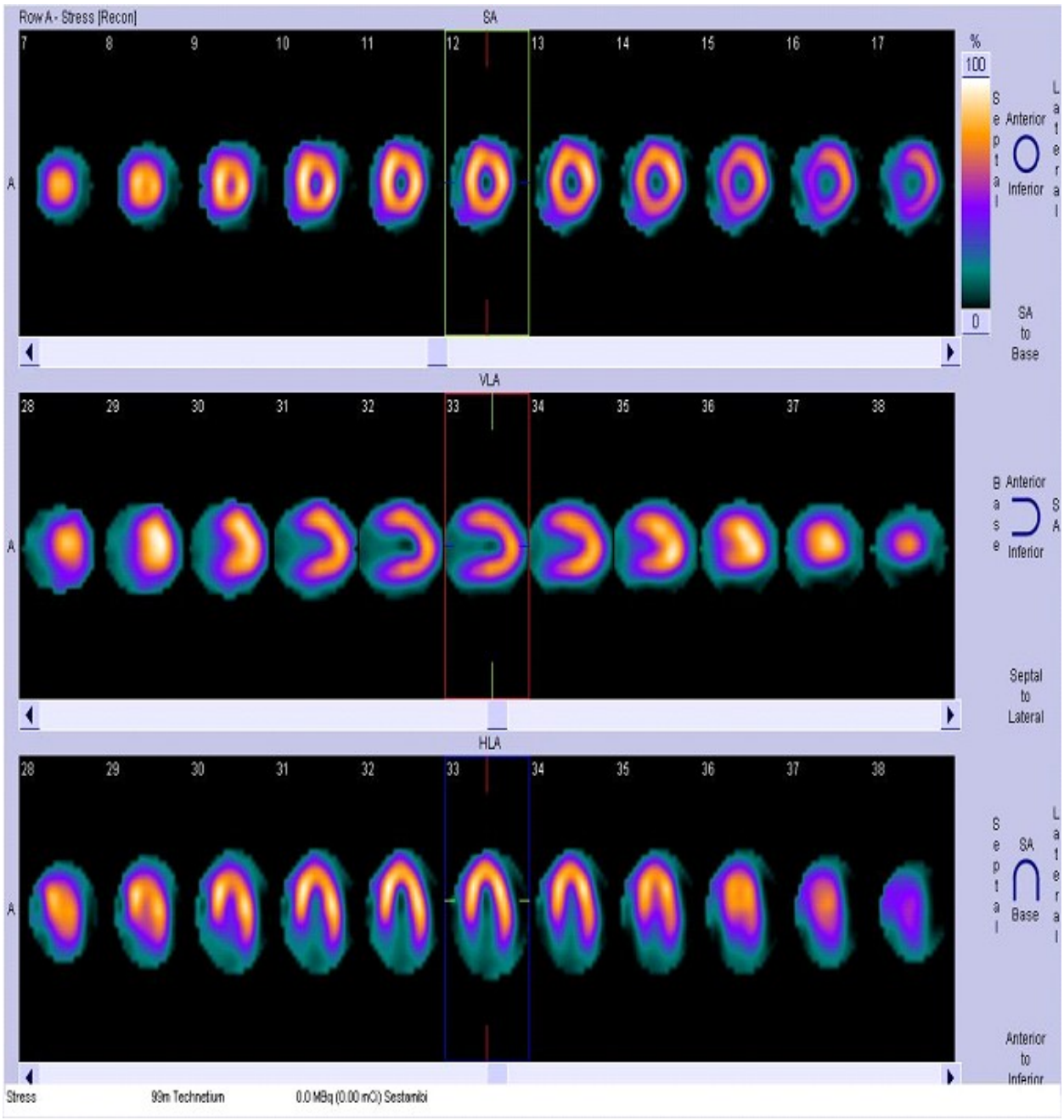
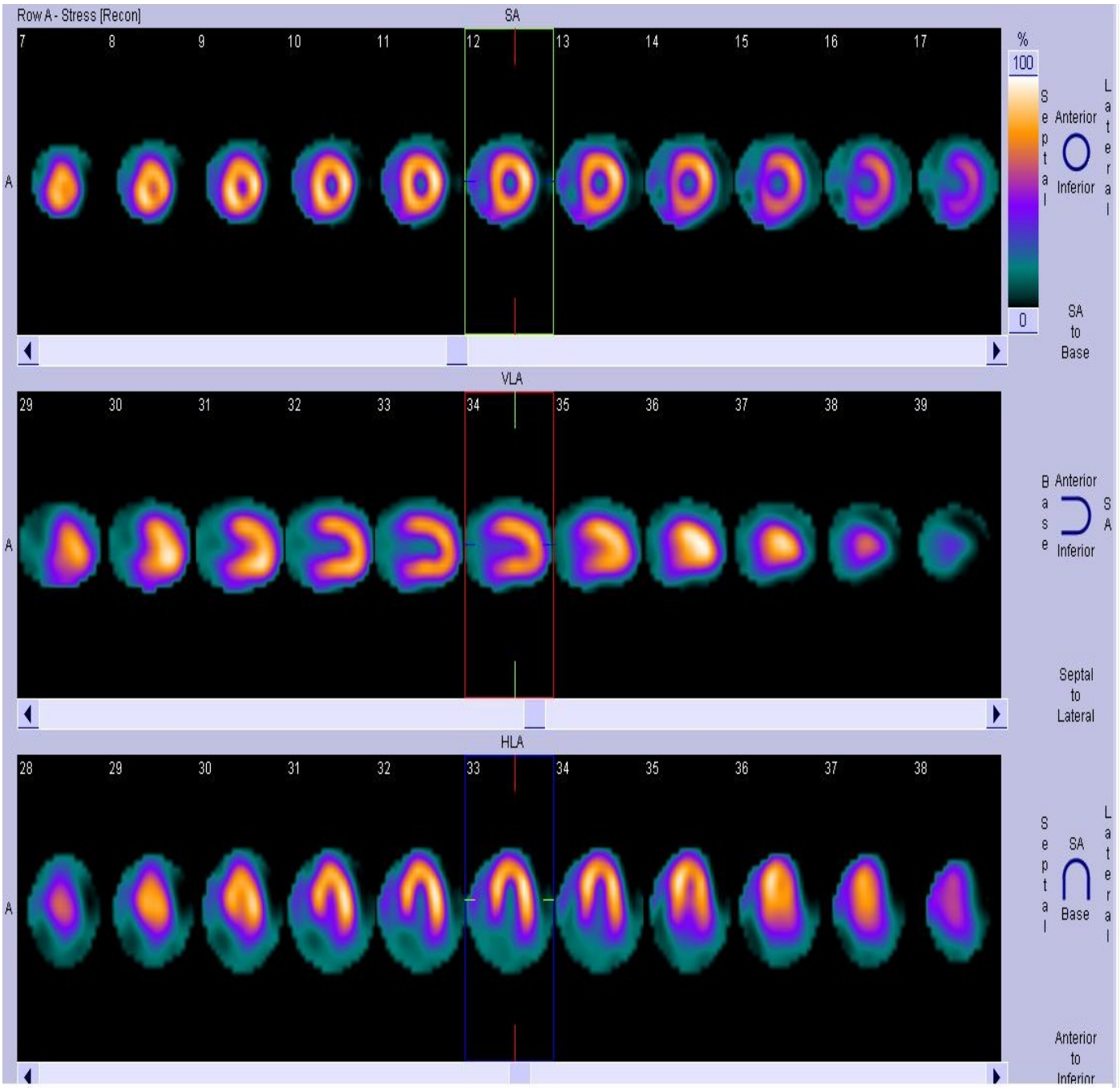
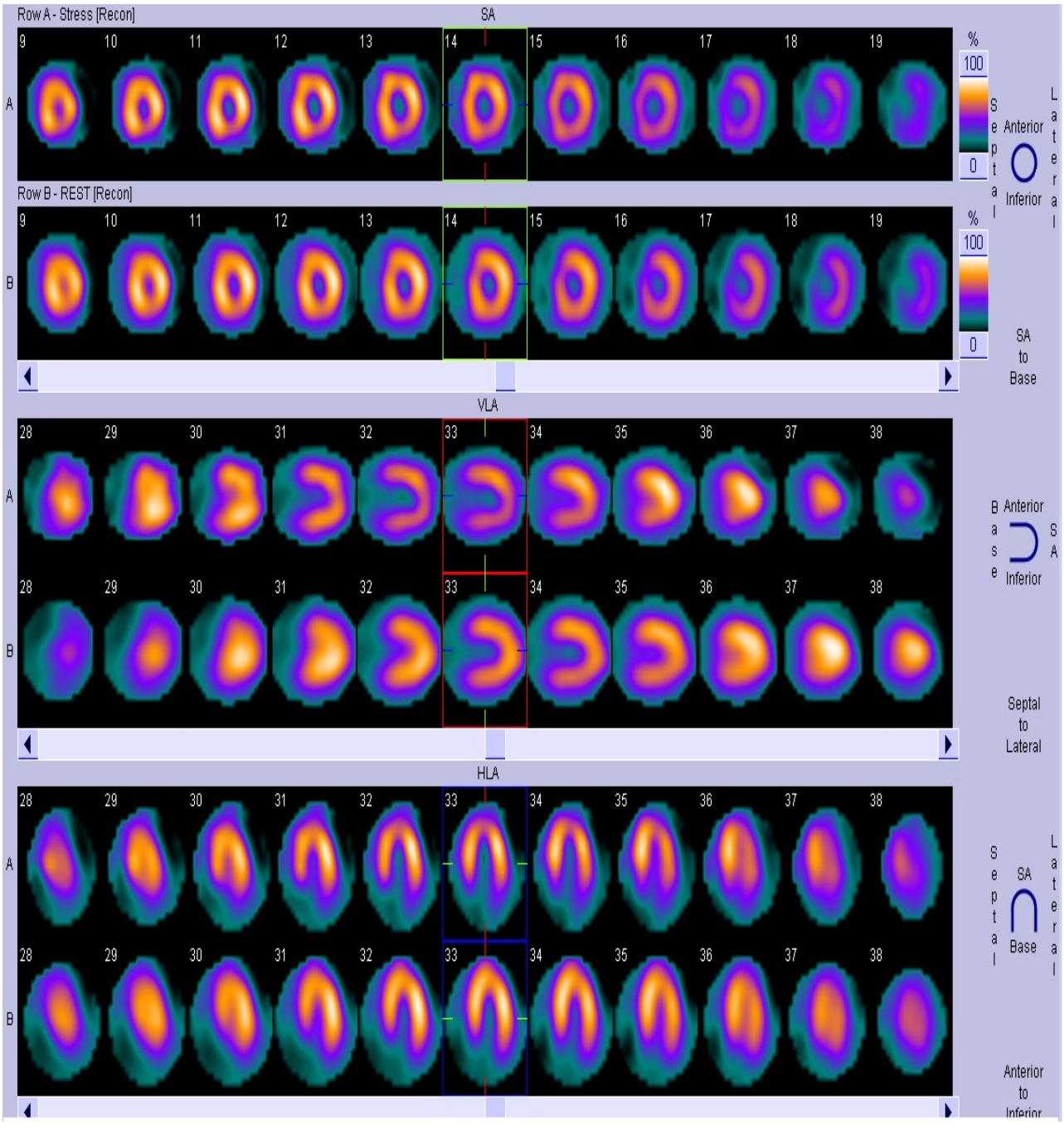
Normal stress myocardial perfusion SPECT scan by using ^{99m}TC labeled with sestamibi (MIBI) and physical exercise by treadmill



