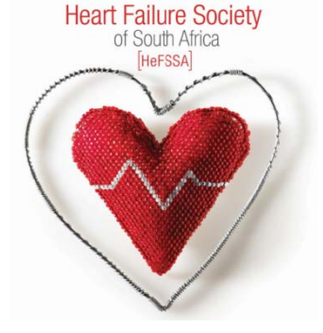
HeFSSA

Heart Failure Society of South-Africa



Background

Special interest group affiliated to the South African Heart Association

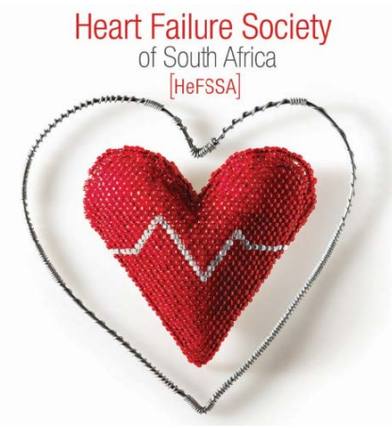
First Heart Failure Society in Africa

Established as a non-profit Section 21 company in 2005

Mission: **To promote education and research as well as collaboration on issues relating to heart failure in South Africa and around the world**

SA Heart

Heart Failure Society of South Africa [HeFSSA]



HeFSSA Exco

Cardiologist in public and private sector

E Klug (President)

M Mpe (Vice-President)

D Smith (Treasurer)

J Hitzeroth (Secretary)

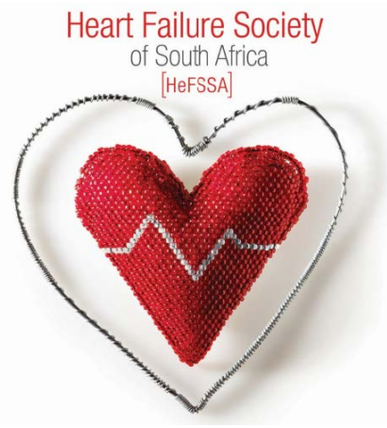
K Sliwa

P Obel

C Radulescu

S Lecour

T Lachman



Activities

Cardio Update for Non-cardiologists at The SA Heart Congress

Research and Specialist Education- HeFSSA/SASCAR

GP Program 2013

Website (www.hefssa.org)

Web-based Questionnaire

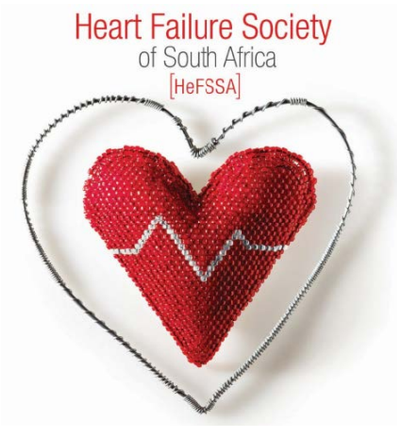
Patient Empowerment Program

Physicians and General Practitioner Update

Heart Failure Travel Scholarship

Inter-CHF Study

The GAPS Study



HeFSSA Vision 2013

To continue to provide value to the SA Heart Association, colleagues, industry and to our patients. We also acknowledge our responsibility towards our sponsors and the communities in which we practice.

Heart Failure Society
of South Africa
[HeFSSA]

Corporate sponsors

AstraZeneca

pharma dynamics

EFFECTIVE AFFORDABLE HEALTHCARE

Boston Scientific

SERVIER

MERCK

Medtronic

Contact details

George Nel

E-mail: george@medsoc.co.za

Mobile: 083 458 5954

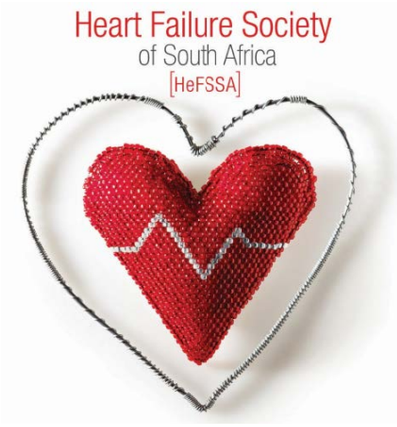
Sanette Zietsman

E-mail: sanette@medsoc.co.za

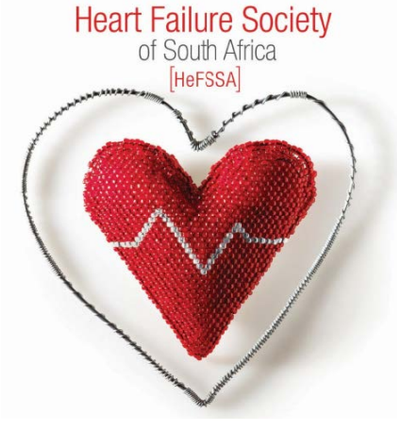
Mobile: 083 253 5212

info@heffsa.org

www.hefssa.org



Heart Failure Case Study



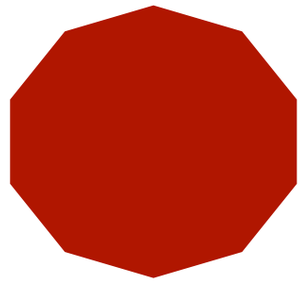
DIAGNOSIS:

1) Hypertensive cardiomyopathy.

1999, 36 years old

HISTORY AND EXAMINATION:

Referred by [redacted] with SOB and ↓ effort tolerance and leg swelling. *Denies alcohol abuse.* **Occupational history:** worked as Supervisor in Cast Iron Foundry. **On Examination:** apyrexial. BP 50\110. ↑ JVP 7 cm. Pedal oedema +++. **CVS:** apex myopathic 6 ICS outside MCL. S1 S2 S3. **Chest:** clear. No creps. **Abd:** 6 cm hepar.



INVESTIGATIONS:

ECG: LVH (all criteria) + strain.
Chest x-ray: ↑ CTR 70%.
Echo: dilated. Dysfunction LV. *EF:* 18%. Mild concentric LVH. Mild MR and TR.
Bloods: see attached flow chart.

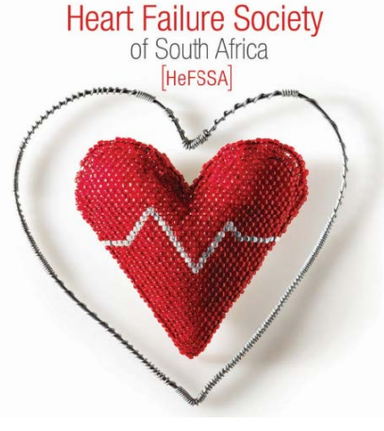
PROGRESS AND MANAGEMENT:

Failure resolving - on treatment.

FOLLOW UP: 1) Cardiac Clinic.
T.T.O:

1) Digoxin 0.125 mg po daily.
2) Slow K III tabs tds po.
3) Coversyl 4 mg po daily.
4) Hoescht Lasix 125 mg po mane and
5)
6) 80 mg noon.
7)
8)

DATE: 10\5\99 **COPY TO:** Cardiac Clinic.



Presentation of HF - REF

- *Effort intolerance*
- *Fluid retention*
- *JVP, hepatomegaly, pedal oedema*
- *Displaced LV apex beat*
- *Left sided third sound*
- *No lung crackles*

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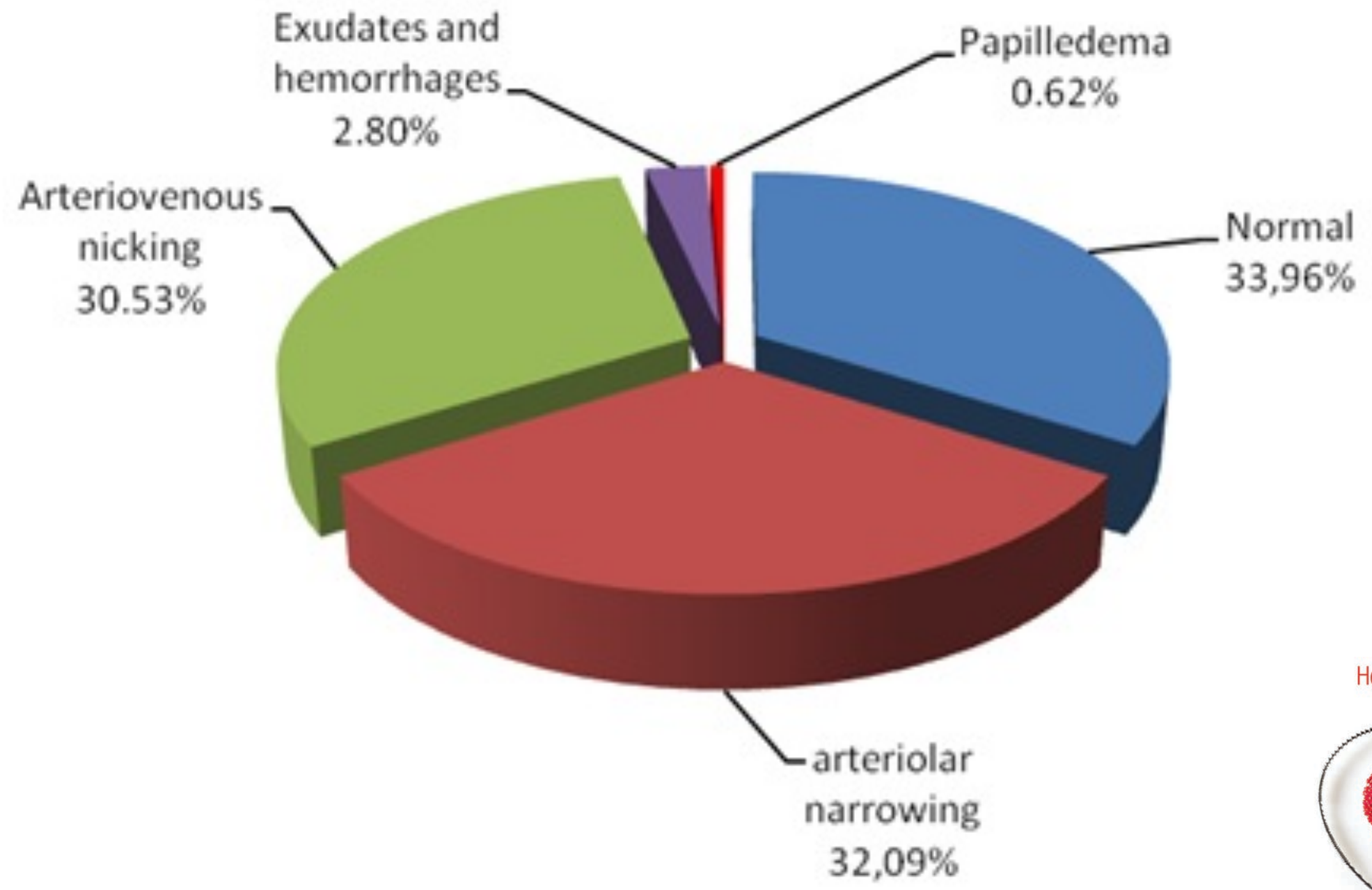
INVESTIGATIONS:

Hypertensive Retinopathy



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7)
8)

DATE: 10\5\99 **COPY TO:** Cardiac Clinic.

