

Non cardiologist and sonographers

ECG-ECHO-CORON correlation

We did a 60 cases tutorial with 2 objectives.:

First to show the limited correlation of ECG-ECHO and Coronarography.

Second to give clues to differentiate Right coronary artery (RCA) territory from left Circumflex coronary artery (Cx) territory in myocardial infarction.

Hoping you will benefit of this tutorial.

Thanks to Sacre-Coeur Hospital cardiologists for their support in this project.

Real Lebeau md

Cardiologist echocardiographer

Sacre-Coeur Hospital

Montreal, Canada

NB.: Non cardiologist include critical care doctor, emergency doctor, anesthesiologist, nurse, paramedic ... with a cardiac Point of Care Ultrasound formation (POCUS) or a FOCUS (focus cardiac ultrasound) formation.

HOW TO USE THE TUTORIAL

A) First read Anatomy correlation

In polar map

Fig.1.: RCA schematic drawing of usual coronary circulation

Fig.2.: LAD schematic drawing of usual coronary circulation

Fig.3.: Cx schematic drawing of usual coronary circulation

Fig.4.: Polar map of all patients with isolated RCA occlusion or stenosis

Fig.5.: Polar map of all patients with isolated LAD occlusion or stenosis

Fig.6.: Polar map of all patients with isolated Cx occlusion or stenosis

Fig.1.: RCA schematic drawing of usual coronary circulation

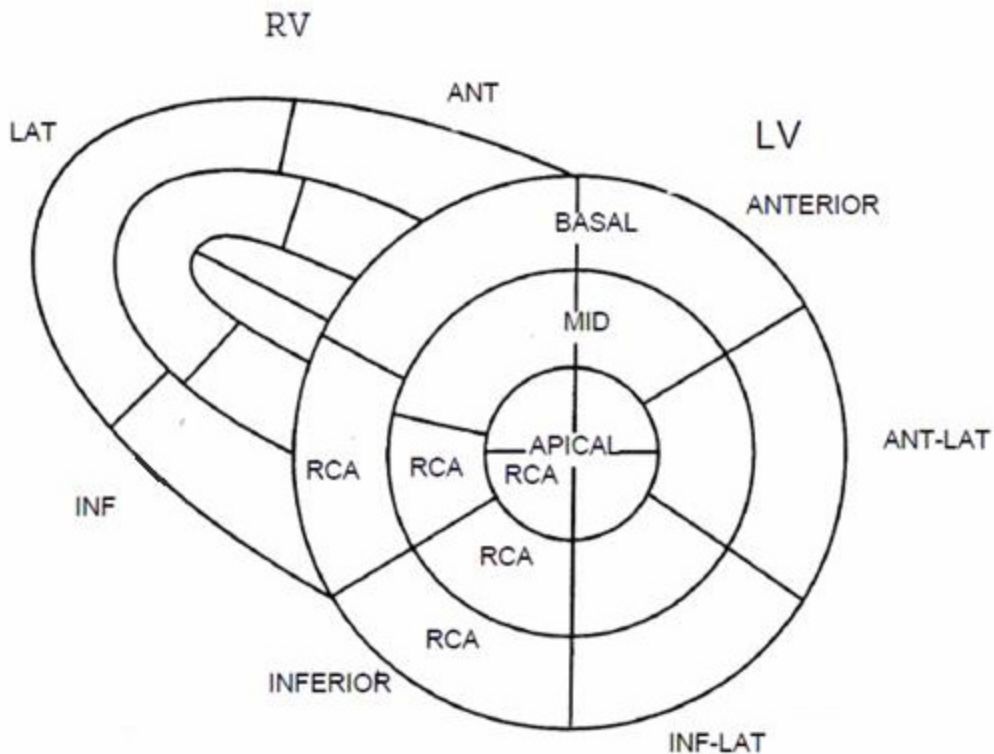


Fig.2.: LAD schematic drawing of usual coronary circulation

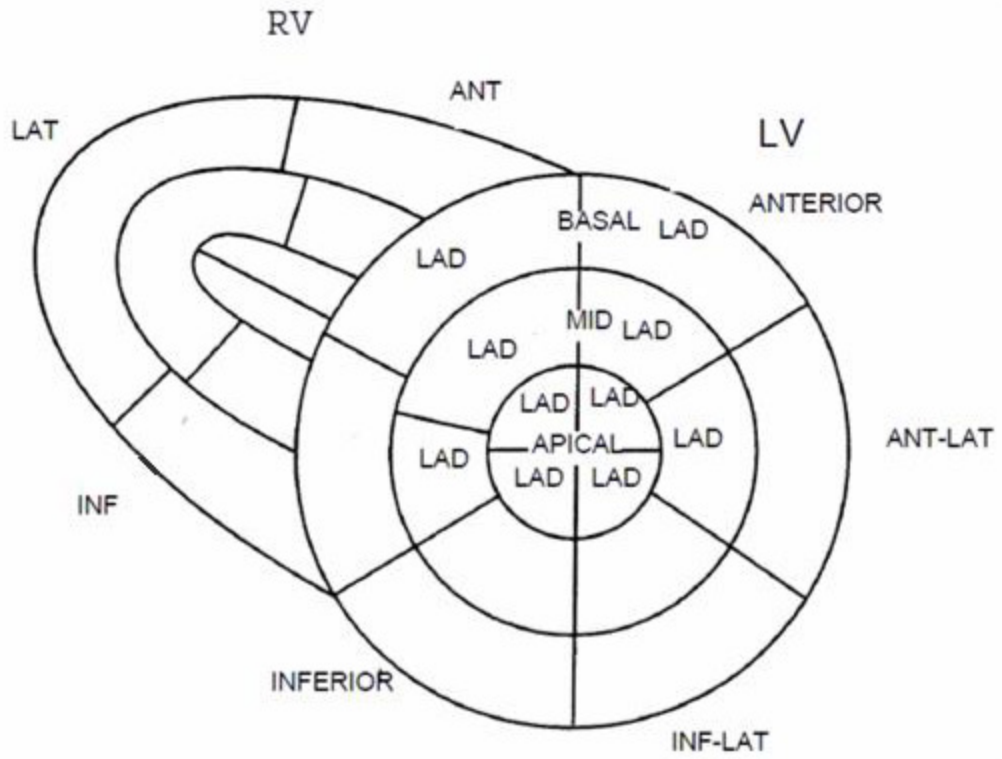


Fig.3.: Cx schematic drawing of usual coronary circulation

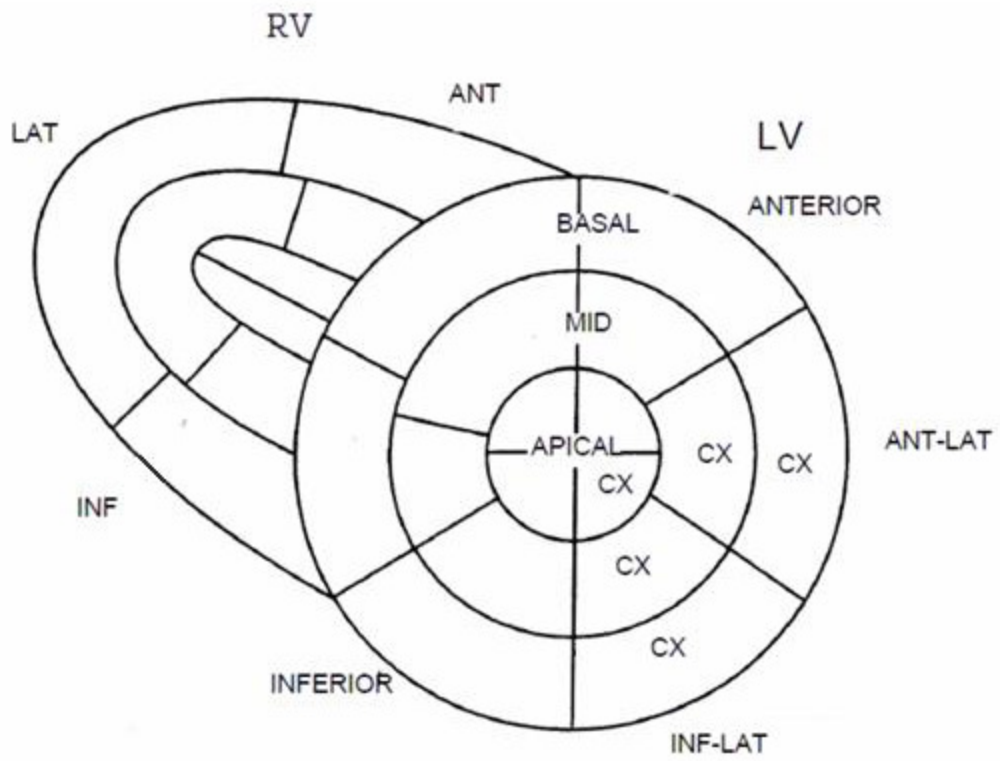


Fig.4.: Polar map of all patients with isolated RCA occlusion or stenosis

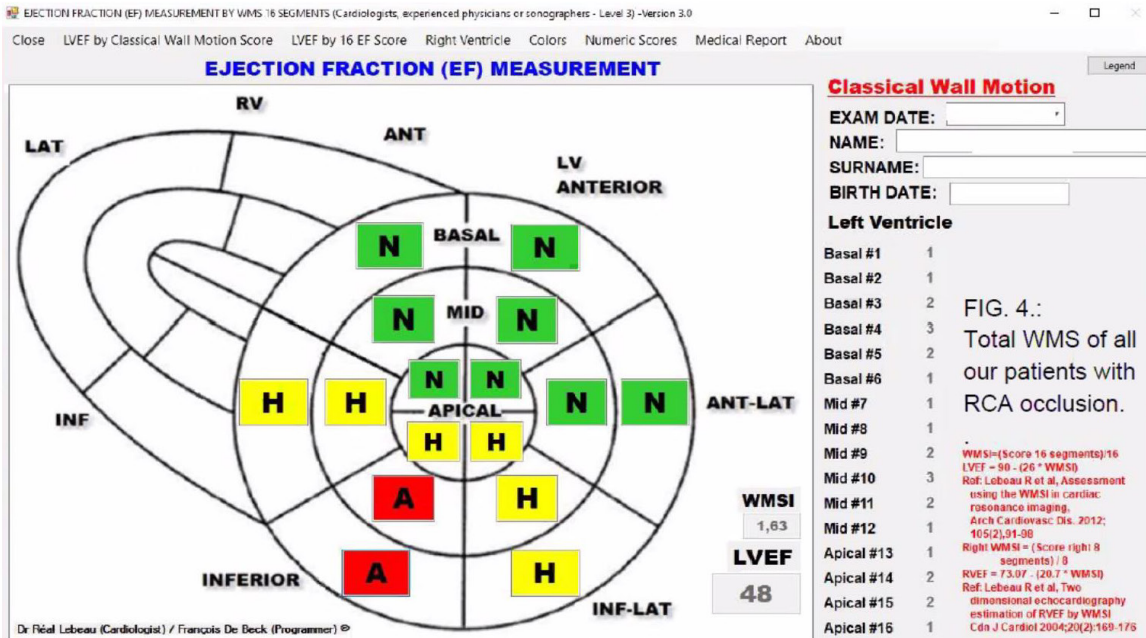


Fig.5.: Polar map of all patients with isolated LAD occlusion or stenosis

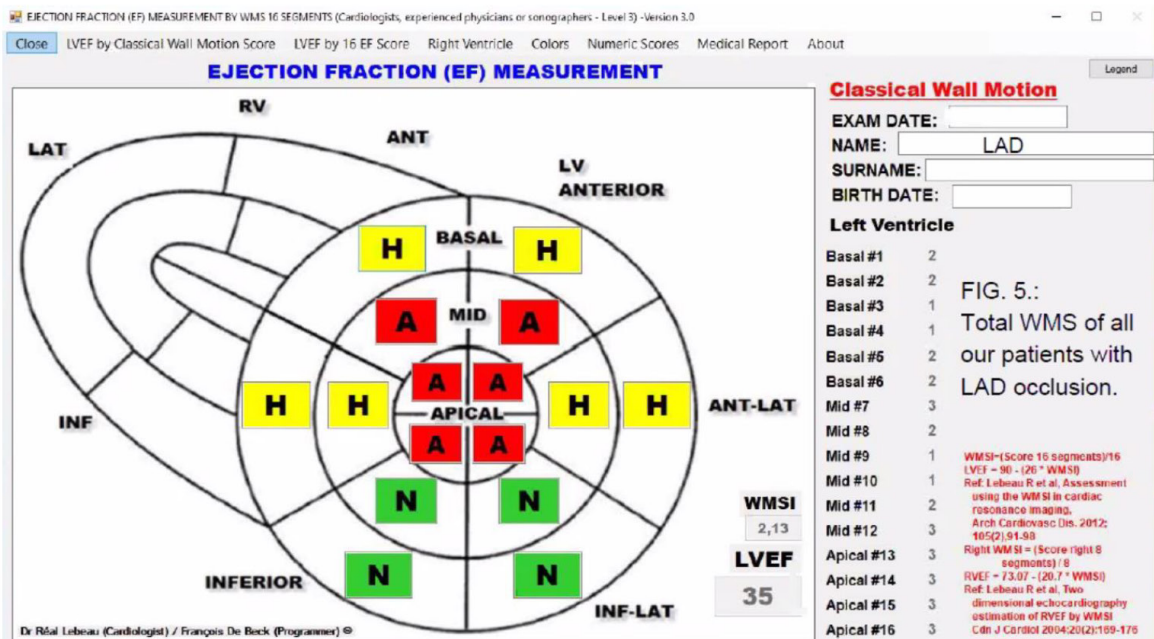
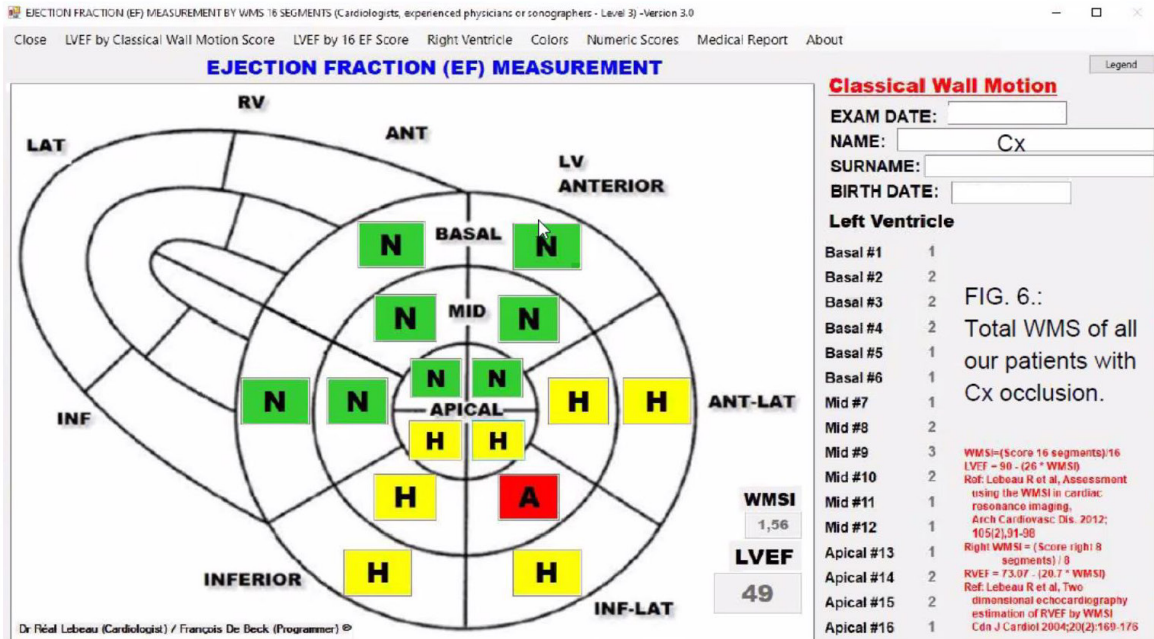


Fig.6.: Polar map of all patients with isolated Cx occlusion or stenosis



RCA and Cx territory often overlap.

ECG.: RCA versus CX for posterior infarction in ECG

As known in the literature the CX artery gives more posterior

involvement (prominent R in precordial derivations) on the ECG than

RCA artery.

In our patients with isolated occlusion or stenosis of RCA and CX.:

RCA has 39% prominent R in precordial derivations (13/33 patients).