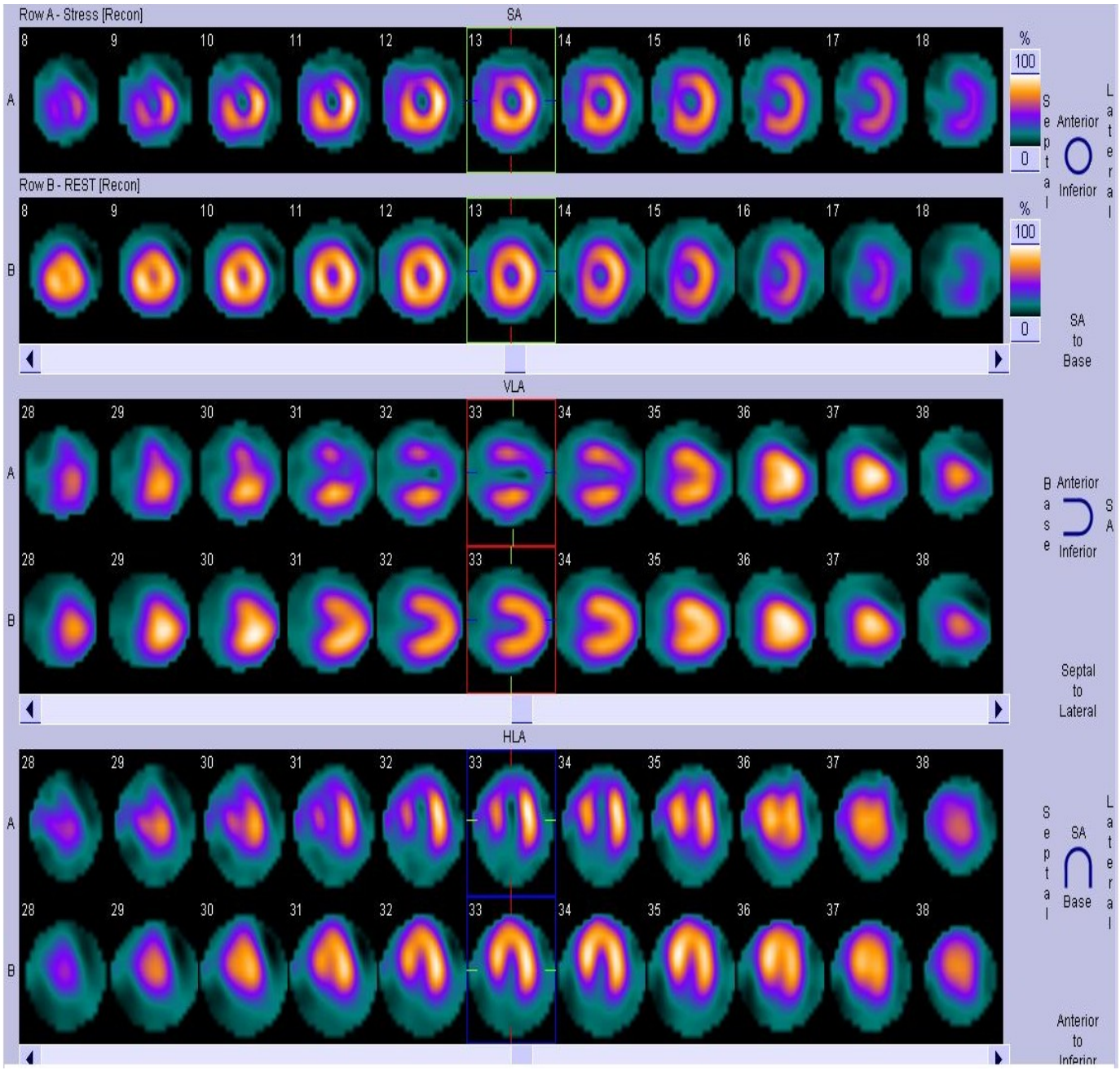
Normal stress myocardial perfusion SPECT scan by using ^{99m}TC labeled with sestamibi (MIBI) and physical exercise by treadmill