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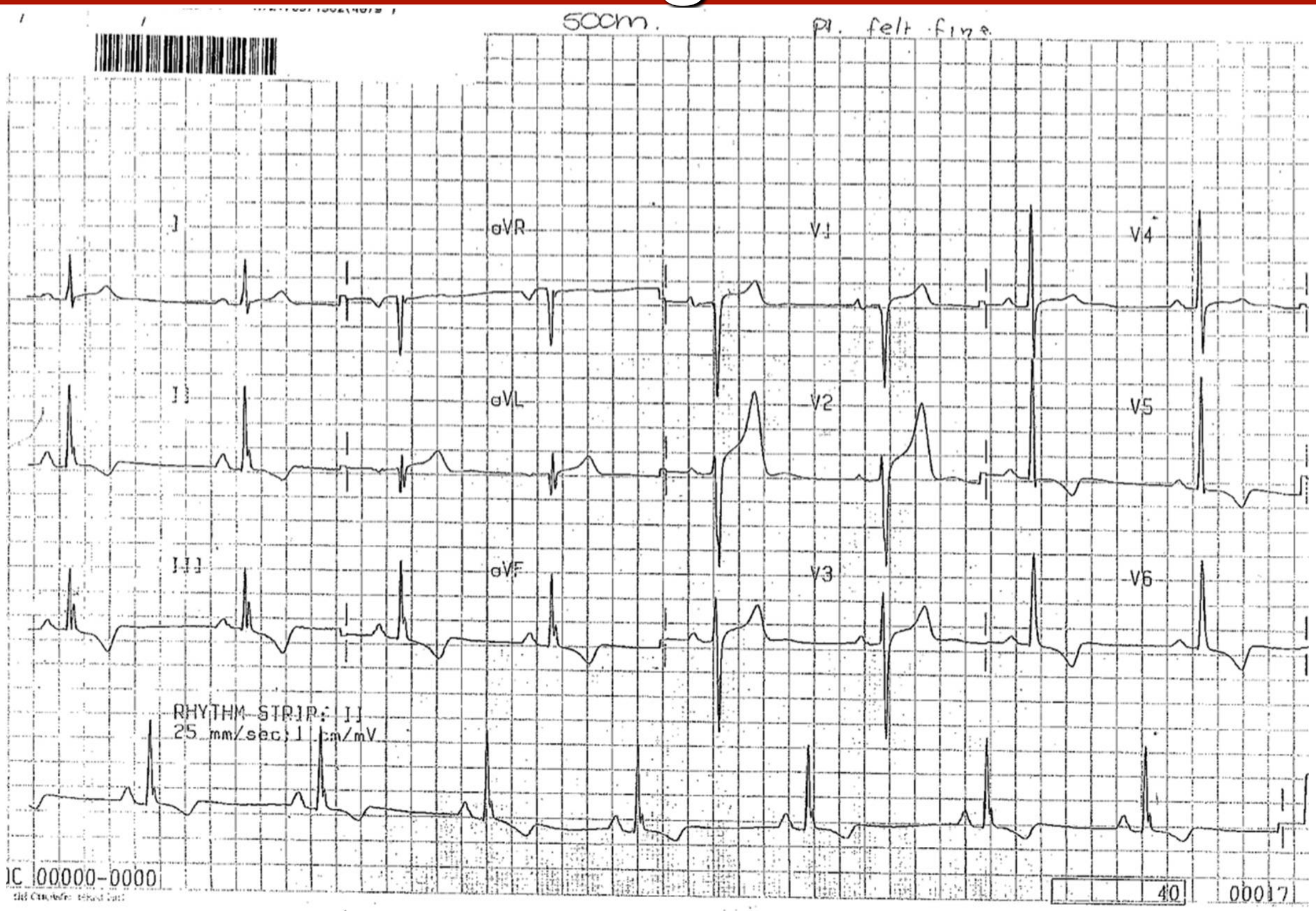
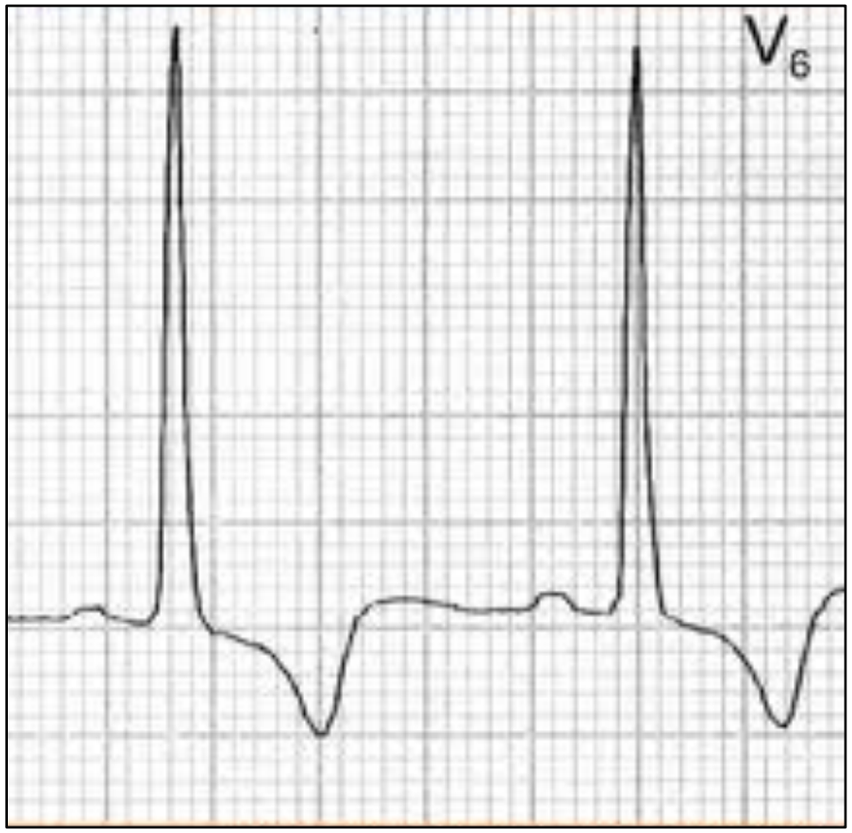
Resting ECG

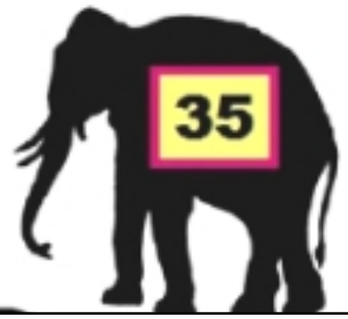

500cm.
Pt. felt fine.
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
RHYTHM STRIP: II
25 mm/sec; 1 cm/mV
40
00017

Sokolow-Lyon voltage criteria



***Simplified* Criteria** for Diagnosing **LVH**

1. Deepest S wave in lead V_1 *or* V_2,
   plus tallest R wave in lead V_5 *or* V_6 ≥ **35**.
   — *and/or* — R in lead aVL ≥**12**.
2. Patient ≥ **35** years old.
3. Left ventricular (LV) " ***strain*** ".



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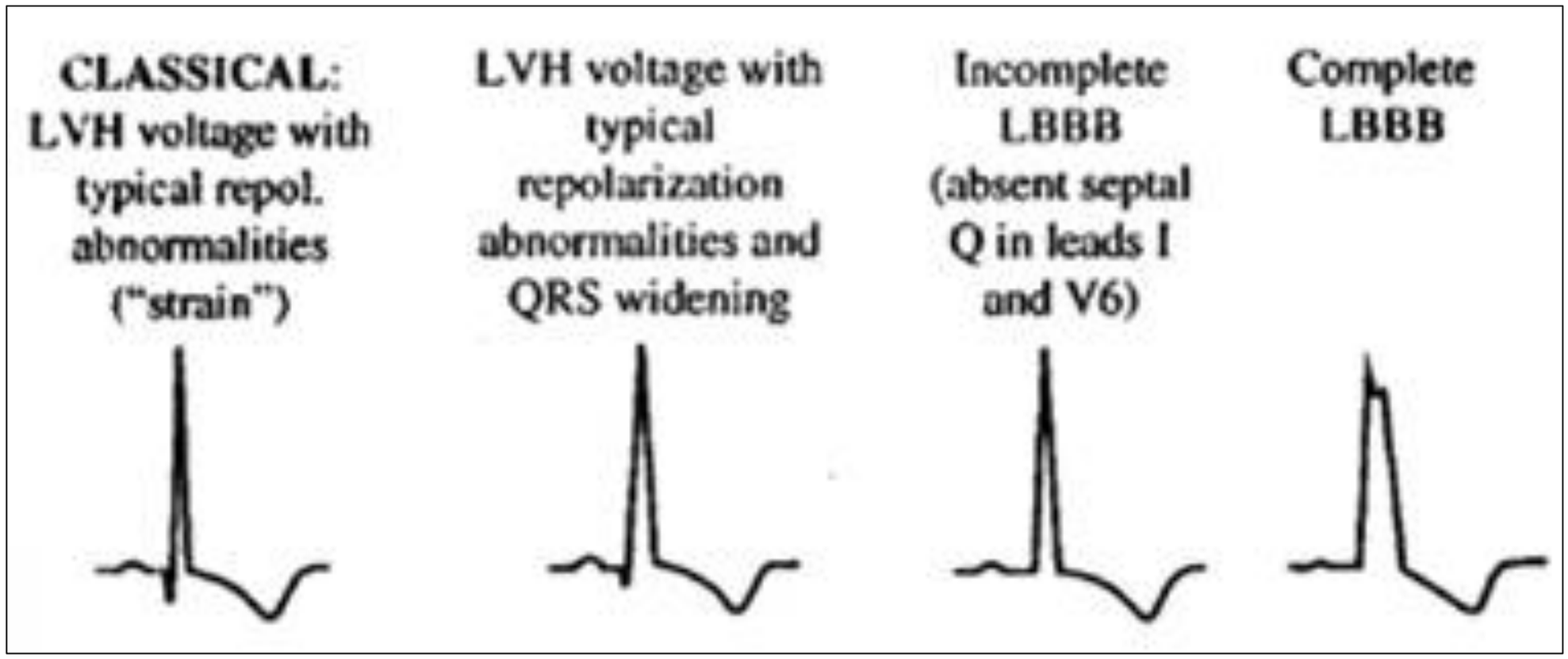
[HeFSSA]