CX has 68% prominent R in precordial derivations (19/28)

ECHO.: RCA versus Cx

RCA is frequently associated with more abnormal infero-septal kinetic compared to Cx. (6 Hr-9 Hr)

Cx artery less often associated with abnormal infero-septal kinetic but more abnormal kinetic in infero-lateral and antero-lateral wall. (3 Hr-6 Hr)

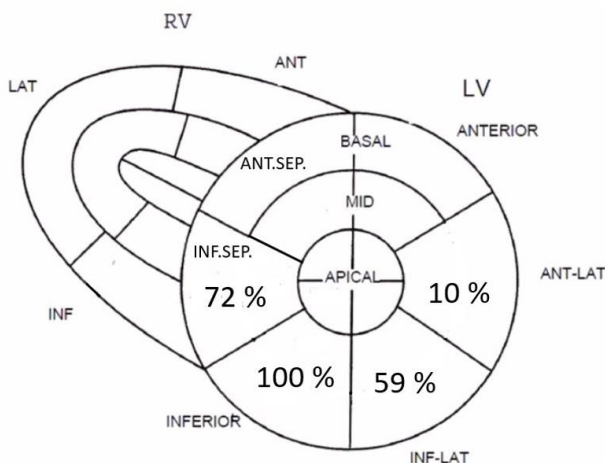
In our patients with isolated occlusion or stenosis of RCA and Cx.:

RCA .: % wall with abnormal kinetic (at least 2 hypokinetic or 1 akinetic wall)

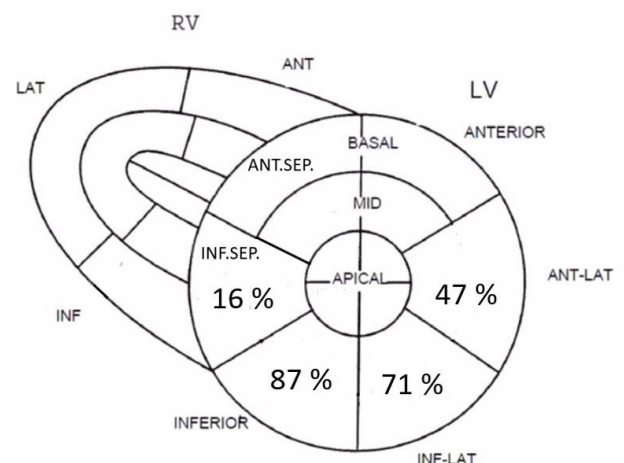
Inferior septum wall	72%	(24/33)
Inferior wall	100%	(29/29)
Infero-lateral wall	59%	(17/29)
Antero-lateral wall	10%	(3/29)

Cx.: % of wall with abnormal kinetic (at least 2 hypokinetic or 1 akinetic wall)

Inferior septum	16%	(5/31)
Inferior wall	87%	(26/30)
Infero-lateral wall	71%	(22/31)
Antero-lateral wall	47%	(15/32)



RCA PERCENT OF WALL MOTION ANOMALY



Cx PERCENT OF WALL MOTION ANOMALY

B) There are 4 chapters in the tutorial

1	Inferior infarction (RCA)
2	Anterior infarction (LAD) (Left anterior descending coronary artery)
3	Lateral infarction (Cx)
4	Unusual cases

You look first the ECG, second the ECHO polar map and finally correlate with the coronary anatomy CORON.

NB.: Acute infarction ECG-Coronarography were done the same day. Echocardiography generally in 2 or 3 days after ECG or coronarography.

NB.: Acute infero-postero-lateral infarction could be abbreviate in acute Inf-post-lat infarction.

INFERIOR INFARCTION (RCA)

1	Acute inferior infarction
2	Acute posterior infarction
3	Acute inf-post-lat infarction
4	Acute inf-post-lat infarction
5	Acute inf-post-lat infarction
6	Acute atypical inf-post-lat infarction
7	Acute atypical inferior infarction
8	Acute atypical inferior infarction
9	Old inferior infarction
10	Old inferior infarction
11	Old inferior infarction
12	Old inferior infarction
13	Old inf-post-lat infarction
14	Inferior ischemia
15	Anterior ischemia
16	Lateral ischemia
17	Normal ECG
18	Normal ECG
19	Normal ECG

ANTERIOR INFARCTION (LAD)

20	Acute anterior infarction
21	Acute anterior infarction
22	Acute anterior infarction
23	Acute anterior infarction
24	Acute anterior infarction
25	Acute anterior infarction (MID)
26	Acute anterior infarction (MID)
27	Acute anterior infarction (Collateral)
28	Acute anterior infarction (Collateral)
29	Anterior ischemia
30	Anterior ischemia
31	Stress CMP (Tako)
32	Stress CMP (Tako)
33	Stress CMP (Tako)
34	ECG normal
35	ECG normal
36	ECG normal

LATERAL INFARCTION (Cx)

37	Acute post-lat-infarction
38	Acute infero-post-infarction
39	Acute post-lat-infarction
40	Acute infero-postero-lat infarction
41	Acute infero-postero-lat infarction
42	Acute infero-postero-lat infarction
43	Acute posterior infarction
44	Atypical acute infero-lateral infarction
45	Atypical acute infero-lateral infarction
46	ECG normal
47	ECG normal
48	Inferior Ischemia
49	Posterior Ischemia
50	Lateral Ischemia
51	Anterior Ischemia

UNUSUAL CASES

52	ECG normal
53	ECG normal
54	Left main coronary artery
55	Left main coronary artery
56	Left main coronary artery
57	CMP (cardiomyopathy)
58	CMP (cardiomyopathy)
59	Stress echo
60	Stress echo

N. B.: More quiz cases to come work in progress.

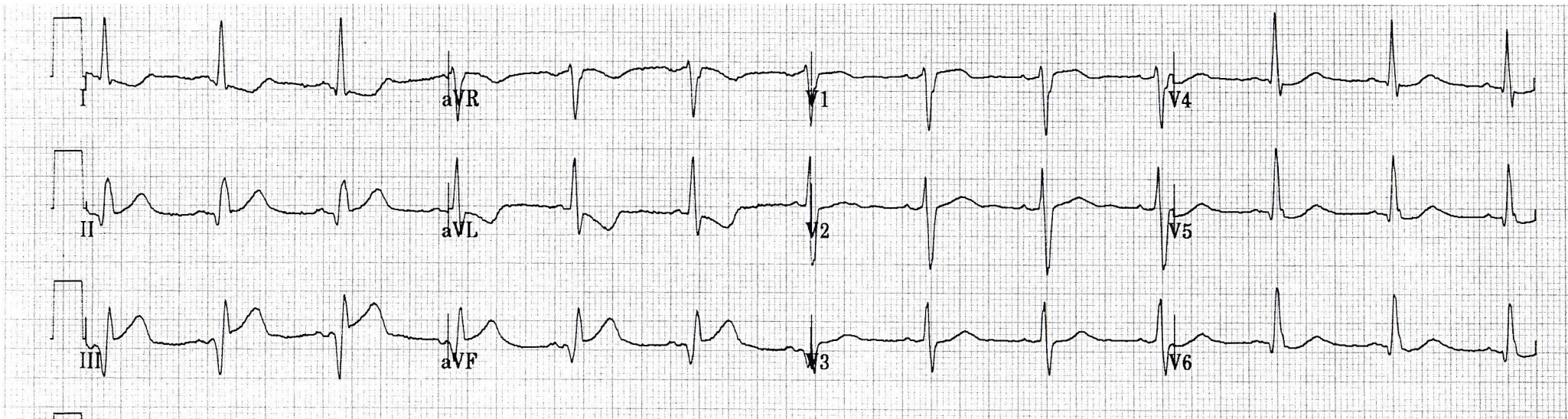
INFERIOR INFARCTION (RCA)

1	Acute inferior infarction
2	Acute posterior infarction
3	Acute inf-post-lat infarction
4	Acute inf-post-lat infarction
5	Acute inf-post-lat infarction
6	Acute atypical inf-post-lat infarction
7	Acute atypical inferior infarction
8	Acute atypical inferior infarction
9	Old inferior infarction
10	Old inferior infarction
11	Old inferior infarction
12	Old inferior infarction
13	Old inf-post-lat infarction
14	Inferior ischemia
15	Anterior ischemia
16	Lateral ischemia
17	Normal ECG
18	Normal ECG
19	Normal ECG