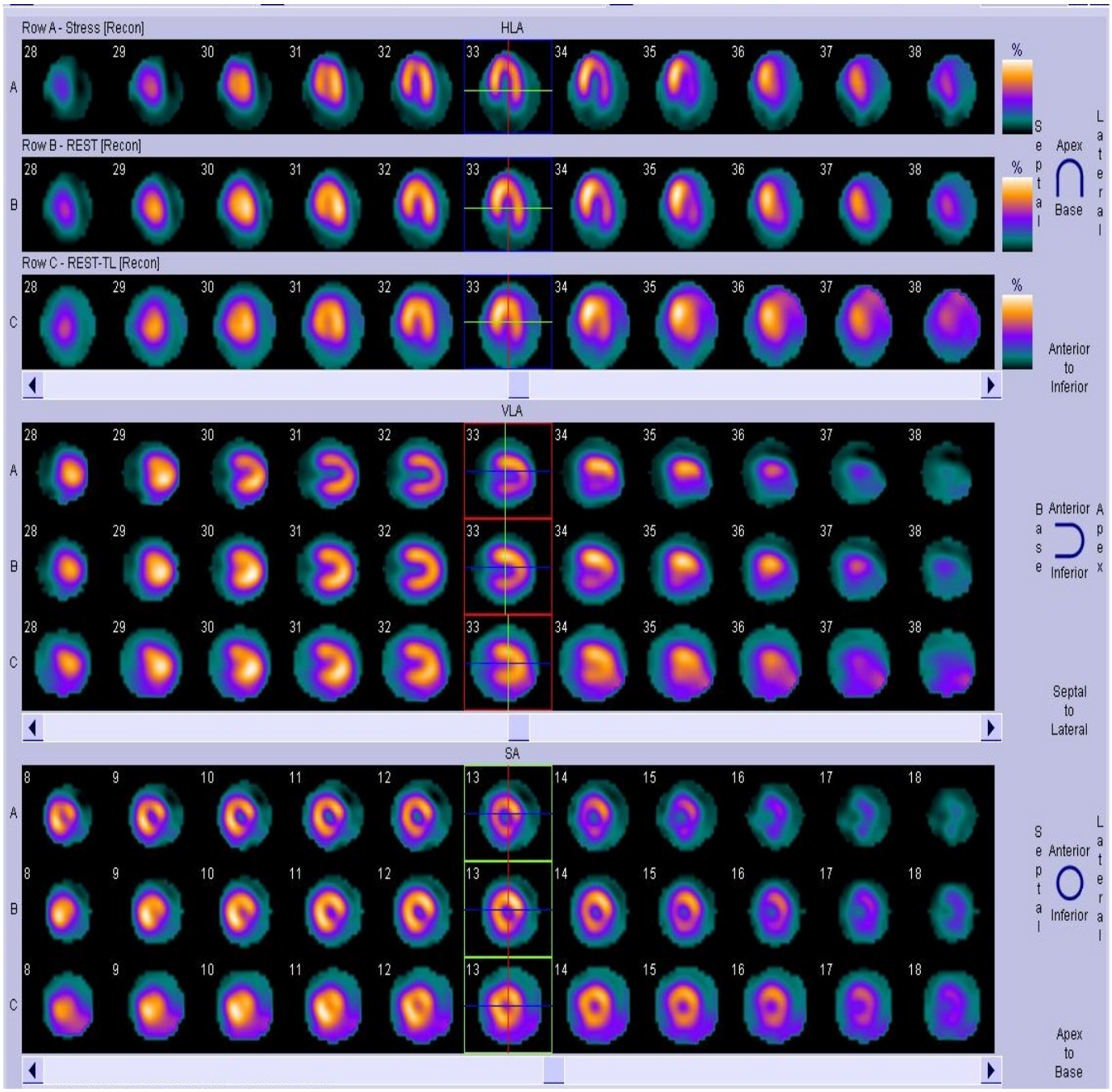
Normal stress myocardial perfusion SPECT scan ^{99m}TC-labele with tetrofosmin (myoview) pharmacologic exercise



