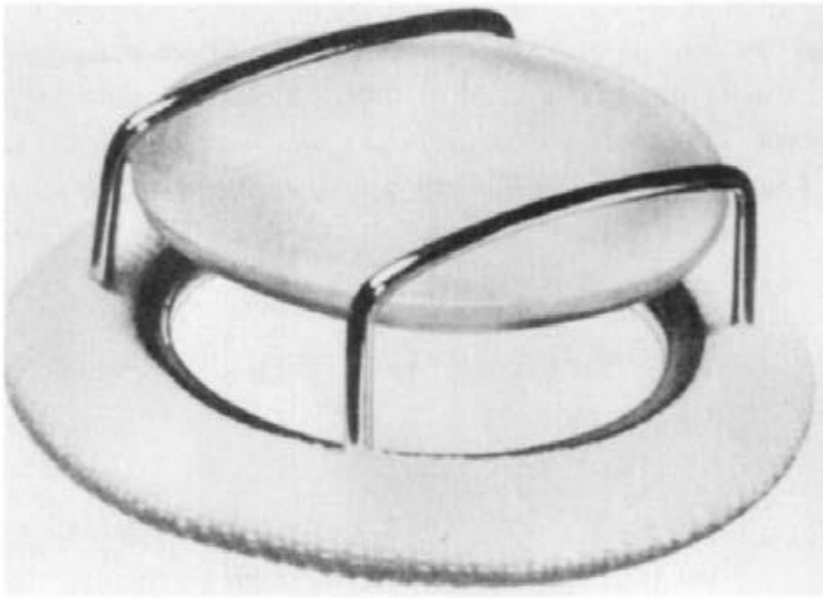

Sinus
Cusp open
(a)
(b)