Progressive QRS widening



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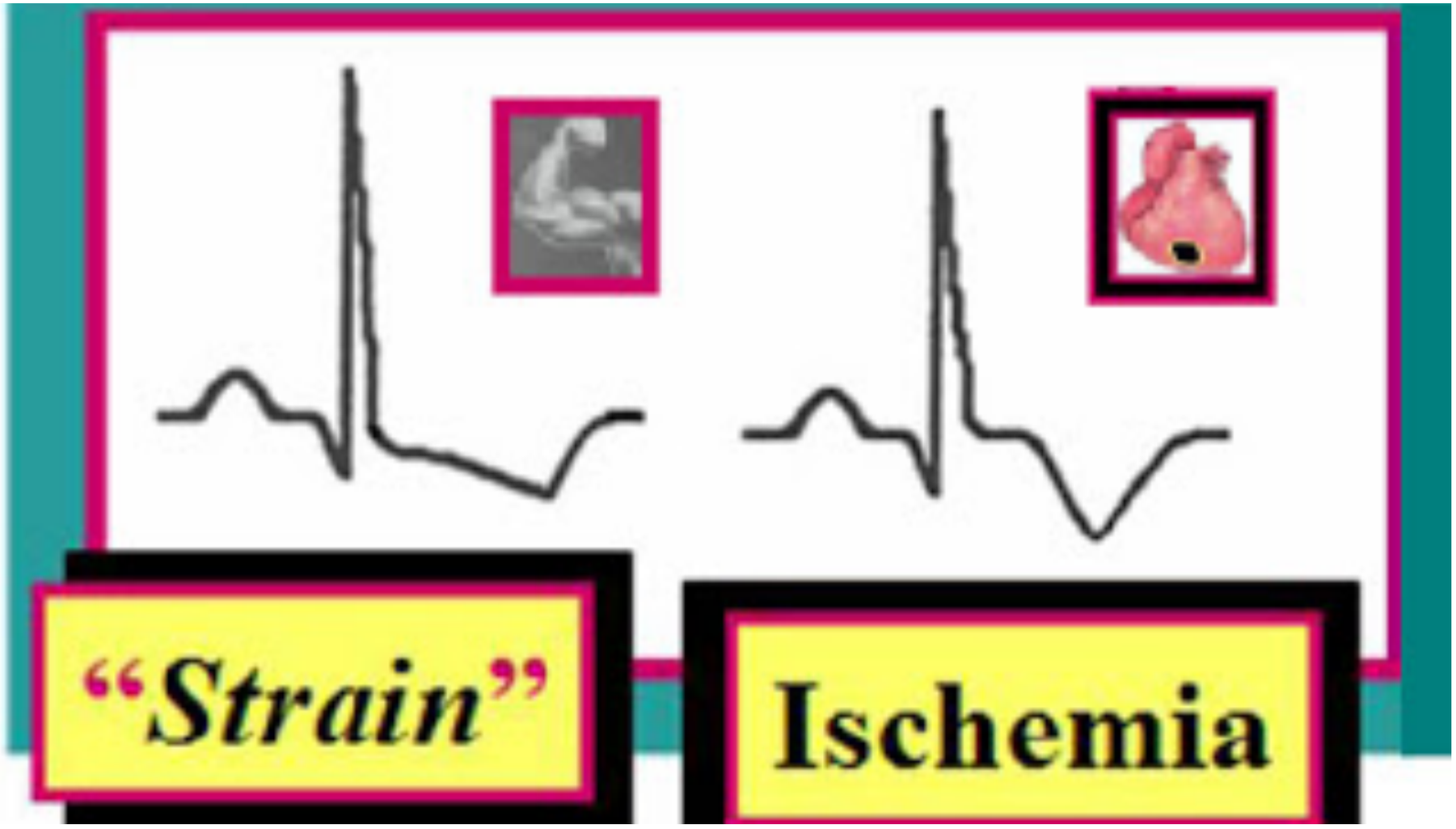
T wave inversion



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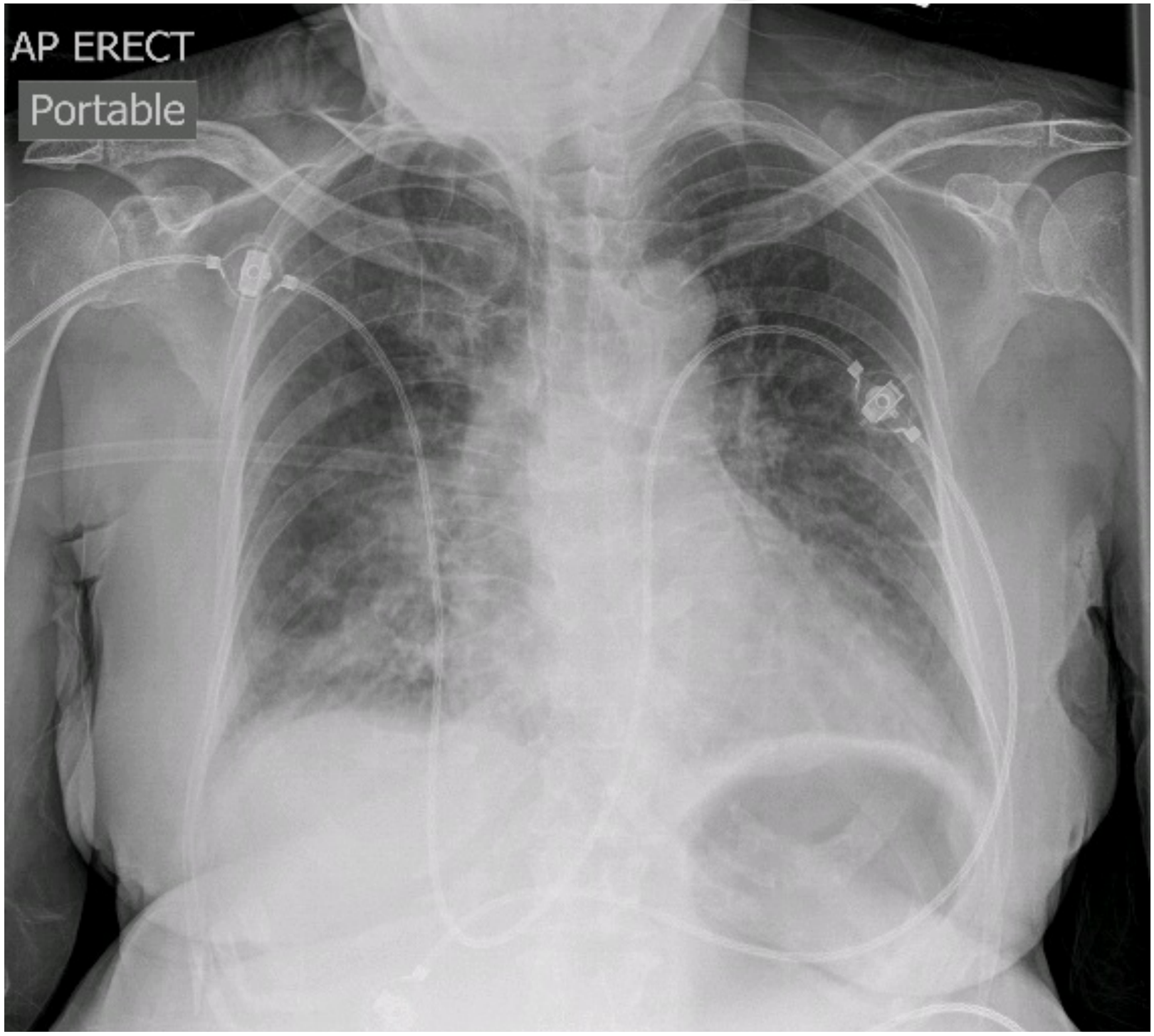
Presenting CXR



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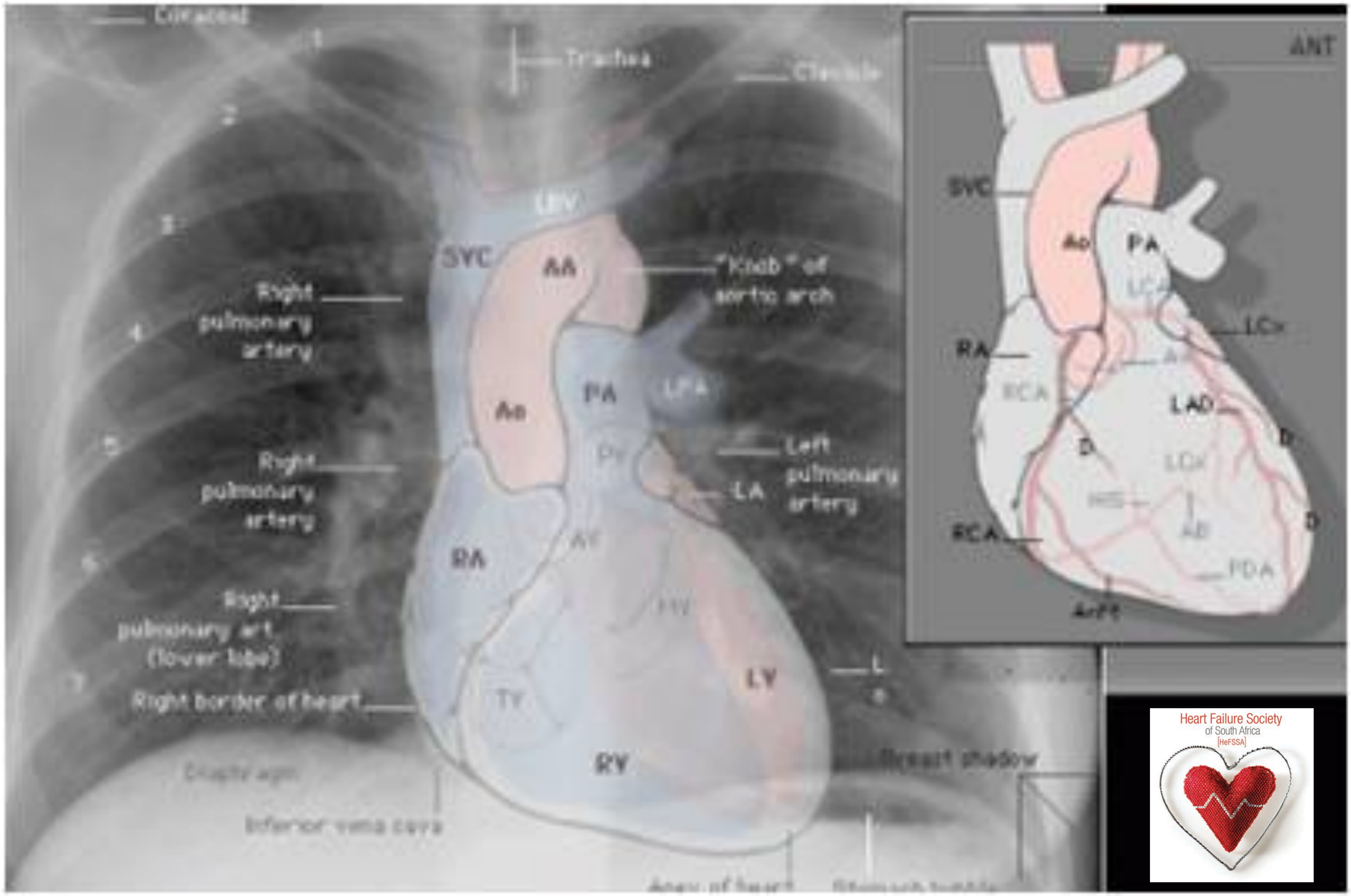
The heart and vascular structures of the CXR