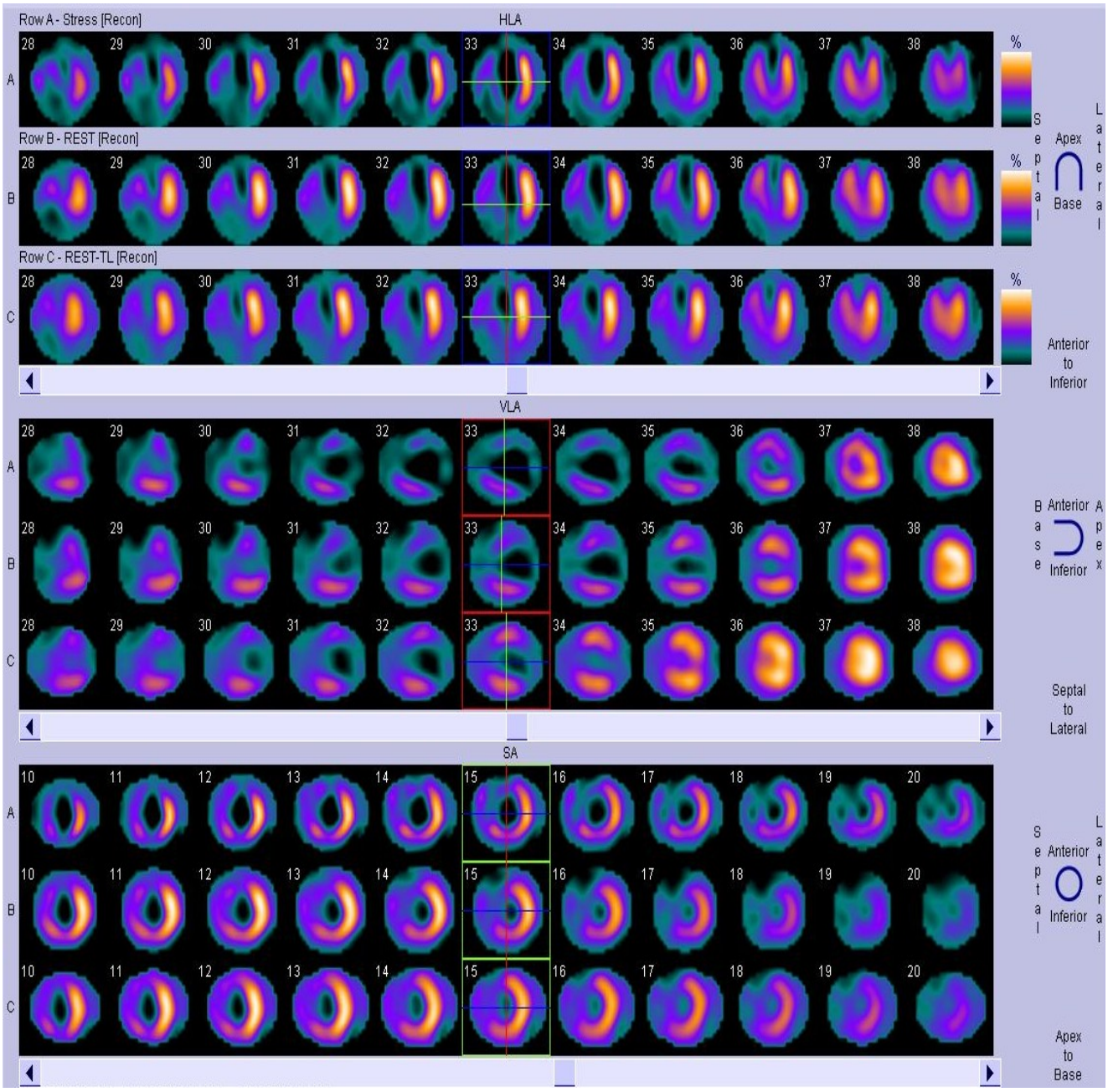
Stress / rest myocardial perfusion SPECT scan abnormal septal with low uptake at stress and normal uptake at rest (positive stress induced reversible ischemia)