No 1

M 51 y . Myocardial infarction

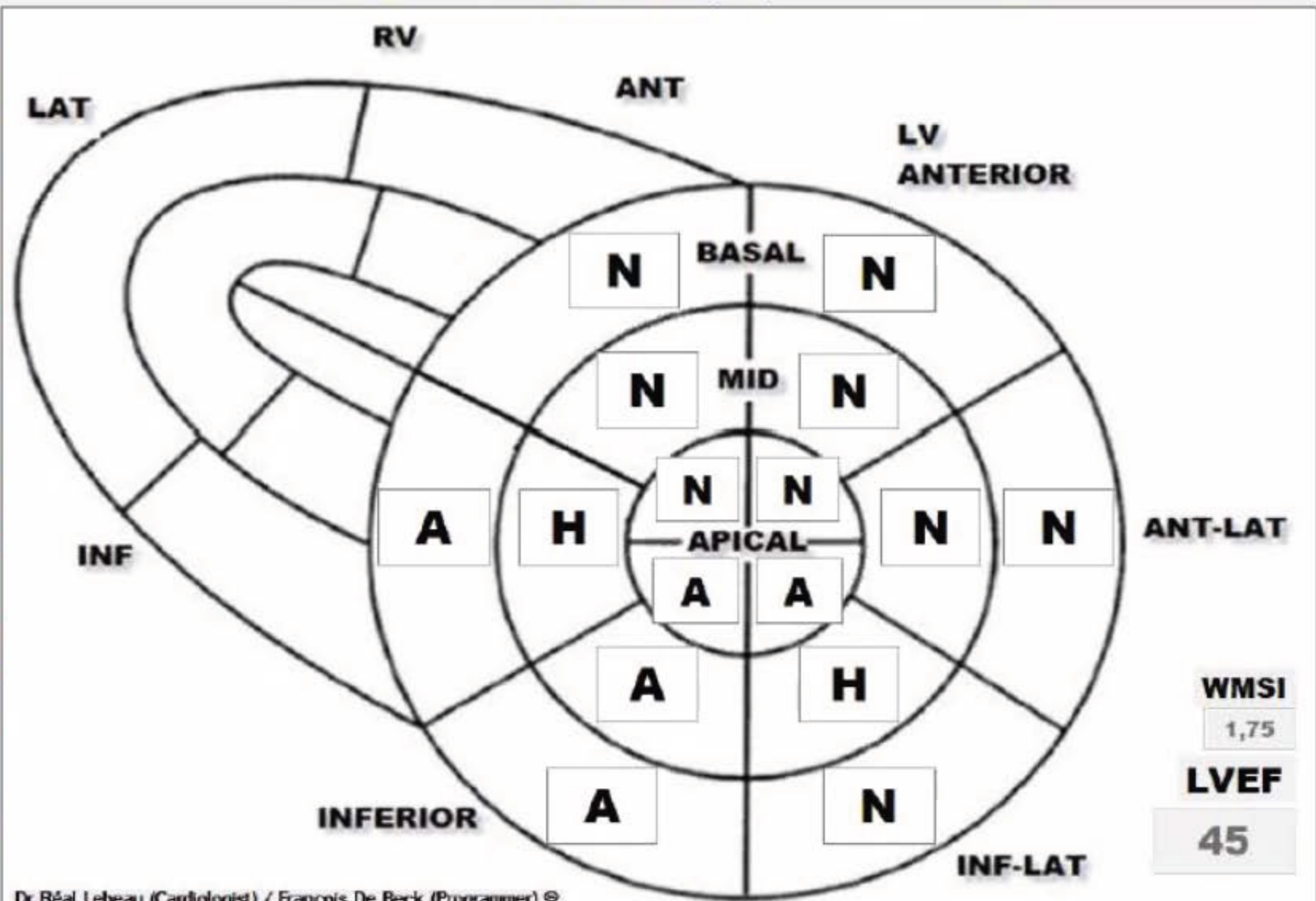
ECG.: your conclusion...



ECG.: Acute inferior infarction

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE:

NAME:

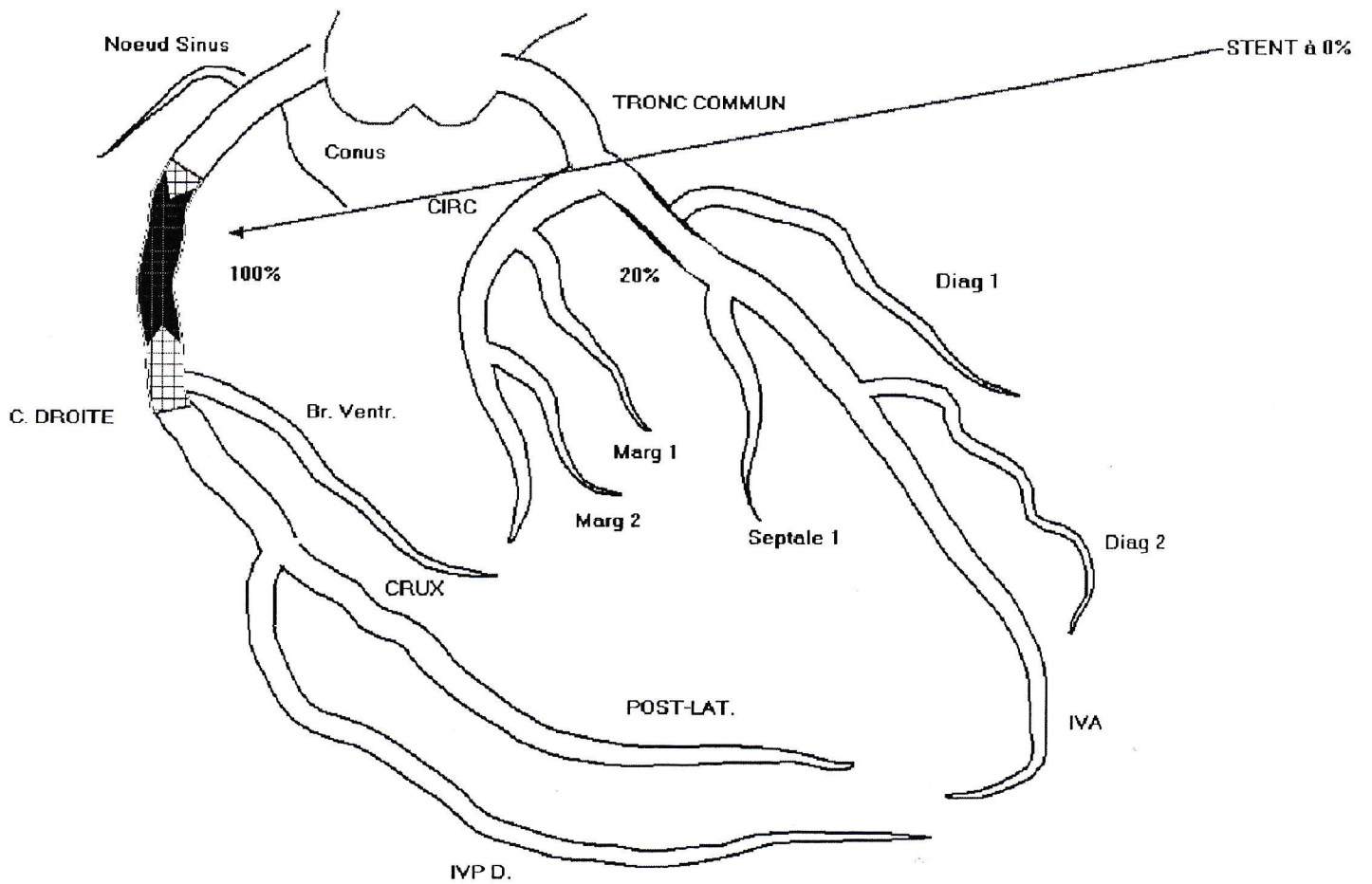
SURNAME:

BIRTH DATE:

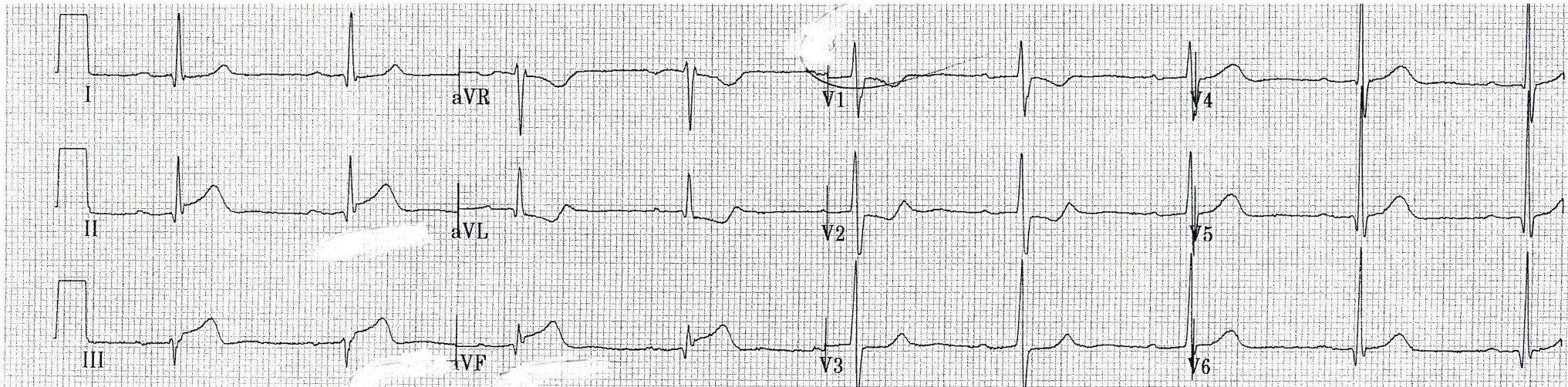
Left Ventricle

Basal #1	1	
Basal #2	1	Dx.:
Basal #3	1	Inferior infarction
Basal #4	3	(RCA)
Basal #5	3	
Basal #6	1	
Mid #7	1	
Mid #8	1	
Mid #9	2	WMSI = (Score 16 segments) / 16
Mid #10	3	LVEF = 90 - (26 * WMSI)
Mid #11	2	Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2):91-98
Mid #12	1	Right WMSI = (Score right 8 segments) / 8
Apical #13	1	RVEF = 73.07 - (20.7 * WMSI)
Apical #14	3	Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI
Apical #15	3	Cdn J Cardiol 2004;20(2):169-176
Apical #16	1	

No 1
Coron.: Acute occlusion of RCA



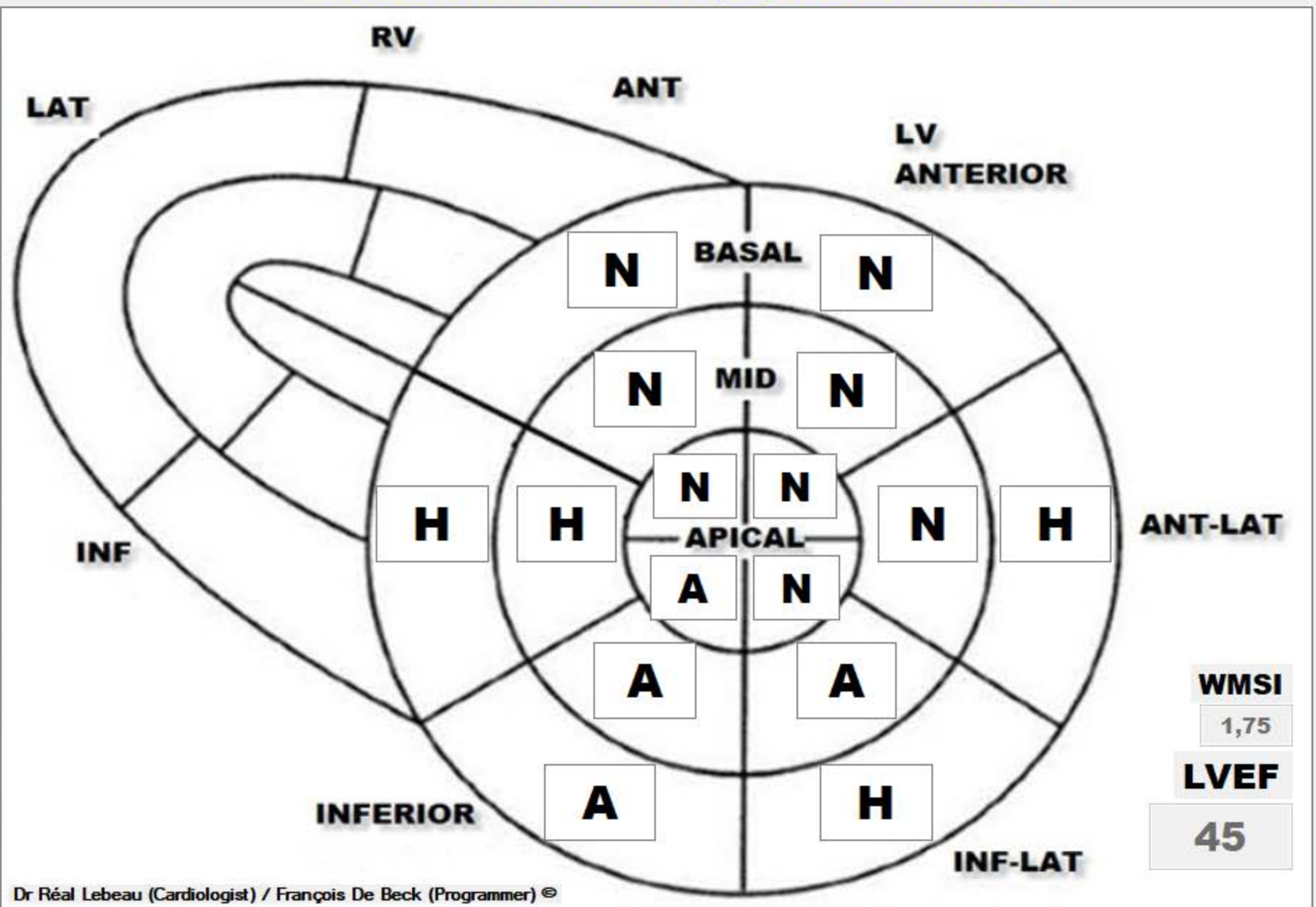
No 2
M 66y . STEMI
ECG.: your conclusion...



ECG.: Acute infero-posterior infarction

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2012-05-24
 NAME: ALEA
 SURNAME:
 BIRTH DATE: 1960-01-1

Left Ventricle

- Basal #1 1
- Basal #2 2
- Basal #3 2
- Basal #4 3
- Basal #5 2
- Basal #6 1
- Mid #7 1
- Mid #8 1
- Mid #9 3
- Mid #10 3
- Mid #11 2
- Mid #12 1
- Apical #13 1
- Apical #14 1
- Apical #15 3
- Apical #16 1

Dx.:
 Inferior
 infarction
 (RCA)