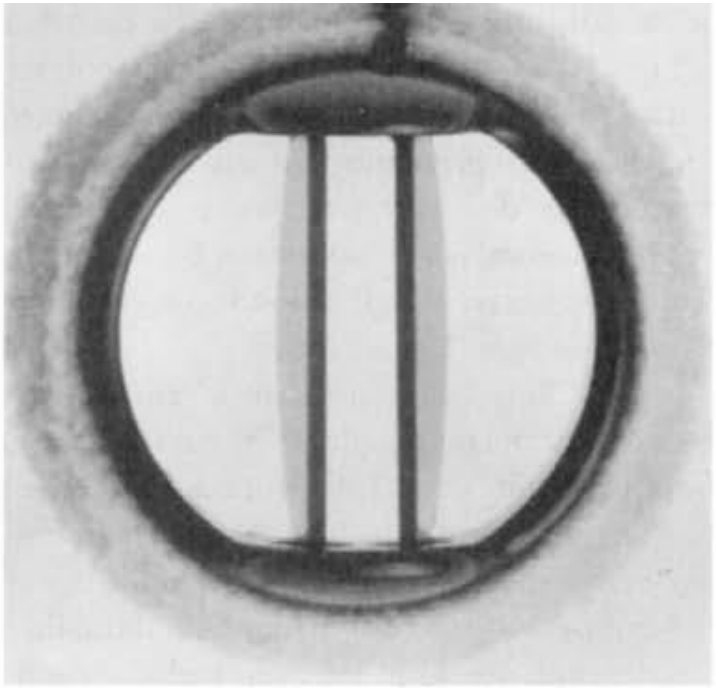

Sinuses
of
Valsalva
LCC
RCC
NCC
Aorta
Left Ventricle


a
b, e
c, f
P
PS
PV
d, g
h
i
MITRAL
FLOW
VELOCITY
a
b
c
d
e
f
g
i

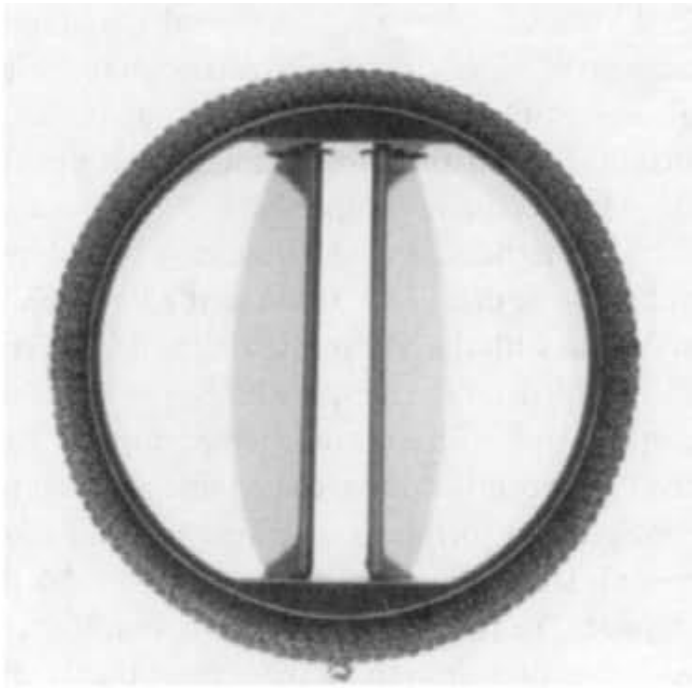

LEFT ATRIUM
SUPPLY RESERVOIR
MITRAL VALVE CHAMBER
ROTAMETER
DIAPHRAGM PUMP
PNEUMATIC PULSER
AORTIC VALVE CHAMBER
COMPRESSED AIR SUPPLY
FLOW PROBE
CAPACITANCE BOX
MECHANICAL RESISTANCE
MEASUREMENT AND RECORDING DEVICES



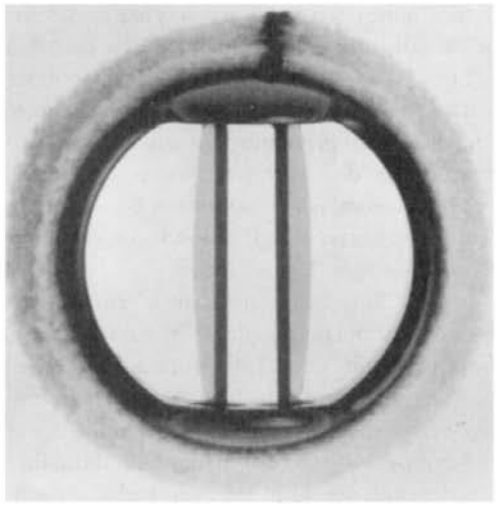




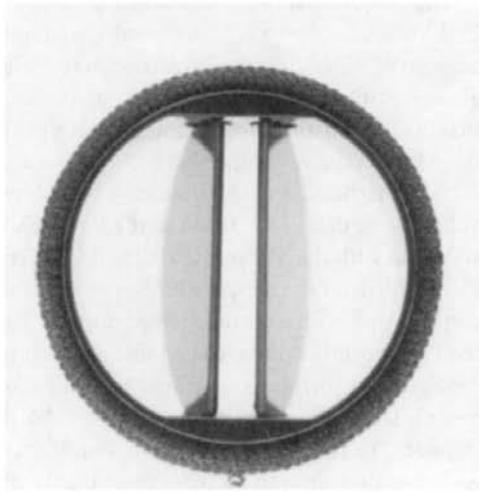
(e)



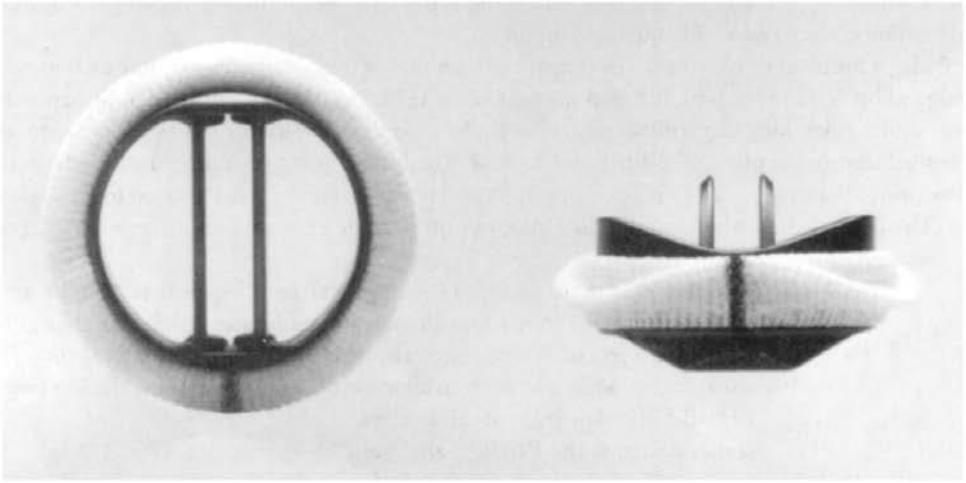
(f)