Stress / rest myocardial perfusion SPECT scan abnormal septal with low uptake at stress and normal uptake at rest (positive stress induce ischemia at rest)



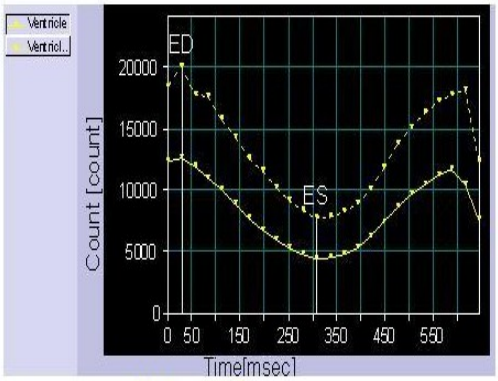
Stress / Rest / Thallium myocardial perfusion SPECT scan theirs abnormal uptake at stress and at rest but at thallium normal uptake that mean the myocardium muscle is viable



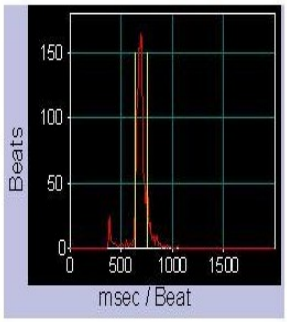
Stress / Rest/ Thallium abnormal uptake at stress, rest and thallium that mean nonviable myocardium muscle

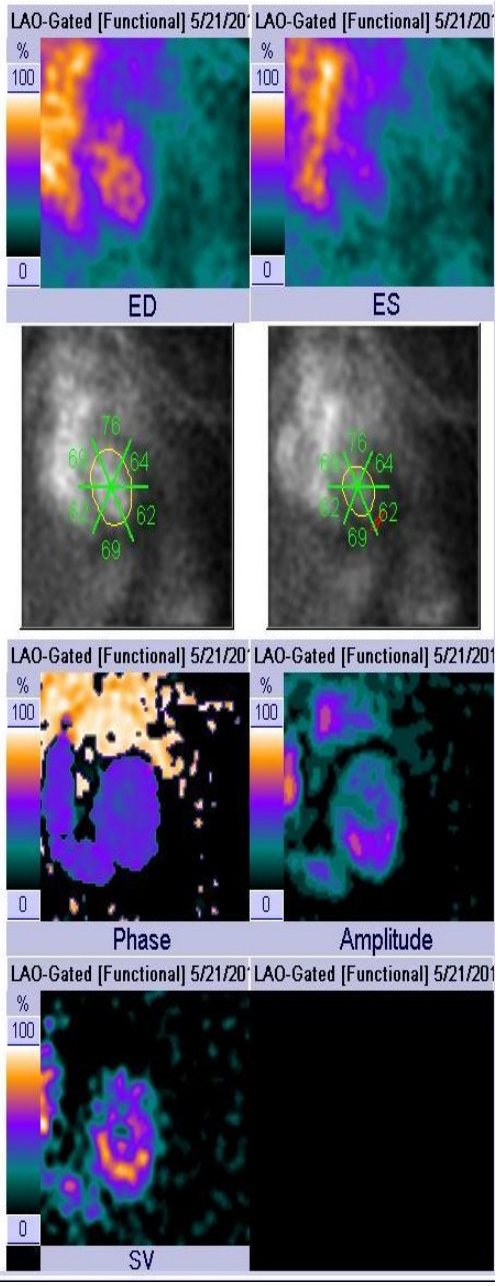
Item	Value
EF [%]	67.8
EDC[count]	19986
ED Area [pixel]	658
ESC [count]	7698
ES Area [pixel]	338
BGC(Ave.) [count]	10.1
TES [msec]	280

Item	Value
Heart Rate [bpm]	87
# of Useful Frames	24
Frame Time [msec]	29
Beat Window [%]	17
Framing Method	PCNT
Total Beats	1400
Accepted Beats	1240
Rejected Beats	160
Max. R-R Time [ms...	745
Min. R-R Time [msec]	627