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ESC Guideline 2012

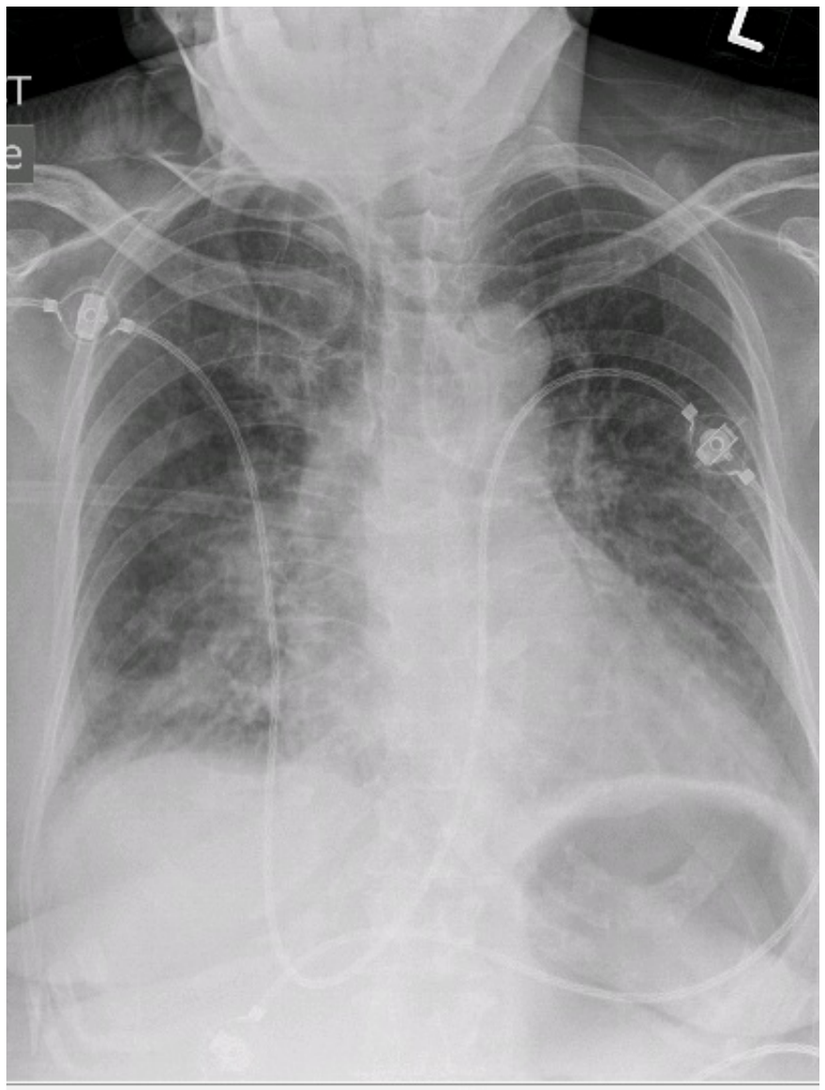
- **3.6.5 Chest X-ray**

- **A chest X-ray is of limited use in the diagnostic work-up of patients with suspected HF.**

- **It is probably most useful in identifying an alternative, pulmonary explanation for a patient's symptoms and signs.**

- **It may, however, show pulmonary venous congestion or oedema in a patient with HF.**

- **It is important to note that significant LV systolic dysfunction may be present without cardiomegaly on the chest X-ray.**



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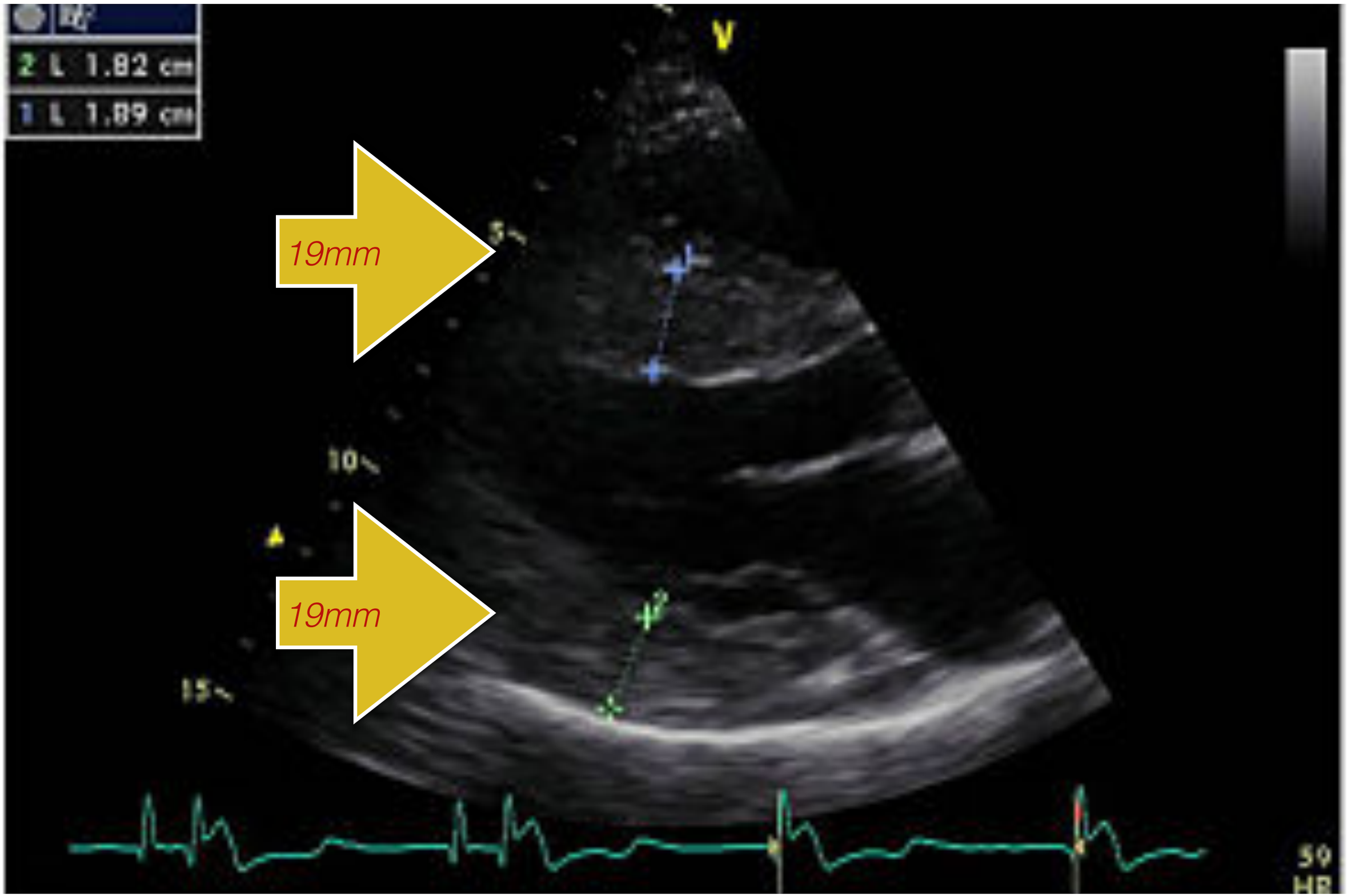
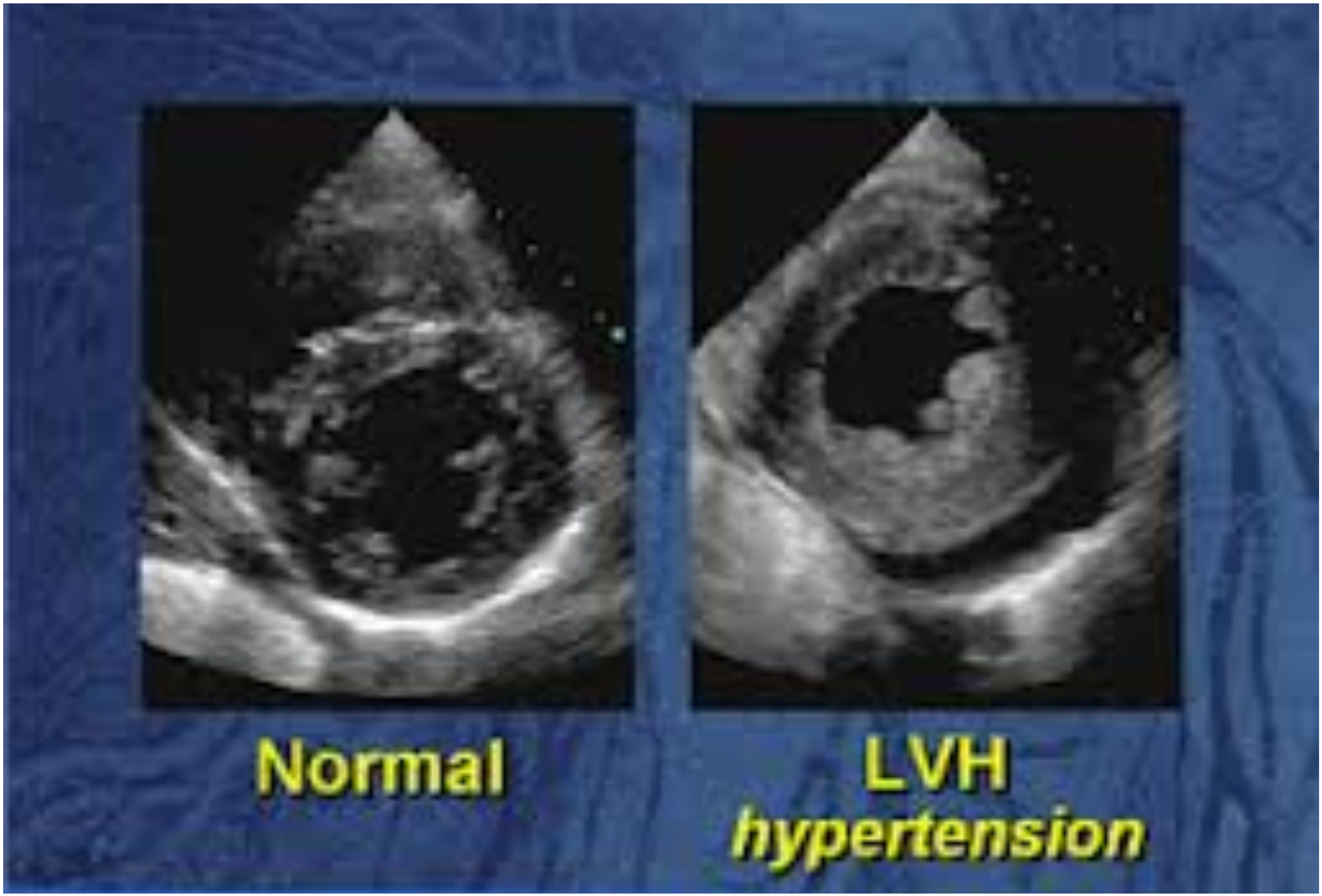
Echo-cardiography - parasternal long axis