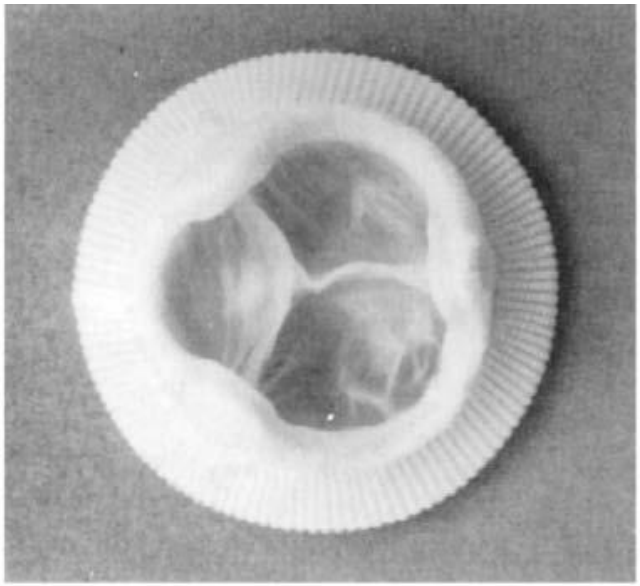


(e)

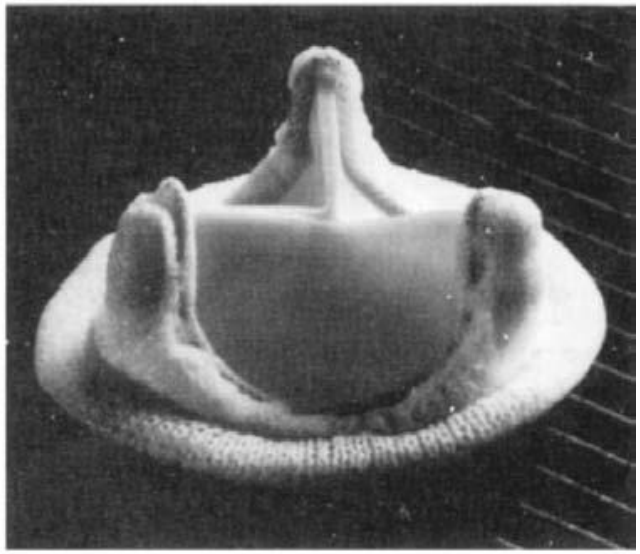


(f)