Volume Curve

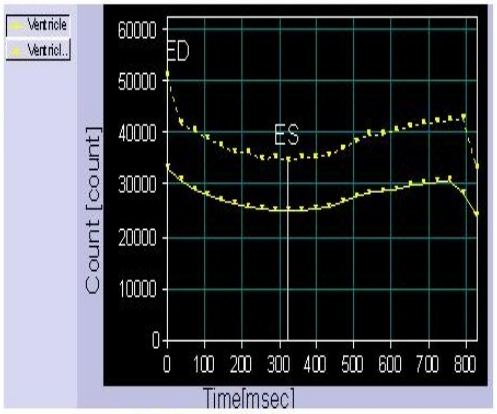




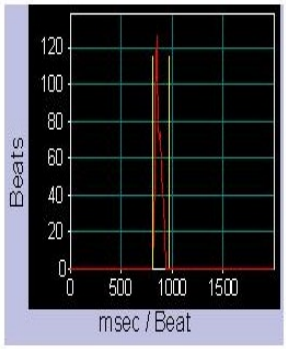
Normal LVEF 67%

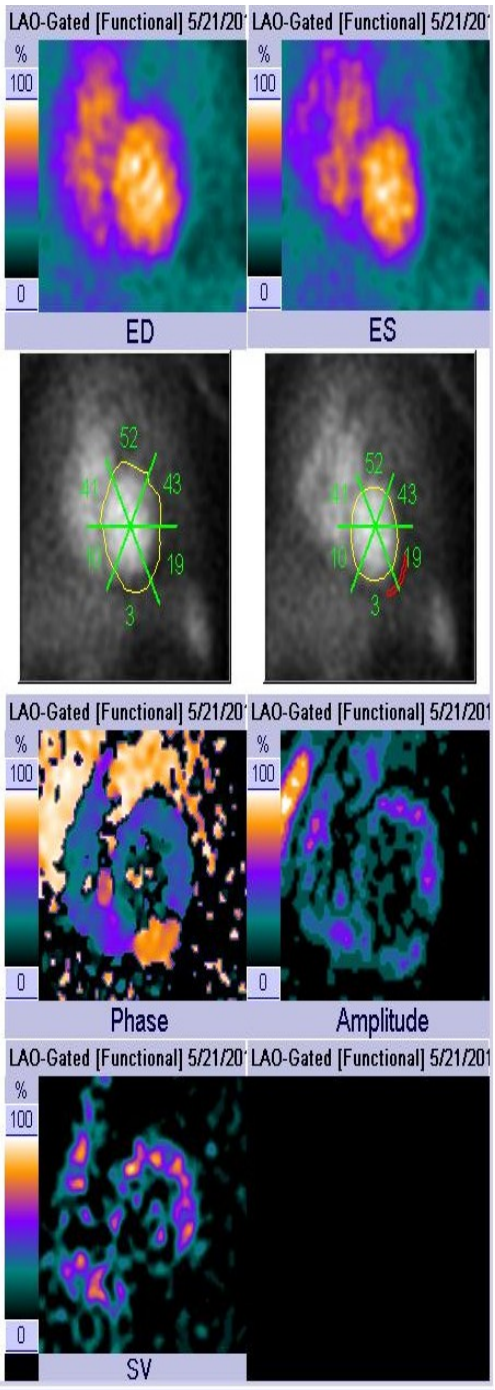
Item	Value
EF [%]	28.3
EDC[count]	51117
ED Area [pixel]	1466
ESC [count]	34591
ES Area [pixel]	870
BGC(Ave.) [count]	11.3
TES [msec]	324

Item	Value
Heart Rate [bpm]	69
# of Useful Frames	24
Frame Time [msec]	37
Beat Window [%]	16
Framing Method	PCNT
Total Beats	752
Accepted Beats	752
Rejected Beats	0
Max. R-R Time [ms...	953
Min. R-R Time [msec]	807