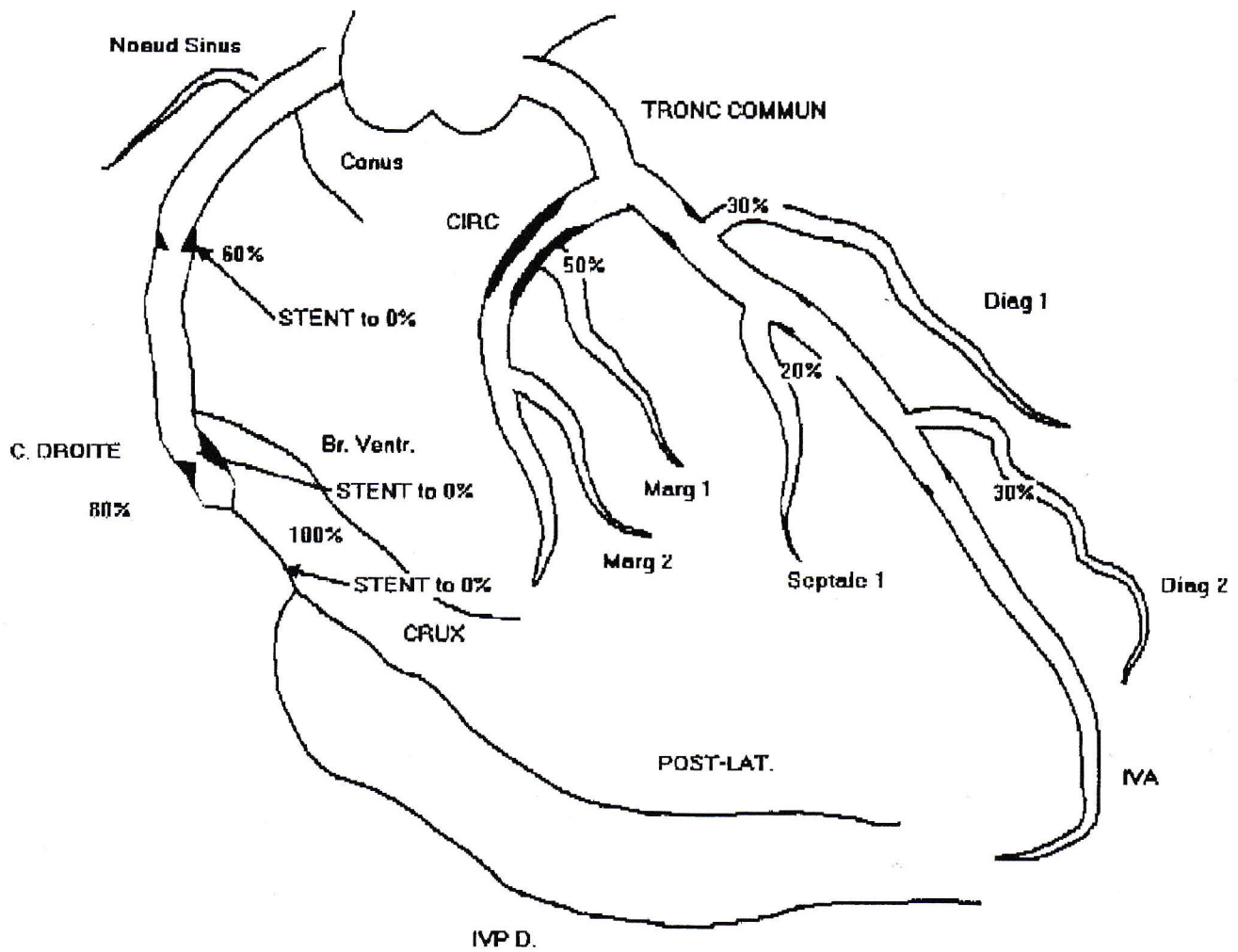
WMSI
 1,75

LVEF
 45

WMSI=(Score 16 segments)/16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98
 Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

No 2

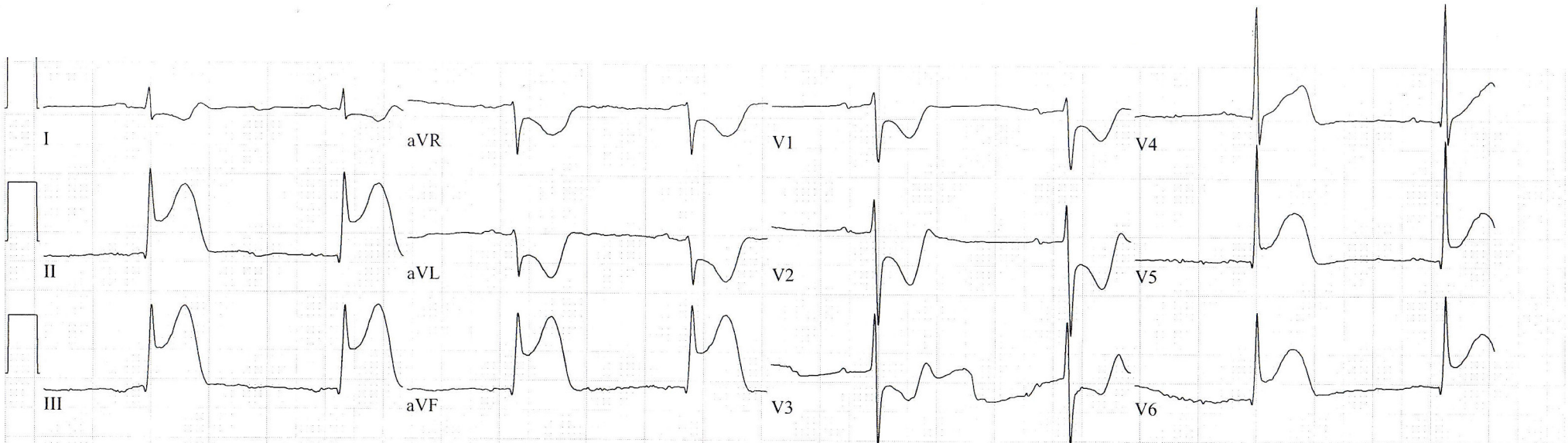
Coron.: Acute occlusion of mid RCA stented



No 3

M 59y . Myocardial infarction

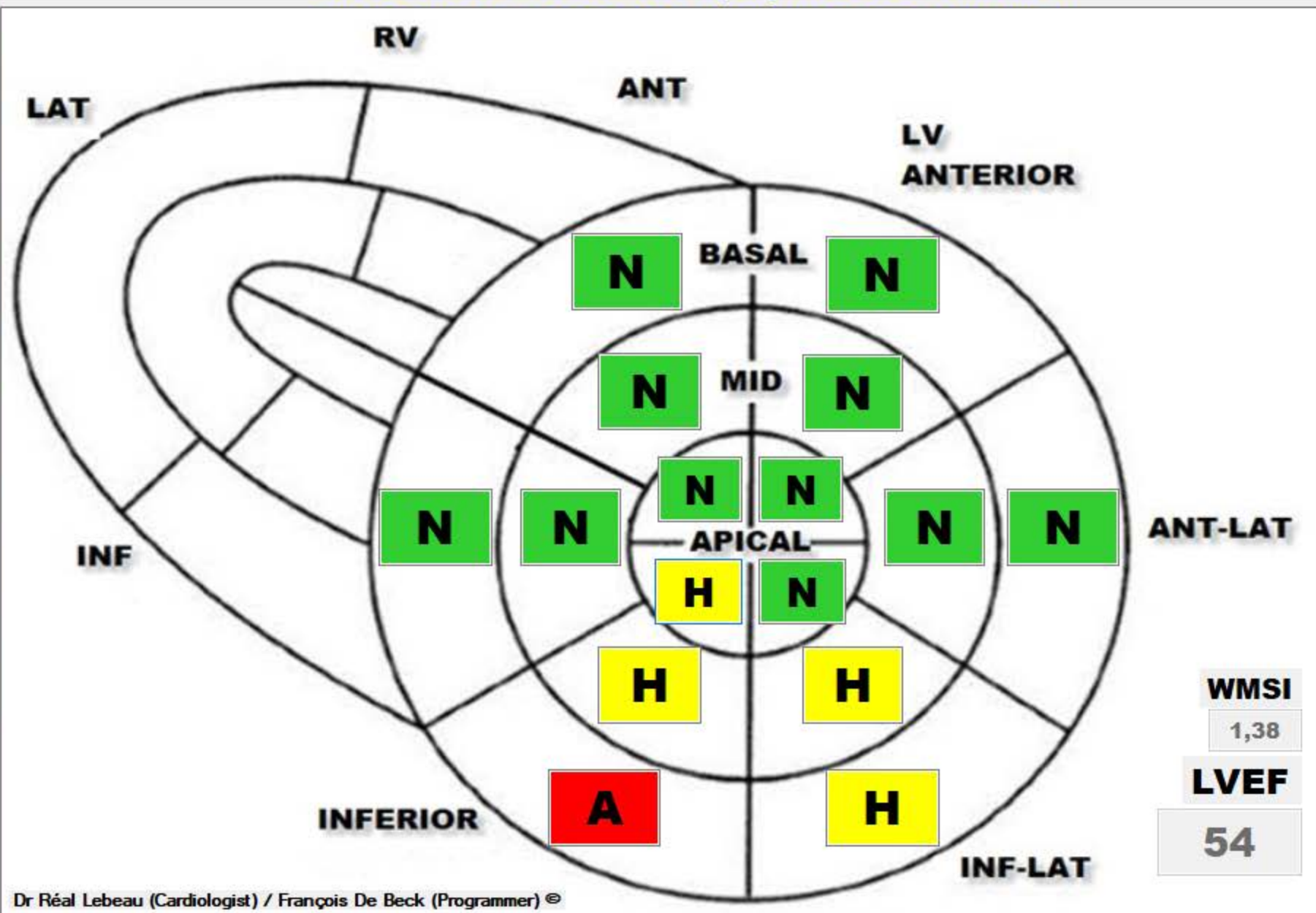
ECG.: your conclusion...