Short axis



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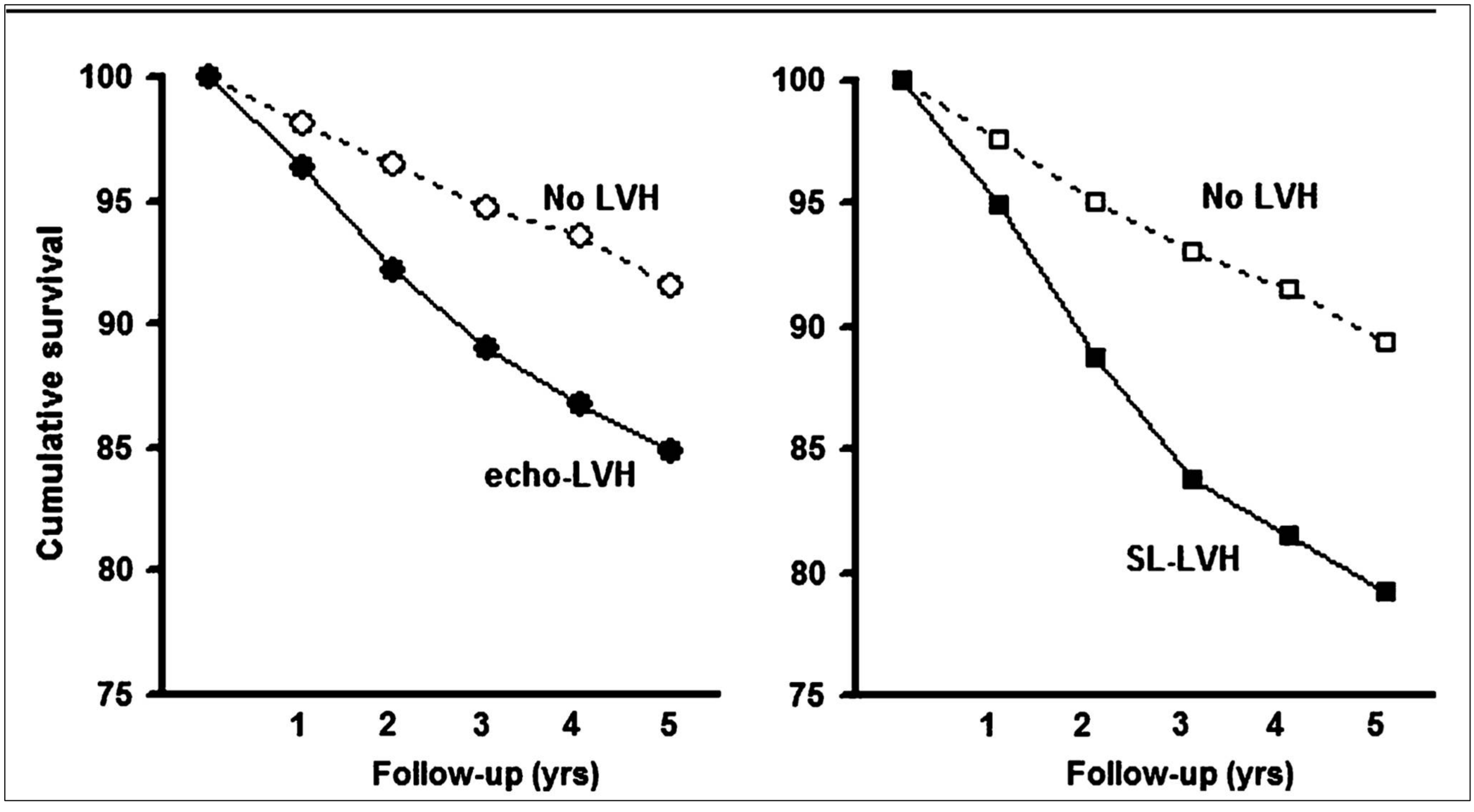
Survival Implications of ECG or Echo LVH

ECHO

ECG



Suspected heart failure

Acute onset

ECG
Chest x-ray

Echocardiography

BNP/NT-pro BNP*

ECG normal
and
NT-proBNP <300 pg/mL
or
BNP <100 pg/mL

Heart failure unlikely[c]

ECG abnormal
or
NT-proBNP ≥300 pg/mL[b]
or
BNP ≥100 pg/mL[b]

Non-acute onset

ECG
Possibly chest x-ray

BNP/NT-pro BNP

ECG abnormal
or
NT-proBNP ≥125 pg/mL[a]
or
BNP ≥35 pg/mL[a]

Echocardiography

ECG normal
and
NT-proBNP <125 pg/mL
or
BNP <35 pg/mL

Heart failure unlikely[c]

Echocardiography

If heart failure confirmed,
determine aetiology[d] and
start appropriate treatment

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of South Africa
[HeFSSA]

Heart Failure Society
of South Africa
[HeFSSA]

1999, 36 years old

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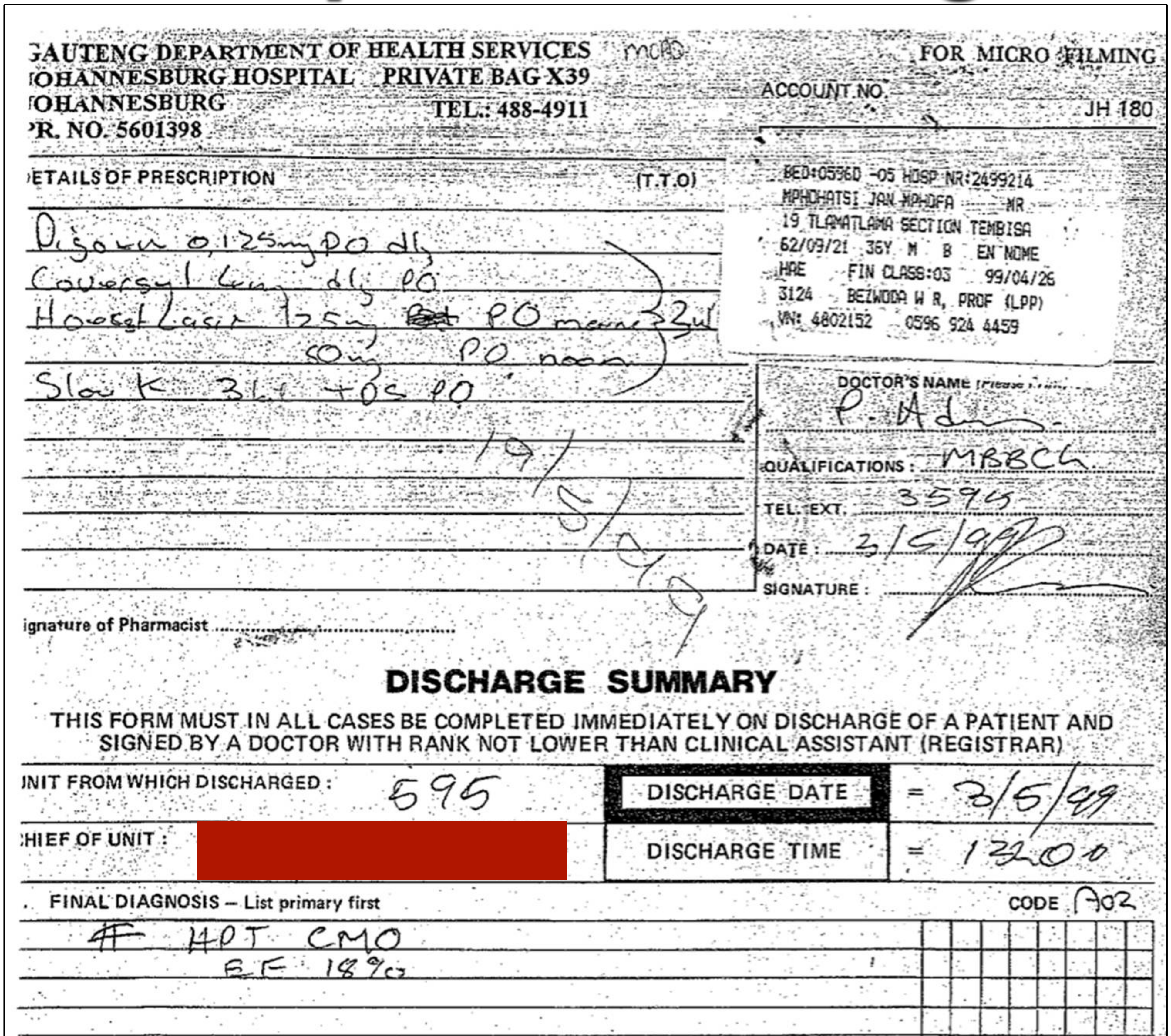
5)
6) 80 mg noon.
7)
8)

DATE: 10\5\99 **COPY TO:** Cardiac Clinic.

Actual script on discharge - 1999



GAUTENG DEPARTMENT OF HEALTH SERVICES
JOHANNESBURG HOSPITAL PRIVATE BAG X39
JOHANNESBURG TEL.: 488-4911
PR. NO. 5601398

FOR MICRO FILMING
ACCOUNT NO.
JH 180

DETAILS OF PRESCRIPTION (T.T.O)

Digoxin 0,125mg PO dly
Coversyl 4mg dly PO
Hoechst Lasix 125mg PO mane
50mg PO noon
Slow K 3 tabs tds PO
19/5/99

BED:0556D -05 HOSP NR:2499214
MPHOHATSI JAN MPHOFA MR
19 TLAMATLAMA SECTION TEMBISA
62/09/21 36Y M B EN NONE
HRE FIN CLASS:03 99/04/26
3124 BEZWODA W R, PROF (LPP)
VN: 4802152 0596 924 4459

DOCTOR'S NAME (Please Print): P. Adam...
QUALIFICATIONS: MBBCh
TEL. EXT.: 3595
DATE: 3/5/99
SIGNATURE:

Signature of Pharmacist ....

DISCHARGE SUMMARY

THIS FORM MUST IN ALL CASES BE COMPLETED IMMEDIATELY ON DISCHARGE OF A PATIENT AND SIGNED BY A DOCTOR WITH RANK NOT LOWER THAN CLINICAL ASSISTANT (REGISTRAR)

UNIT FROM WHICH DISCHARGED: 595 | DISCHARGE DATE = 3/5/99
CHIEF OF UNIT: [redacted] | DISCHARGE TIME = 12:00

FINAL DIAGNOSIS – List primary first CODE A02
HPT CMO
EF 18%

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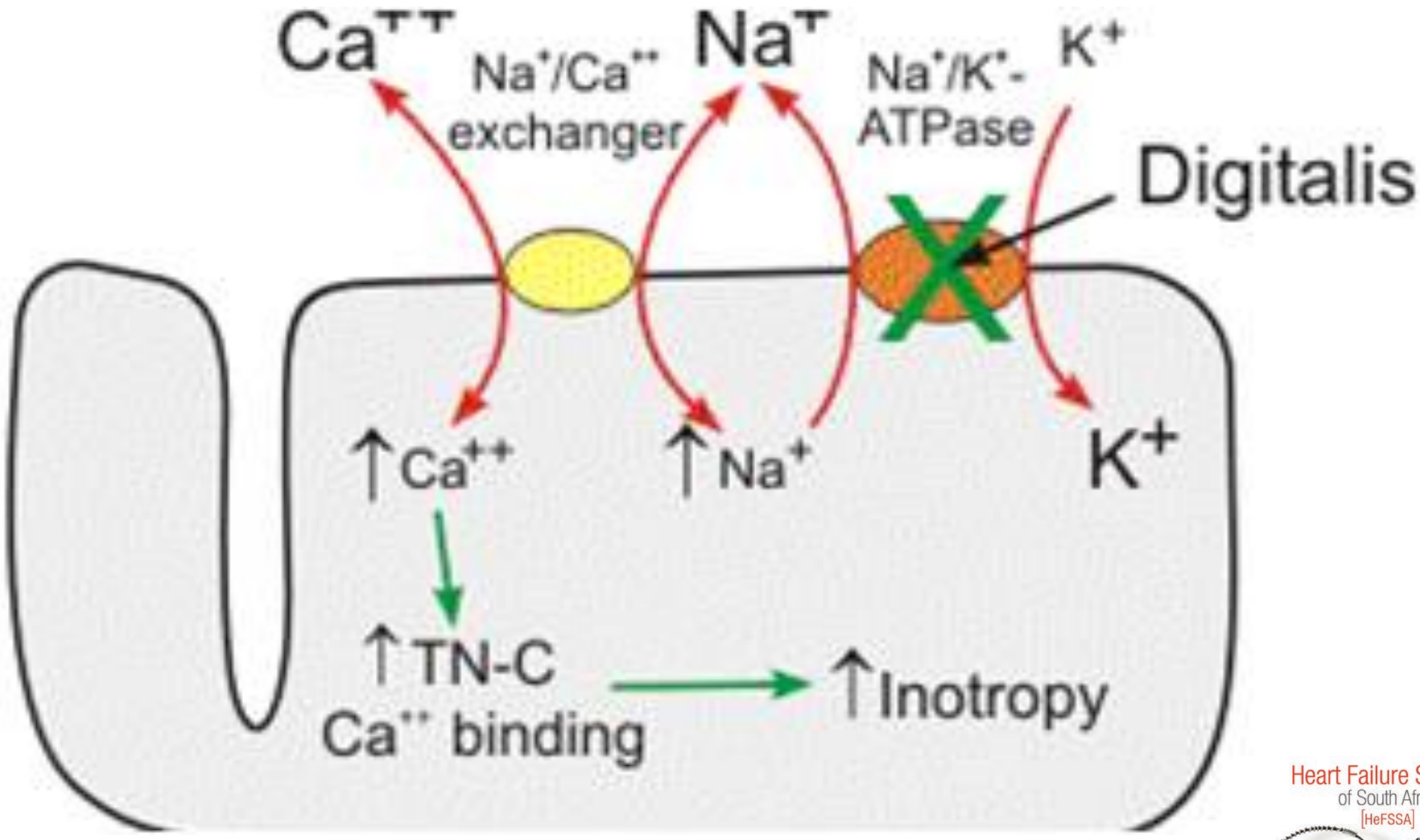
Effect of digoxin