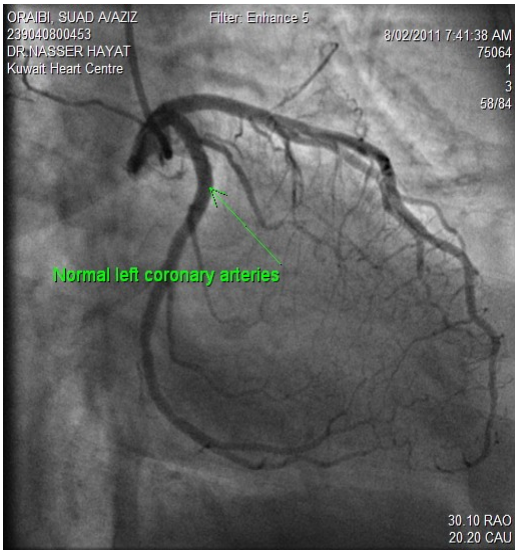
Volume Curve



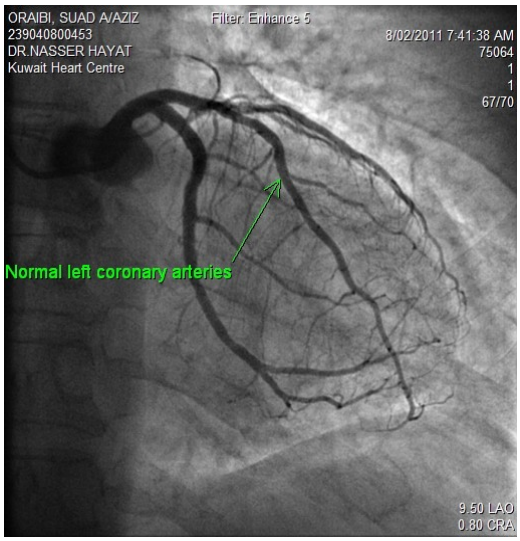


Abnormal LVEF 28%

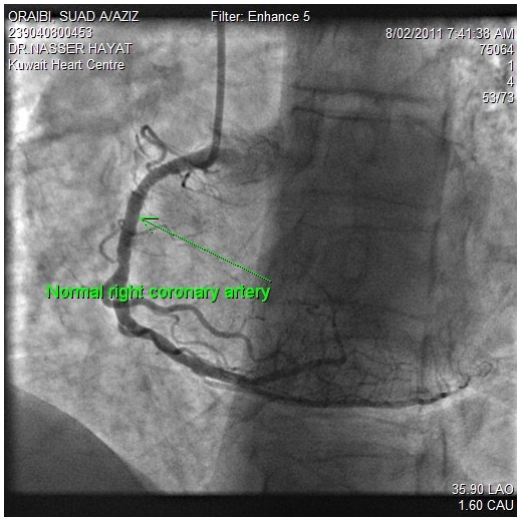
(B) coronary angiogram



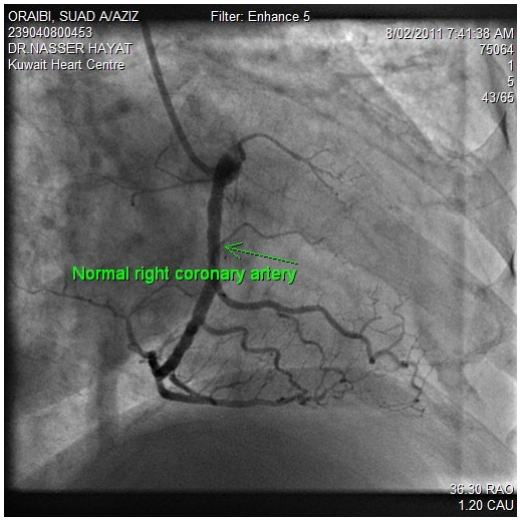
Normal left coronary arteries



Normal left coronary arteries

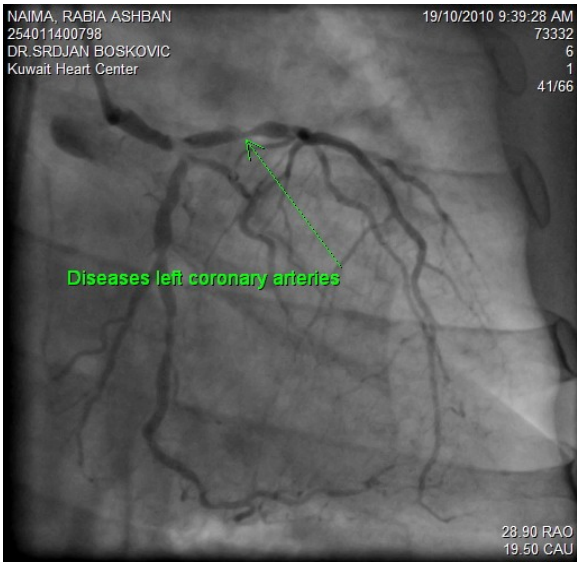


Normal right coronary arteries

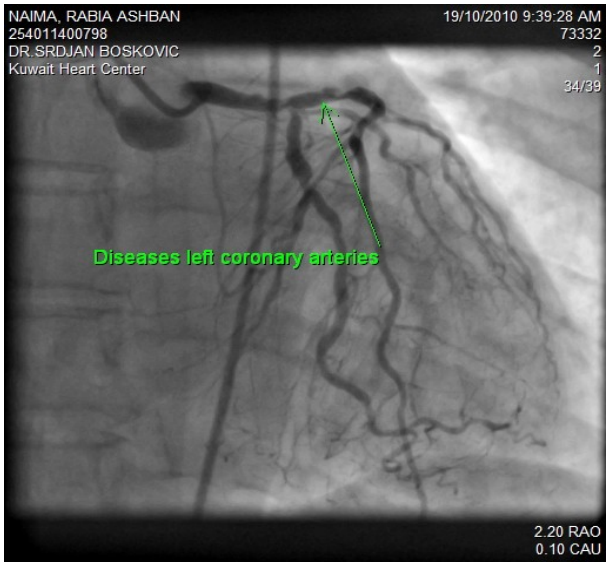


coronary arteries

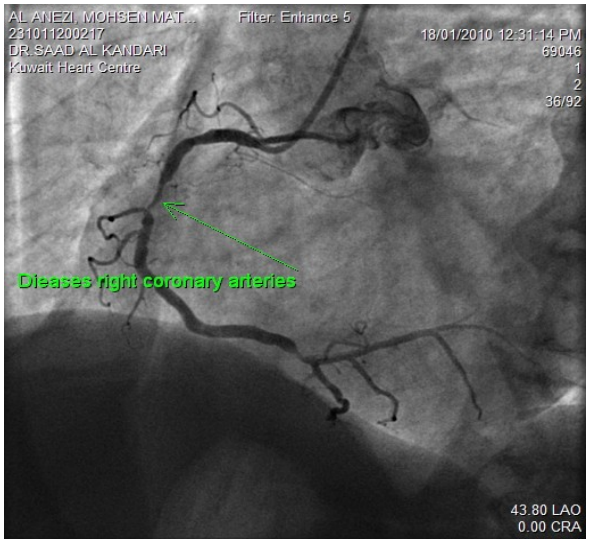
Normal right

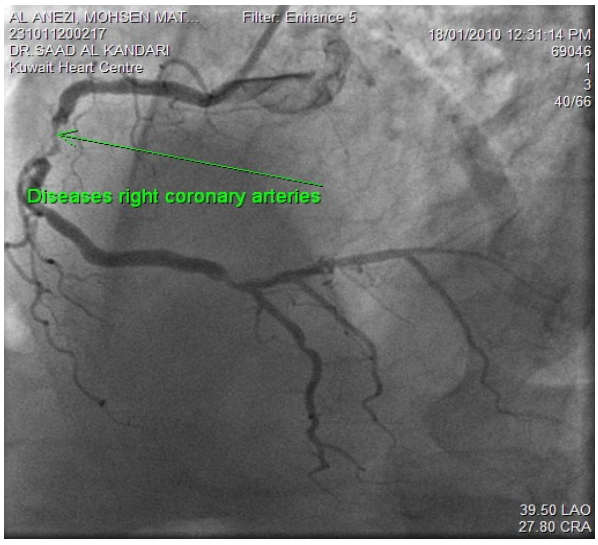


Disease left coronary arteries



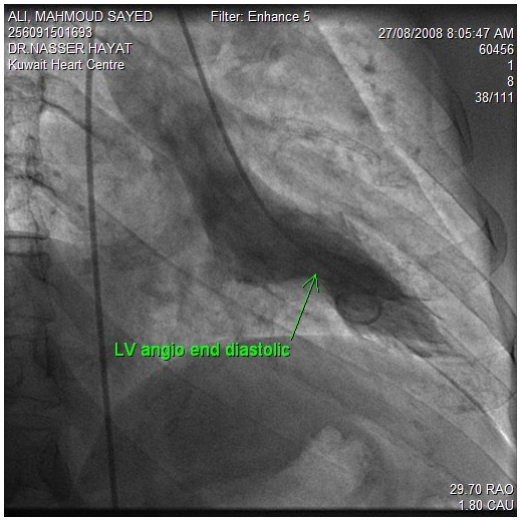
Disease left coronary arteries



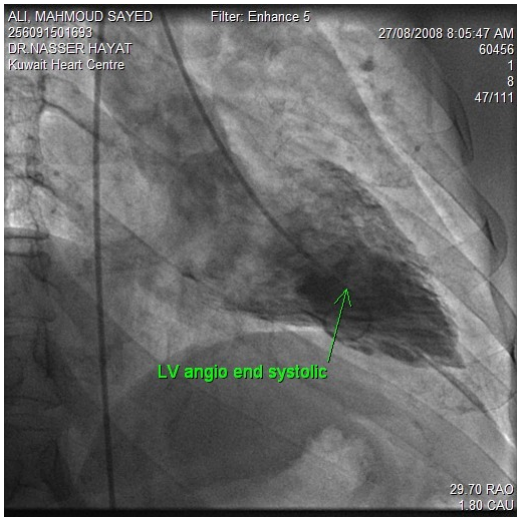


Disease right coronary arteries

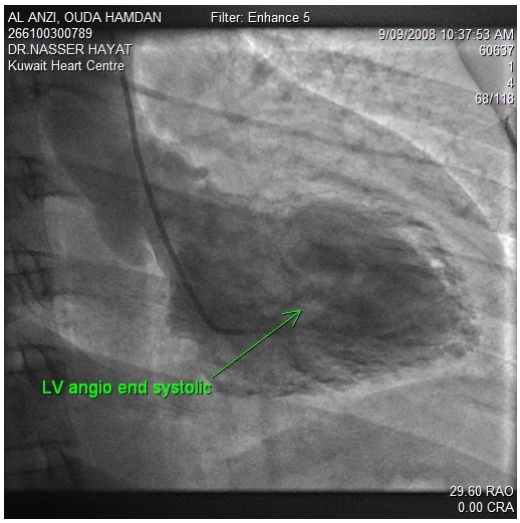
Disease right coronary arteries

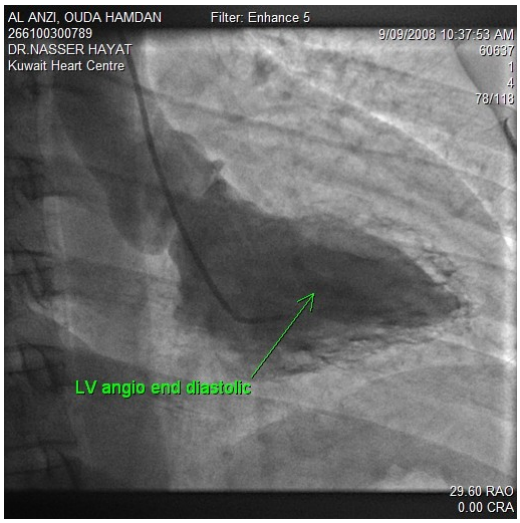


Normal diastole of LV (normal LVEF)73%



Normal systole of LV (normal LVEF) 73%





Abnormal systole of LV (abnormal LVEF) 25%

Abnormal diastole of LV (abnormal LVEF) 25%

(C) Tables

Table (5.1) Represent the average percentage of left ventricle ejection fraction (LVEF) by cath and SPECT

Method of exam	LVEF/SPECT	LVEF/Cath
Average of LVEF	50.8%	55.3%
Standard Deviation	10.6	10.7

Table (5.2) represent percentage of diseases and normal patients of CHDs in all population by using coronary angiography

	Population
Diseases	75%
Normal	25%

Table (5.3) represented the percentage of sensitivity, specificity and accuracy of MPSPECT scan in population

	Population
Sensitivity	93%
Specificity	87%
Accuracy	92%

Table (5.4) represented percentage of sensitivity, specificity and accuracy of MPSPECT scan in males and females

	Male	Female
Sensitivity	94%	91%
Specificity	81%	93%

Accuracy	91%	92%

(5.5)Percentage of sensitivity, specificity and accuracy of myocardial perfusion SPECT scan in physical and pharmacological exercise