ECG.: Acute infero-postero-lateral infarction

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-10-30
 NAME:
 SURNAME:
 BIRTH DATE: 2020-10-30

Left Ventricle

Basal #1	1
Basal #2	1
Basal #3	2
Basal #4	3
Basal #5	1
Basal #6	1
Mid #7	1
Mid #8	1
Mid #9	2
Mid #10	2
Mid #11	1
Mid #12	1
Apical #13	1
Apical #14	1
Apical #15	2
Apical #16	1

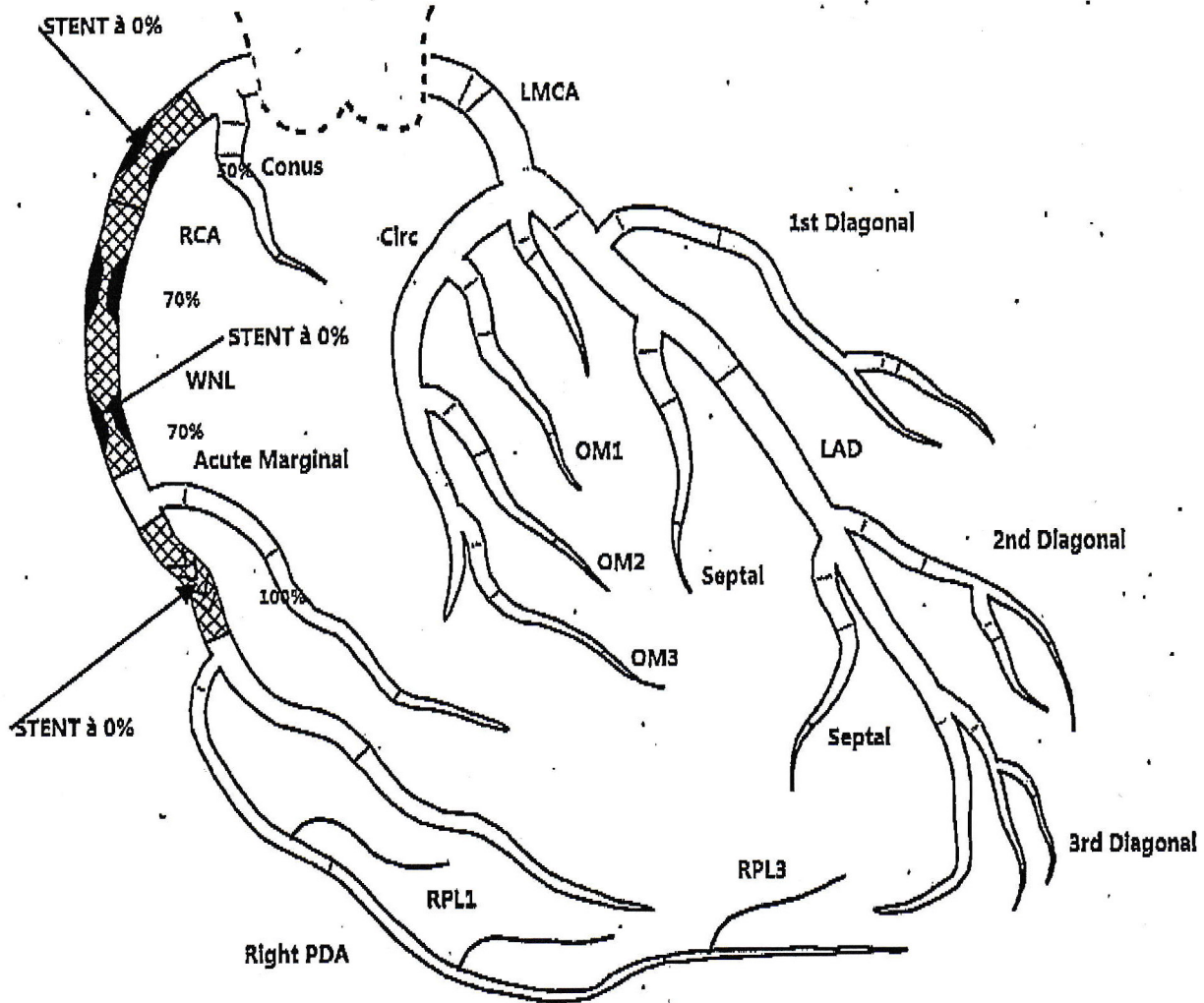
WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

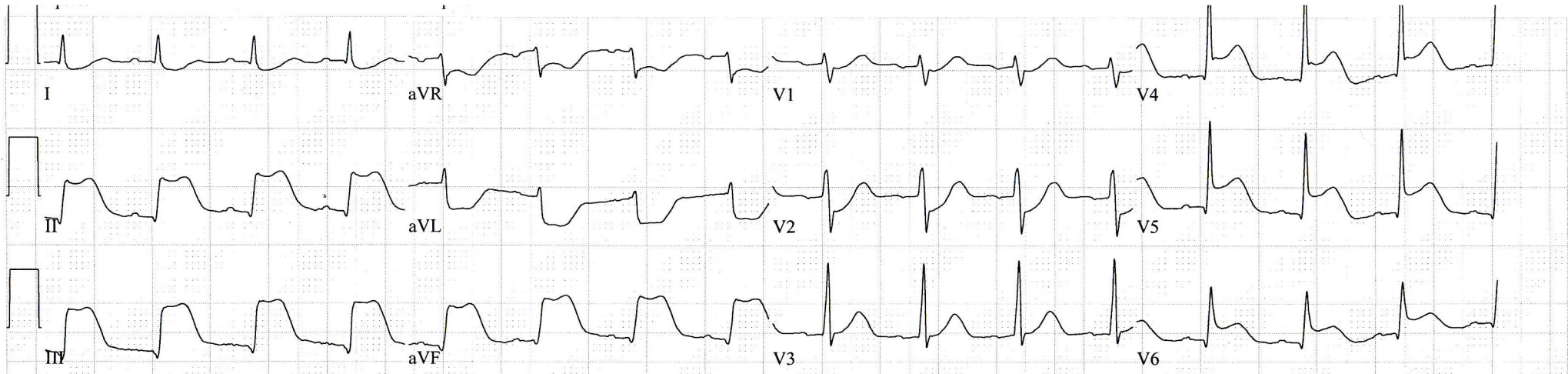
WMSI
1,38

LVEF
54

Cporon.: RCA stenosis stented



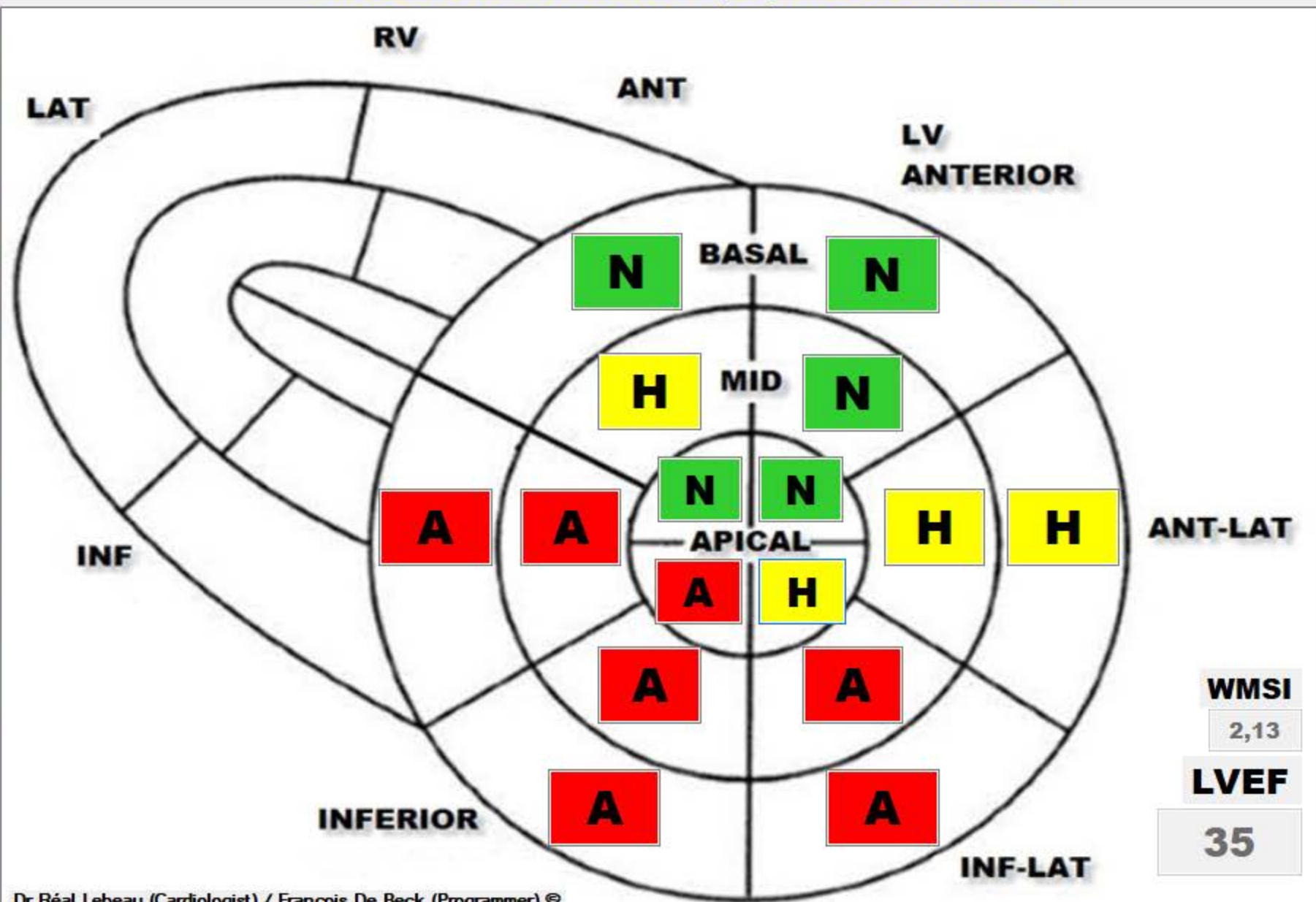
No 4
M 73y . Myocardial infarction
ECG.: your conclusion...