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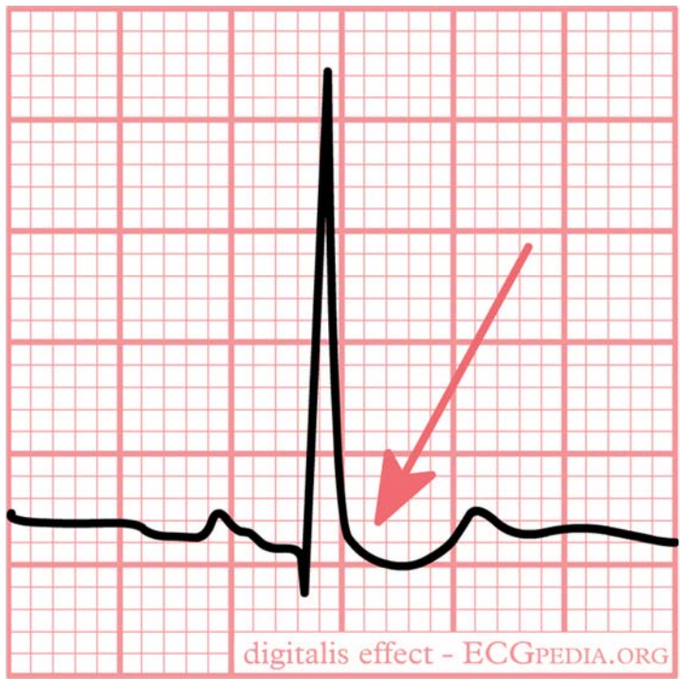
Digoxin effect on ECG

- *The bowl-like down-sloped ST segment depression is characteristic for the digitalis effect - "reverse tick"*



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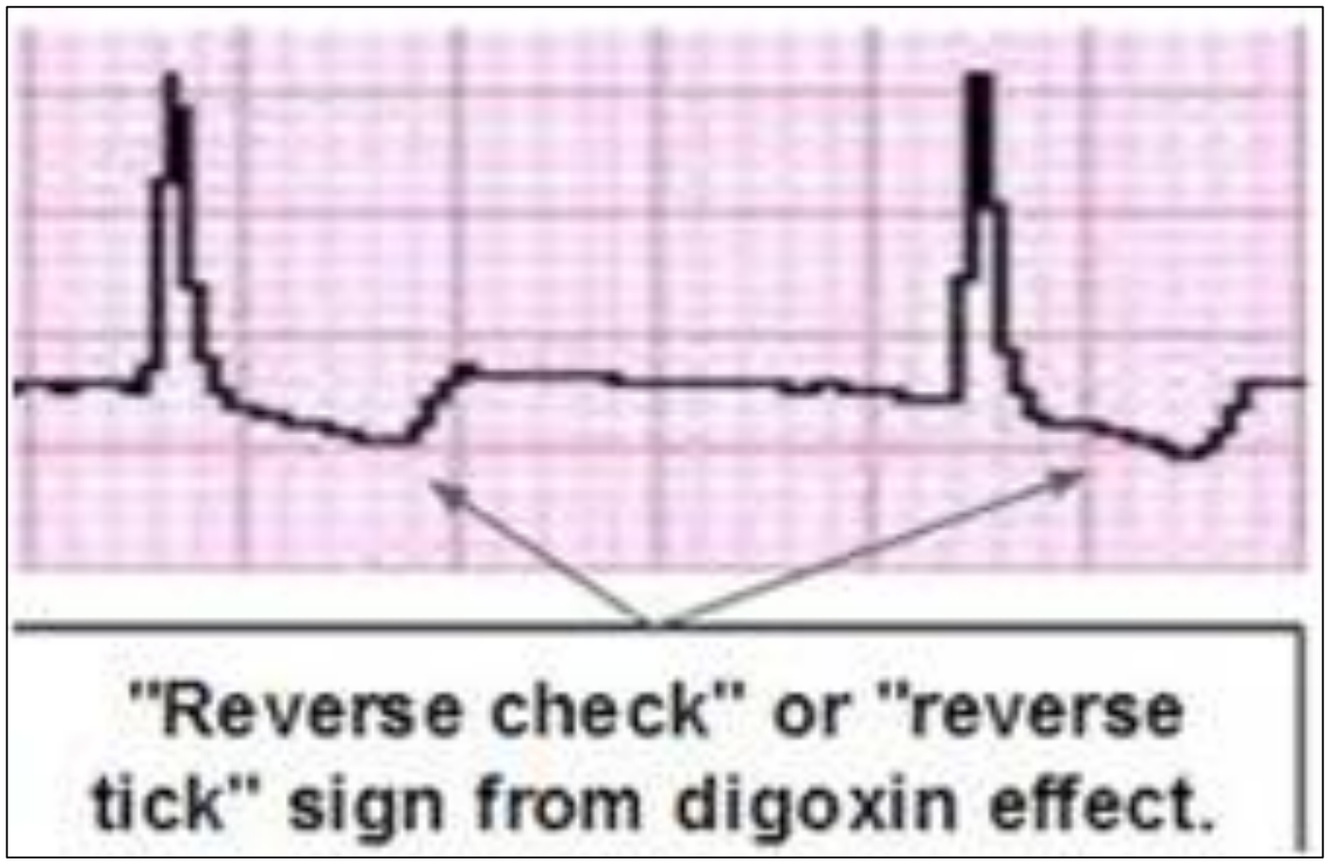
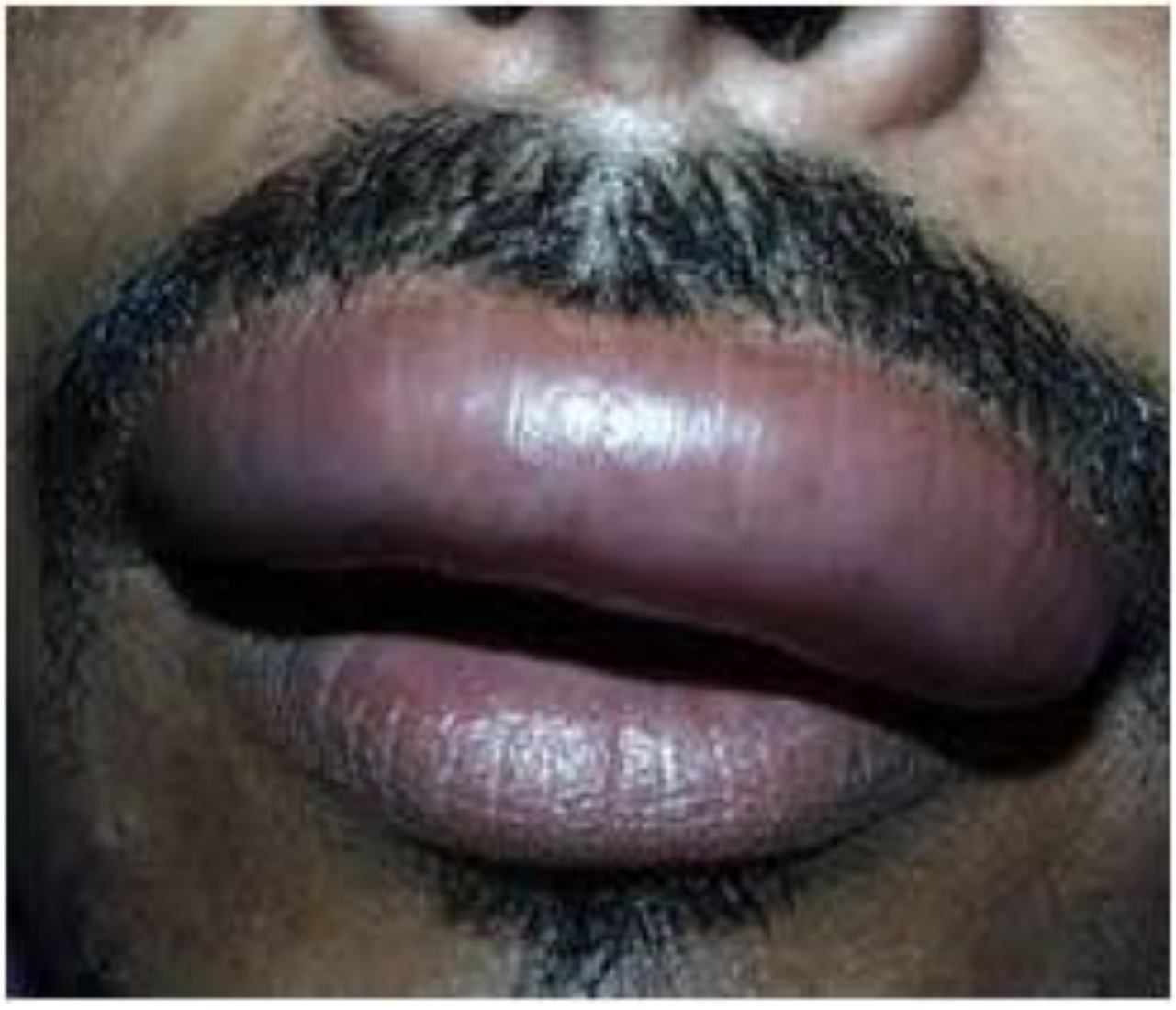


Medication side effect



- *Developed angioneurotic oedema on enalapril*
- *In public health system received telmisartan , then losartan as replacement.*

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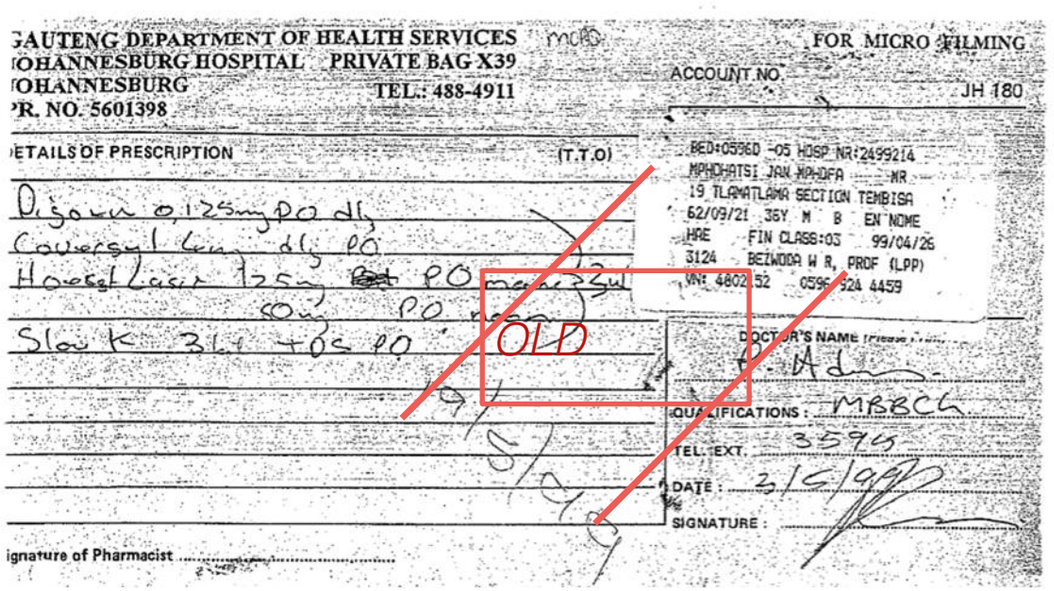
Treatment in July 2013

