

HTN

- diastolic dysfx [relaxation type]
- ventricular hypertrophy

M shape $\bar{q}$ wave

0.8 reversed...

1 - 1.5 normal

(HTN) target organ damage may lead to AIA

- VHD

- HF

- Aortic aneurysm

PCI pt → I ischemic HD.

→ gold standard for arteries... [invasive]

normal ejection fraction:- 55, 75%.

normal septal diameter → 7-11

in Echo we see → non invasive.
→ arteries
→ muscle.
dilatation
pericardial effusion

* diastolic fx early sign in HTN - Ischemic HD before systolic dyfx.

→ energy depended

Top [Final Stage]

No ATP needed.

* Heart need Ca^{2+} from out side [but other organ from inside]

→ enters by T tubules [large in cardiac M.]

→ in reticular system.

* Ca^{+2} activate re-uptake receptor and this release Ca^{+2} to make binding to myosin - Actin

relaxation:- energy dependant process

[↑ energy]

terminal system Ca^{+2} release

system

energy

appendectomy + palpitation + shortness of breath due to stress.

* pt with cough, left side pneumonia, PCT

weak contraction in septum $\Rightarrow$ scar / Mitral regurgitation

septo apical hypokinesia $\Rightarrow$ HF pt

mosaic color

معرضة لـ HF، contraction of septum and apex

* cardiomyopathy

→ 1ry

→ 2ry. [Ischemic HD.]

* exercise tolerant test:- noninvasive. to know what the cause of chest pain.

↳ the specificity depend on $\frac{220 - \text{age}}{\text{max HR}}$ A. م. بنص A. م. $\left\{ \begin{array}{l} ① 60\% \\ ② 80\% \\ ③ 90\% \end{array} \right.$

5% of max. HR ← target $\leftarrow$ يضل بين 5% من ايماكس

① chest pain evaluation

② for assess to drug $\leftarrow$ (نوع الدواء) B. Blocker و ادرينالين و نيتروجليسرين و ...

- atypical angina
- ST depression $\leftarrow$ $\left\{ \begin{array}{l} \text{horizontal} \\ \text{downward} \end{array} \right.$ true test
- drop systolic BP

③ palpitation with effort

④ after PCI

⑤ +ve family hx of PCI ... etc

[How metabolic equivalent occur].

↑ Systolic / normal diastolic $\rightarrow$ normal response of heart to exercise.
or decrease $\rightarrow$ strong +ve test

* due to ↓ peripheral vascular resistance $\therefore$ ↓ diastolic

The cat^1 score in

artifact

up sloping $\rightarrow$ normal with tachycardia.

horizontal $\rightarrow$ Ischemic.

sever HF
HOCM
sig. arryth.
unstable angina
sever Aortic stenosis

contraindication.

of ex. test

disc
Branchia asth
stroke
age
anemia
AF

limitation

* stress dopa timin ECG X axis u

* " " Echo ✓ " "

* ASD : atrial septal defect. [effort dyspnea]

↳ pulmonary HTN

↳ Rt side hypertrophy.

↳ mitral color [turbulent]

there is 2 edge

* interseptal diameter:-

* ostium secundum

*

*

types of ASD

* history of dental proccess [infective endocarditis]

mass in Aortic valve → calcification
→ vegetation [dense] lead to Aortic regurge significant
+ mild Aortic stenosis

→ old vegetation → dense as bone become calcification.

The BP above 160 - 100 need 2 drug...

Valzadepine → amlodipine + valza

tt of arrhythmic → electrical

AV re-entrant
tachycardia

→ to prevent the tachycardia
induce cardiomyopathy.



AV node 2 pathway → fast
→ slow

SVT → fast, narrow

vtac → wide

recurrent syncope → we do shorter monitoring

tail 1/2000

* 4 pulmonary A. responsible of Arterial arrhythm:

[↑ ectopic]

chronic → Atrial bigger than ventricle
→ AV

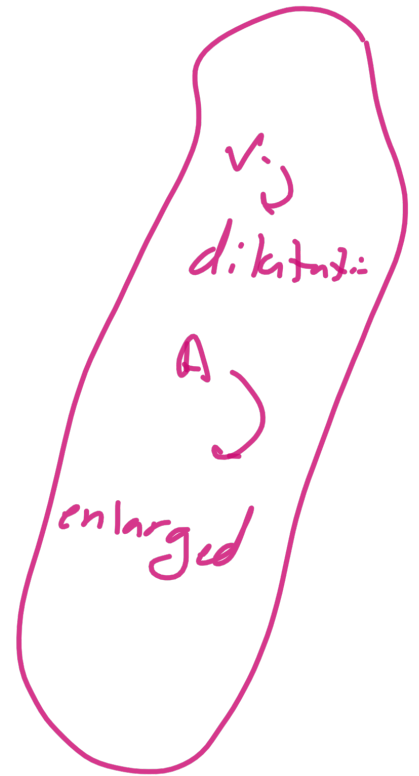
→ restrictive cardiomyopathy [Atrial megaly]

diastolic dys fx [restrictive exacerbated]

* the main gradient between Aortic and
more than 40 % significant..

- ventricle rigid
- Atrialomegaly
- AF
- exacerbated diastolic dysfunction

restrictive cardiomyopathy



TR mosaic color

→ indicate to pulmonary HTN..

(AF) measure chudscore :.

HTN

1

DM

1

age = 65

1

age > 75

2

Stroke previous

2

female

1

trivial TR → less than mild.

↙ if there is TR

Pulmonary Pressure = Rt V. Systolic $\oplus$ Rt A. p.

Collapse > 50% in IUG

1st 2nd

Cardiomyopathy

- congenital
- acquired
 - restriction
 - dilated
 - hypertrophic [thick M. + obstruction] HOCM..

DCM → idiopathic (1st)
→ dilated cardiomyopathy.

- B Blocker
- Zgelt
- Spironolactone
-

Aortic dissection → A may reach + in iliac/femoral
need urgent surg. → B after the Ascending
[Ascending involved]

R on T ⇒ lead to VT [arrest]

have put loop recorder for 6 months
Palpitation 1/2/15 010

> 30 sec → sustained

< 30 sec → non sustained

TP interval → Isoelectric interval
[resting poten.]

prolonged in Bradycardia...

- early after depolarization } Arrhythmia
- late " " } QT interval

↳ TP interval, Bradycardia → vent. fibr