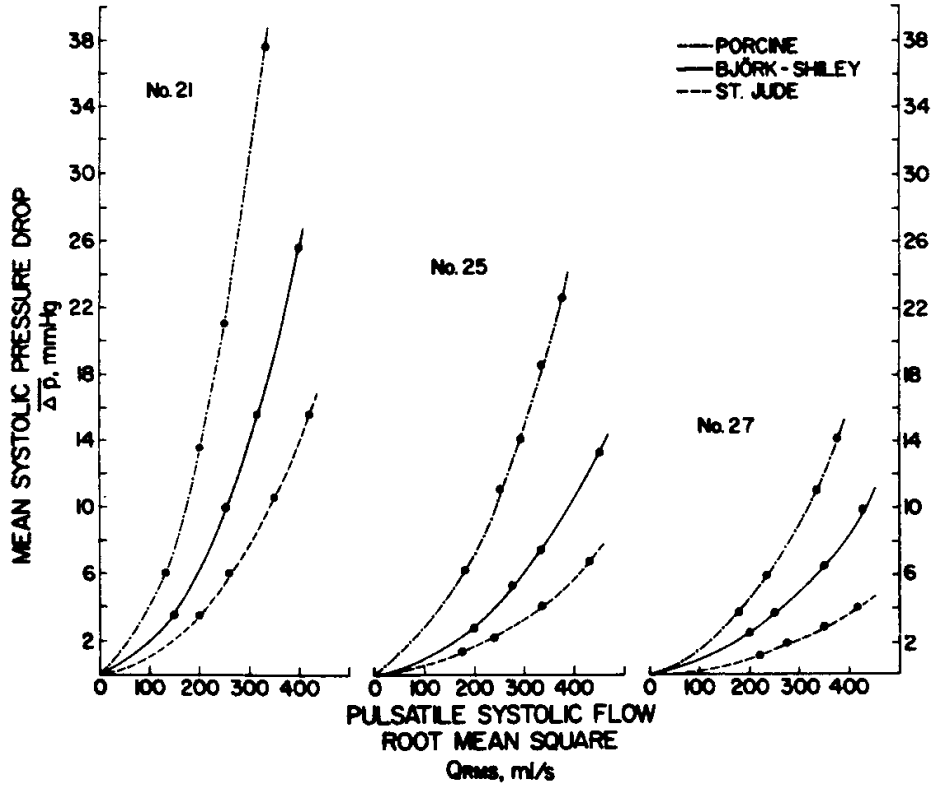


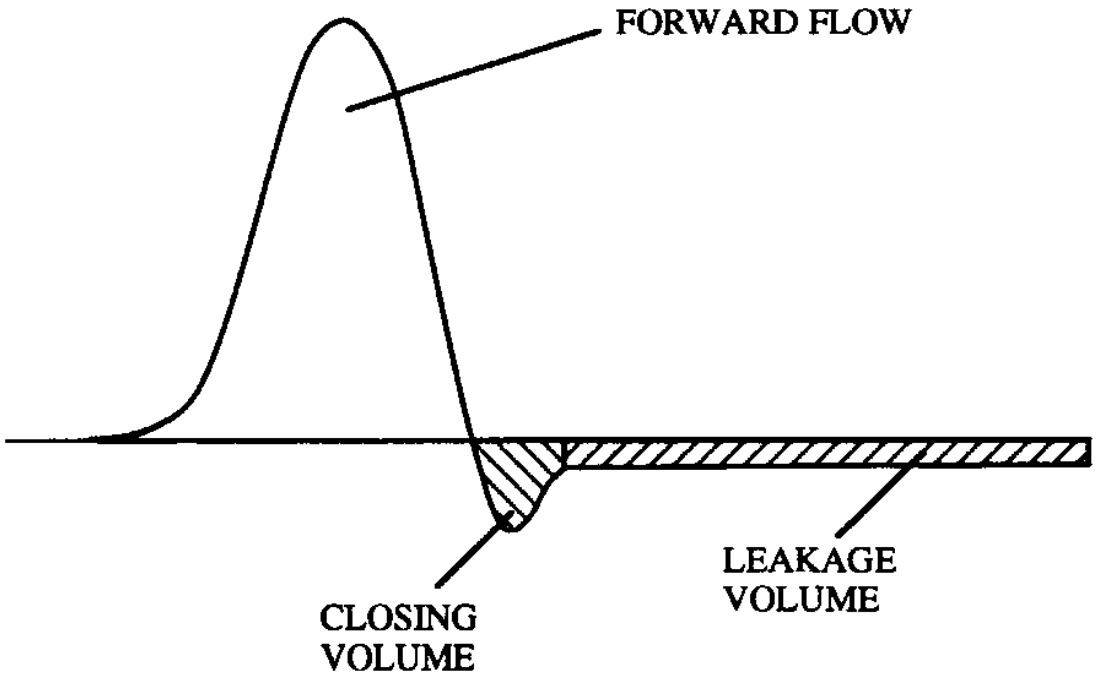
(a)



(b)

$$EOA\left(cm^2\right) = \frac{Q_{rms}}{51.6\sqrt{\Delta\bar{p}}}$$




FORWARD FLOW
CLOSING VOLUME
LEAKAGE VOLUME