- *Hydrochlorthiazide 12.5 mg*
- *Losartan 100 mg daily*
- *Carvedilol 25 mg bd*
- *Amlodipine 10 mg daily*



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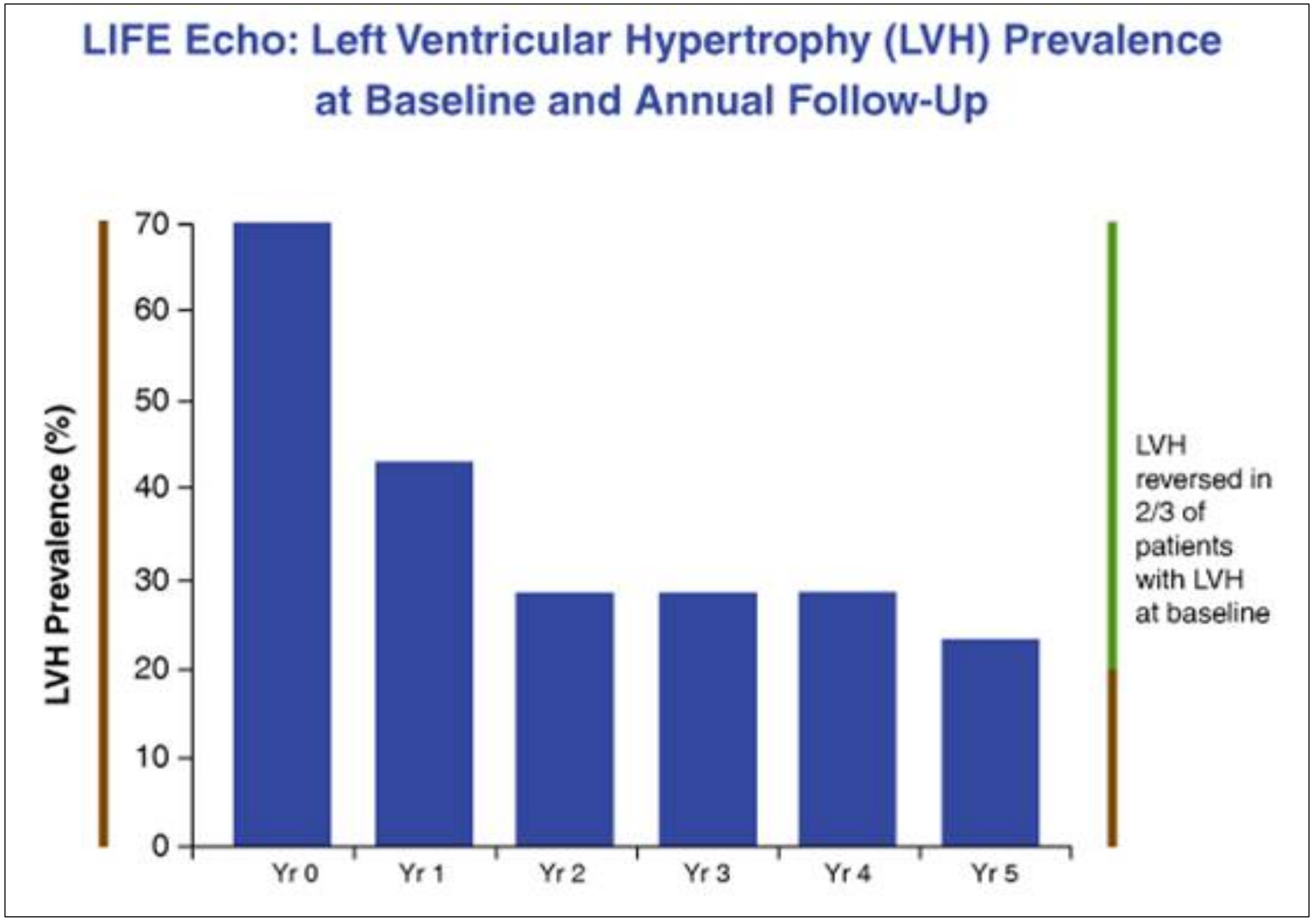
Reversal of LVH



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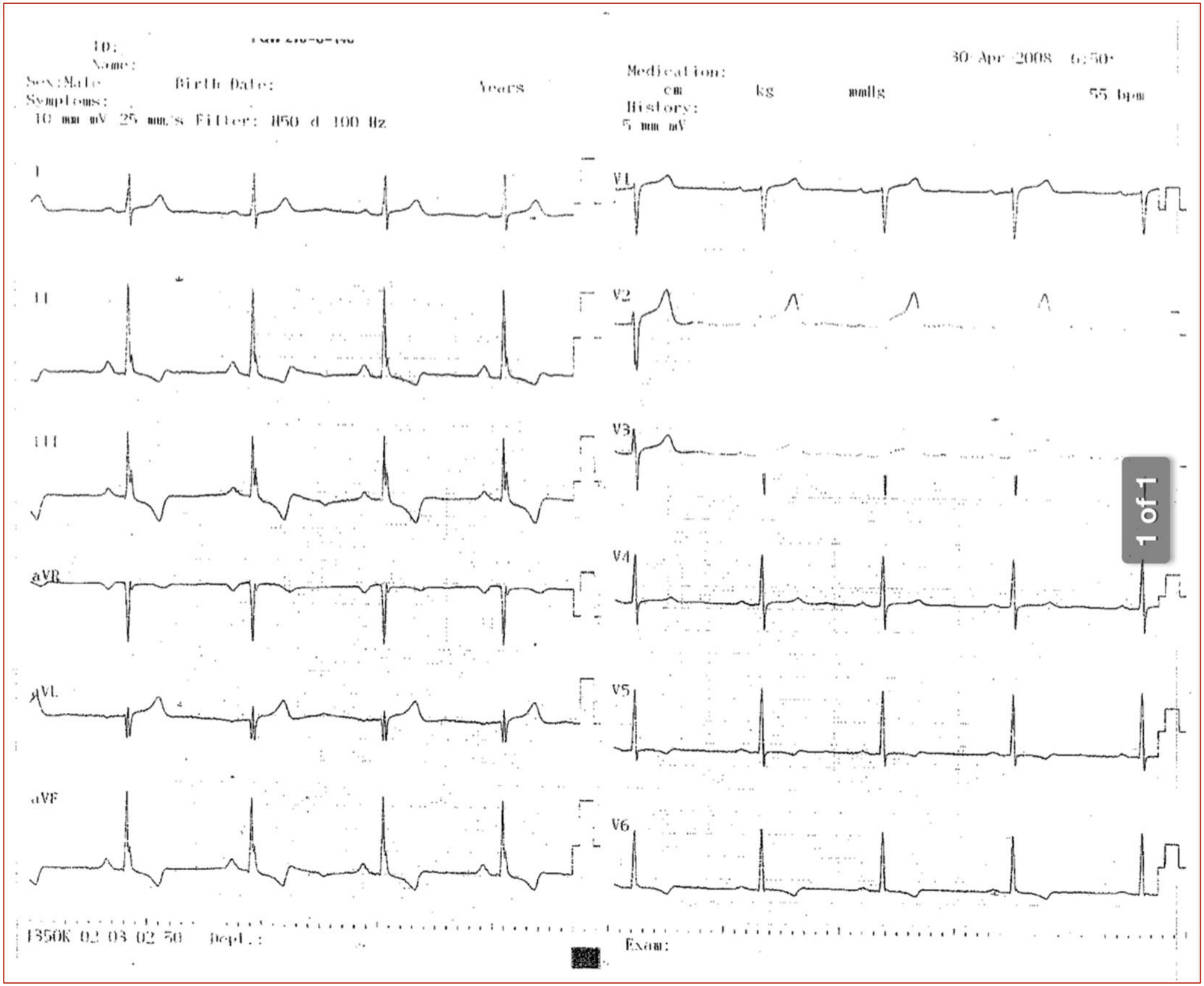
2008