	physical	pharm
sensitivity	87%	98%
specificity	86%	87%
accuracy	87%	98%

Table (5.6) Percentage of diseases and normal patients of CHDs in male &female in all population using cardiac catheterization

	Male	Female
Diseases	83%	49%
Normal	17%	51%

Table (5.7) percentage of risks factor of CHDs in male and female

		Male %		Female %
MI	113	37%	29	33%
Smoking	209	69%	17	19%
hypercholostrolemia	129	42%	41	46%
HTN	193	63%	52	58%
DM	174	57%	39	43%
Chest pain	107	35%	22	25%
postive ECG	92	30%	15	17%

(5.8) table show TP, TN, FP, FN meaning

TP = Detected +ve by SPECT and Catheter
TN = Detected -ve by SPECT and Catheter
FP = Detected +ve by SPECT and -ve by Catheter
FN = Detected -ve by SPECT and +ve by Catheter

Data collection sheet

1-Gender A- Male B- Female

2- Age ….

3- HTN 4- DMS 5-Hyperlipedeamia

6- Positive ECG 7- Chest pain

8-Myocardial perfusion SPECT:-

1-Sress :-

a-pharmacological exercise

b- treadmill exercise

2-Rest :- 3-LVEF % ……

4-Perfusion: - A-Normal uptake B-low uptake
C-No uptake

I-Anterior ii-inferior

iii-Lateral iv-Apical v-Septal

5-Movement of LV wall:- A-Kinetic B-A kinetic

C-Hypokinezia D- Gloplhypokinezia

i-Anterior ii-inferior iii-Lateral

6- Vaibility :- i- Vaible ii- Non viable

Finding:-

1- positive 2- negative

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10-Complication:-

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11-Coronary angio :-

1- LVEF %

2- Normal 3-Disease i-1vessel ii-2vessels ii-3vessels- Stenosis % ..... length ......

Supply :-i- Ant ii- Inf iii- Lat iv-Sep vii-Apic

4- Movement of the wall :- A-Kinetic B- A kinetic

C-Hypokinezia D- Gloplhypokinezia

i- Ant ii- Inf iii- Lat

finding :-

1-positive 2- negative

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5- Complication:-

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