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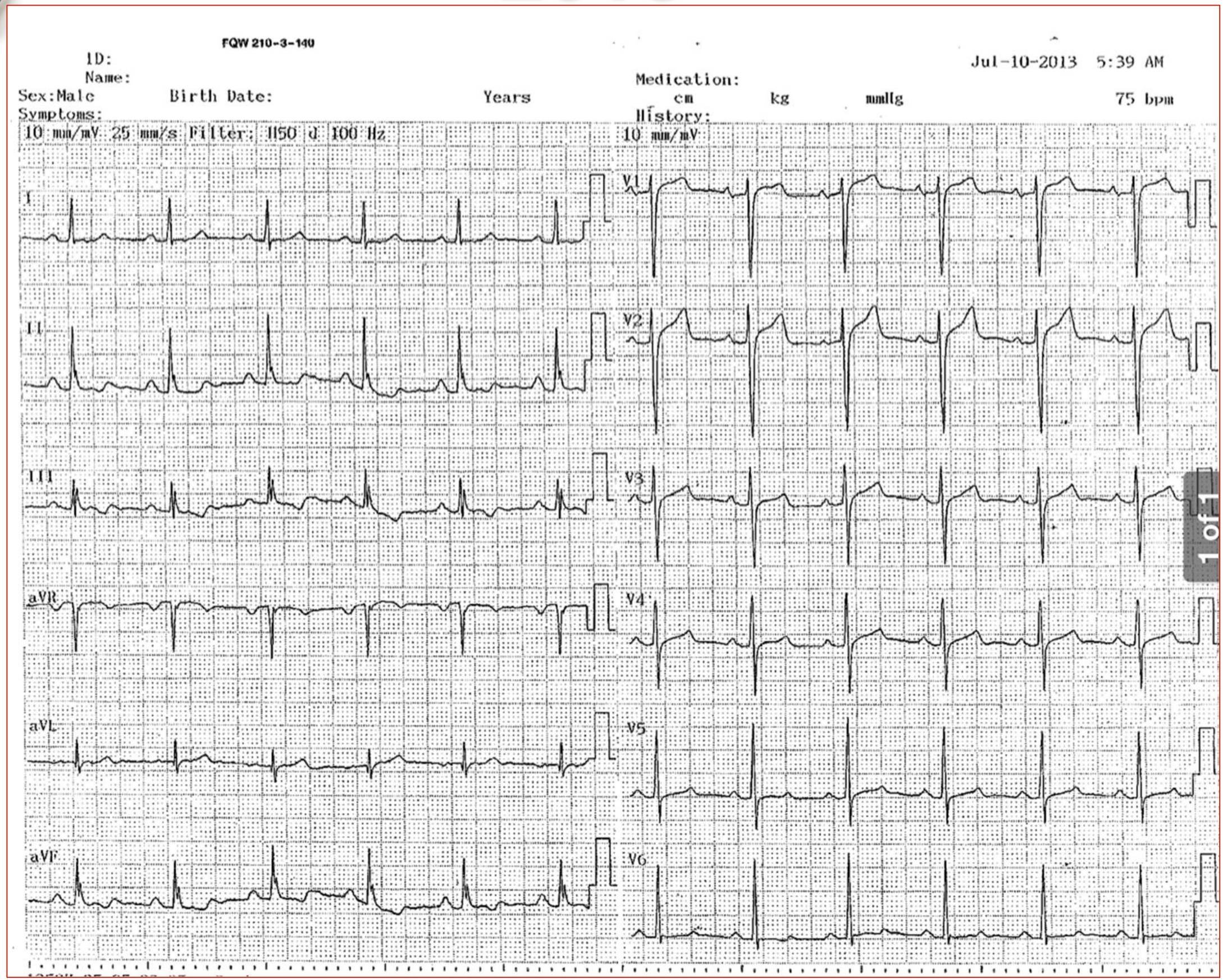
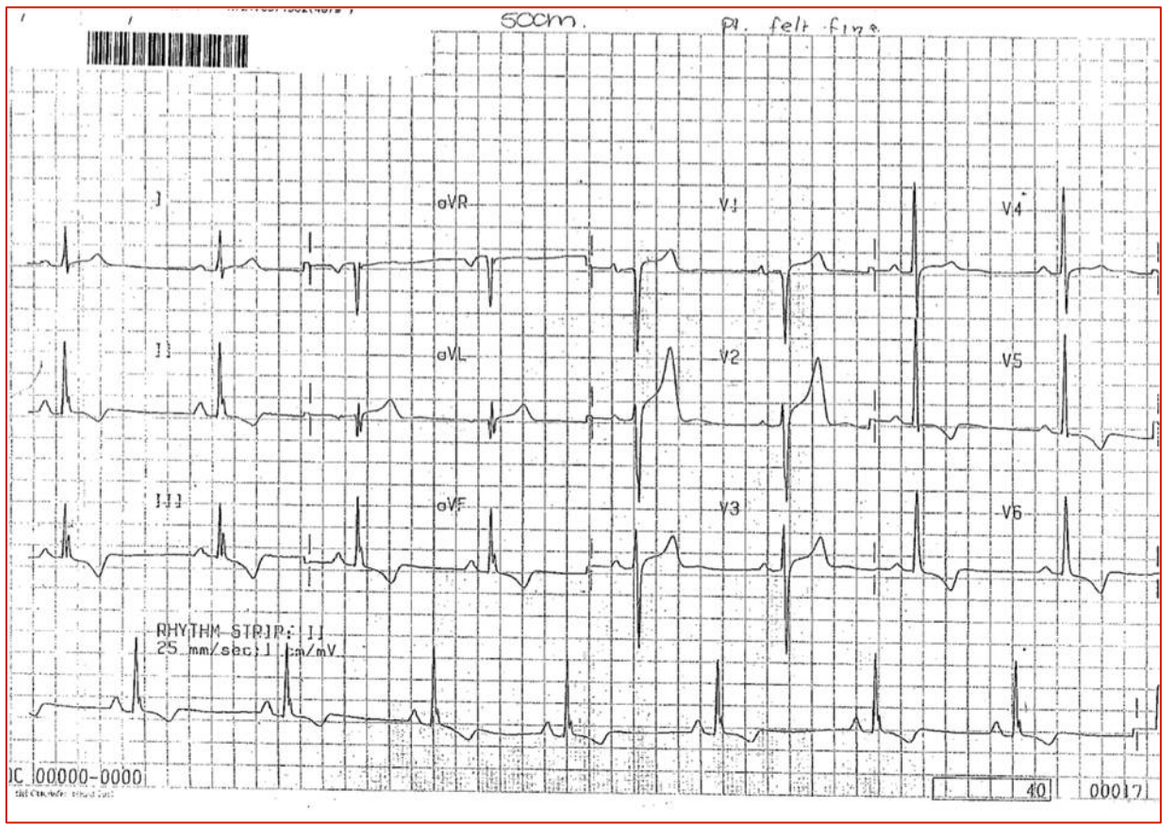
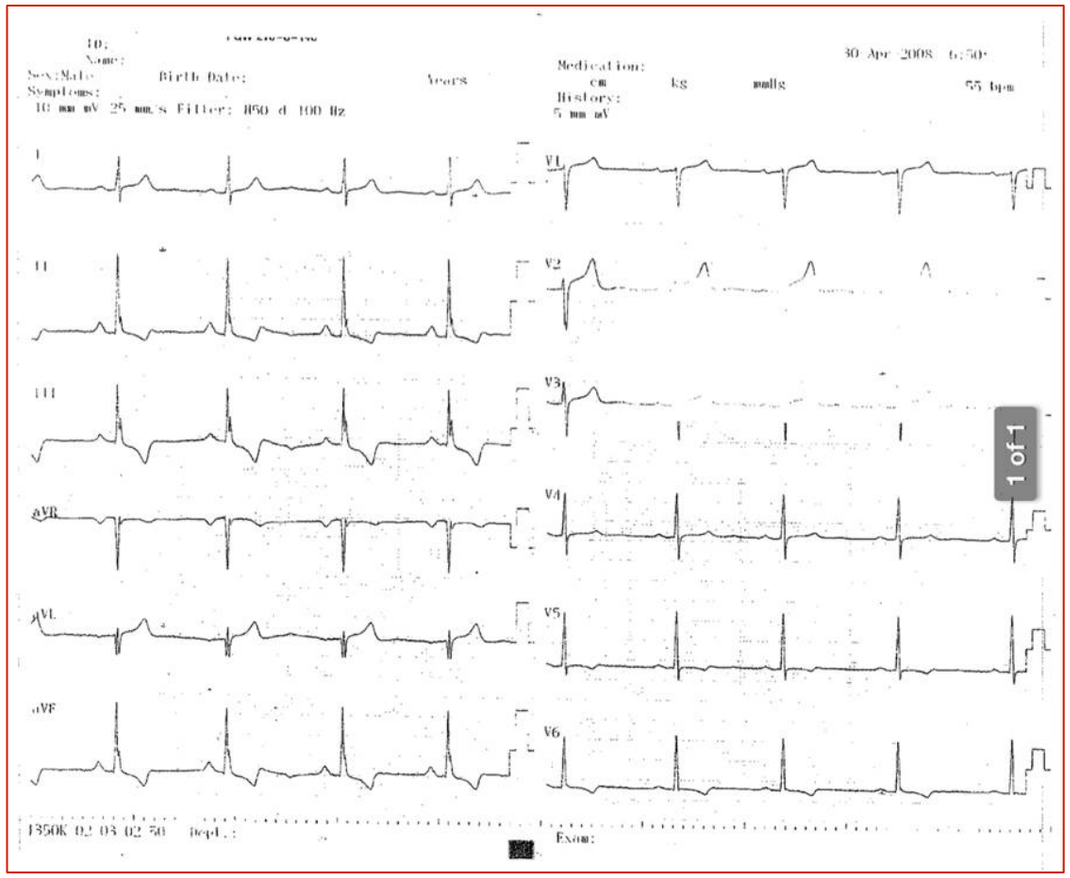
2013



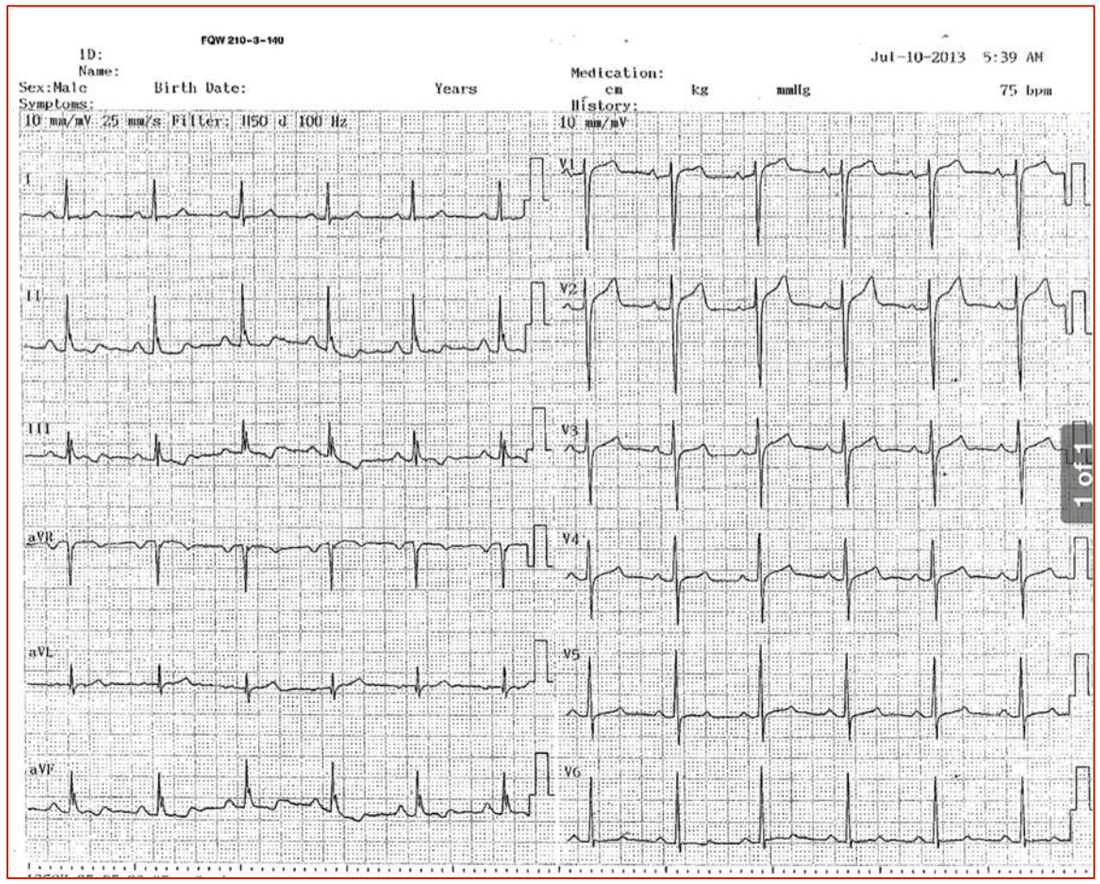
1999



2008



2013



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Reverse remodeling

Echo

	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Visit 6	Visit 7	Visit 8	Visit 9	Visit 10
Date	[illegible]	[illegible]	[illegible]		[illegible]					
IVSd	1.48	1.47	16		13					
LVIDd	5.99	6.01	55	52	46					
PWd										
IVSs										
LVIDs	4.65	45.1	28	33	29					
PWs										
MV exc E	2.90									
MV exc A	2.61									
Ao Root	3.04									
LA	3.75				39					
R-R	.790									
Ao ej time	.310									
FS	22.5	40	48	33						
EF	45	69.9	80	66	66					
DT (cm^{-2})	413	343	218	171	182					
DT (s)	0.115	0.130								
E peak vel	71.6	55	50	62	75					
Ei	10.7	7.27								
A peak vel	81.0	66	70	56	93					
Ai	7.12	5.64								
Sp Index										
M Ann	3.82									
T Ann										

Clinic Echo results 1999 - 2012
LVIDD - 59.9 mm reduced to 46 mm

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Lessons

- *Basic investigations still of benefit*
- *LVH and LV dilatation are reversible with appropriate therapy*
- *Recognise adverse drug events and replace offending agent appropriately*
- *Reduce diuretic therapies as the patient's heart failure improves*
- *In difficult to control hypertension and heart failure, use appropriate medications*

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