ECG.: Acute infero-postero-lateral infarction

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-10-30
 NAME:
 SURNAME:
 BIRTH DATE: 2020-10-30

Left Ventricle

Basal #1	1
Basal #2	2
Basal #3	3
Basal #4	3
Basal #5	3
Basal #6	1
Mid #7	1
Mid #8	2
Mid #9	3
Mid #10	3
Mid #11	3
Mid #12	2
Apical #13	1
Apical #14	2
Apical #15	3
Apical #16	1

WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

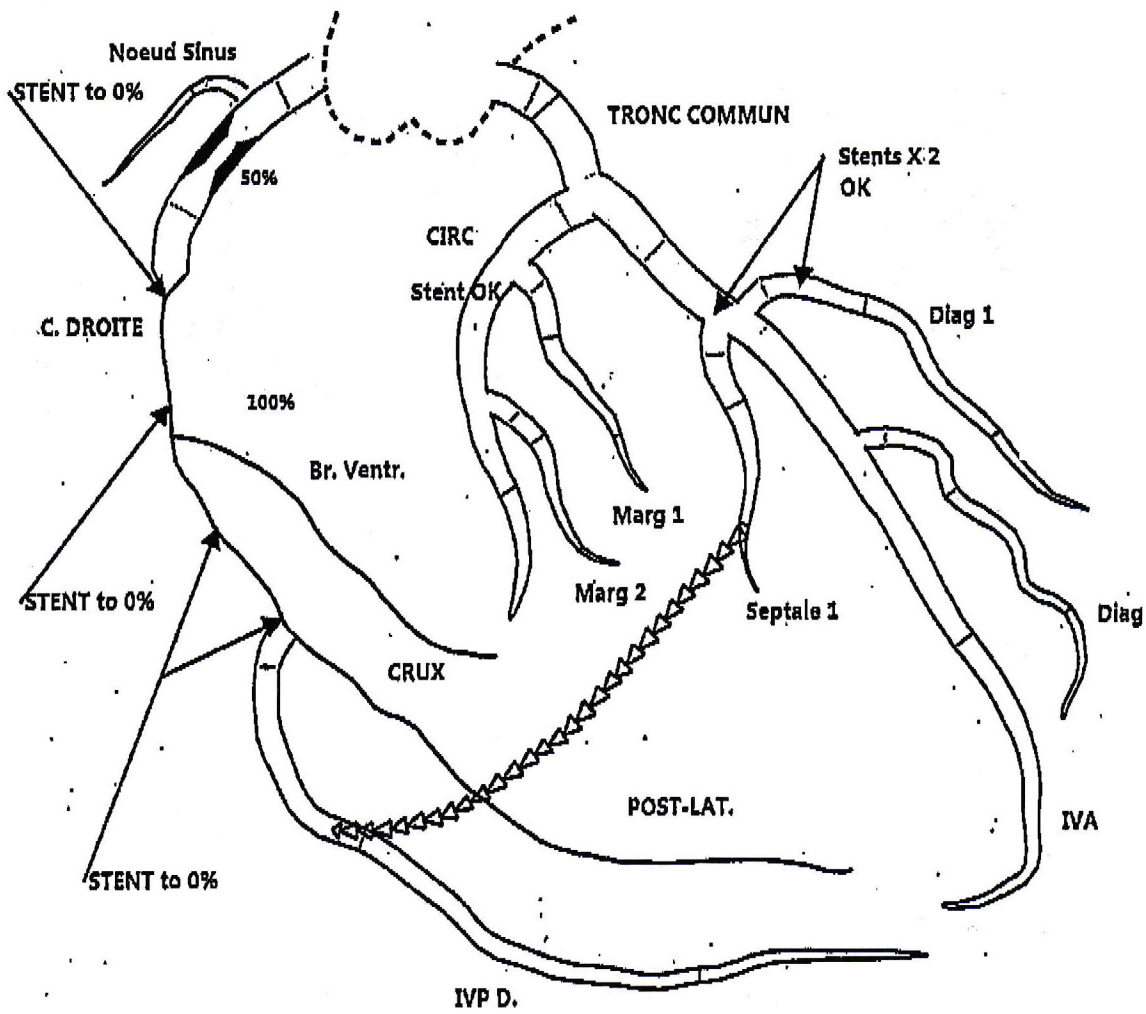
Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

WMSI
2,13

LVEF
35

No 4

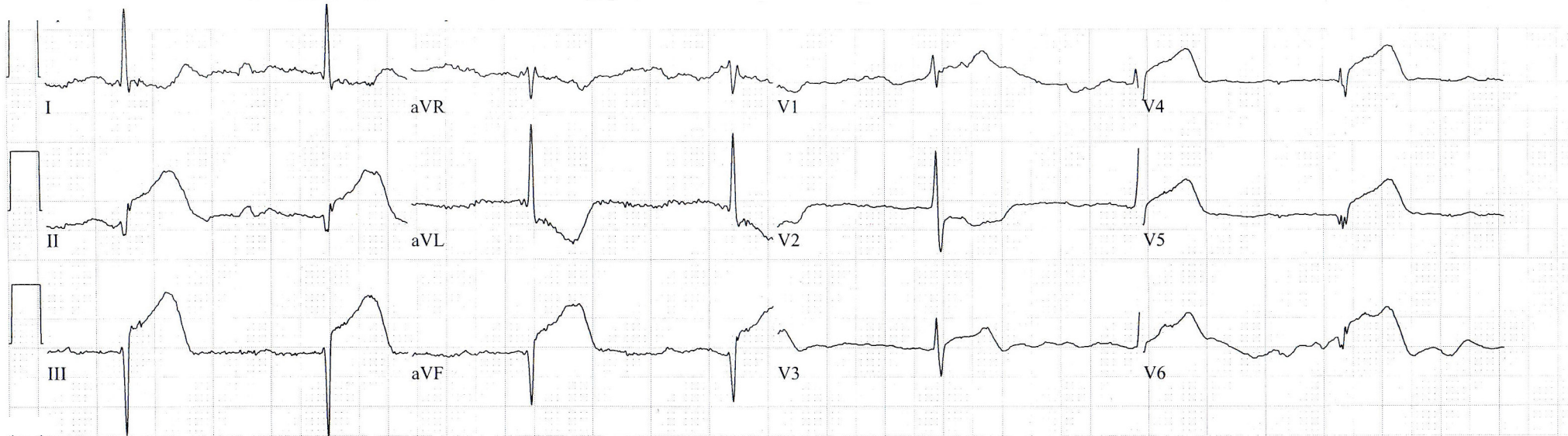
Coron.: Acute occlusion of RCA stented



No 5.

F 81y. Myocardial infarction

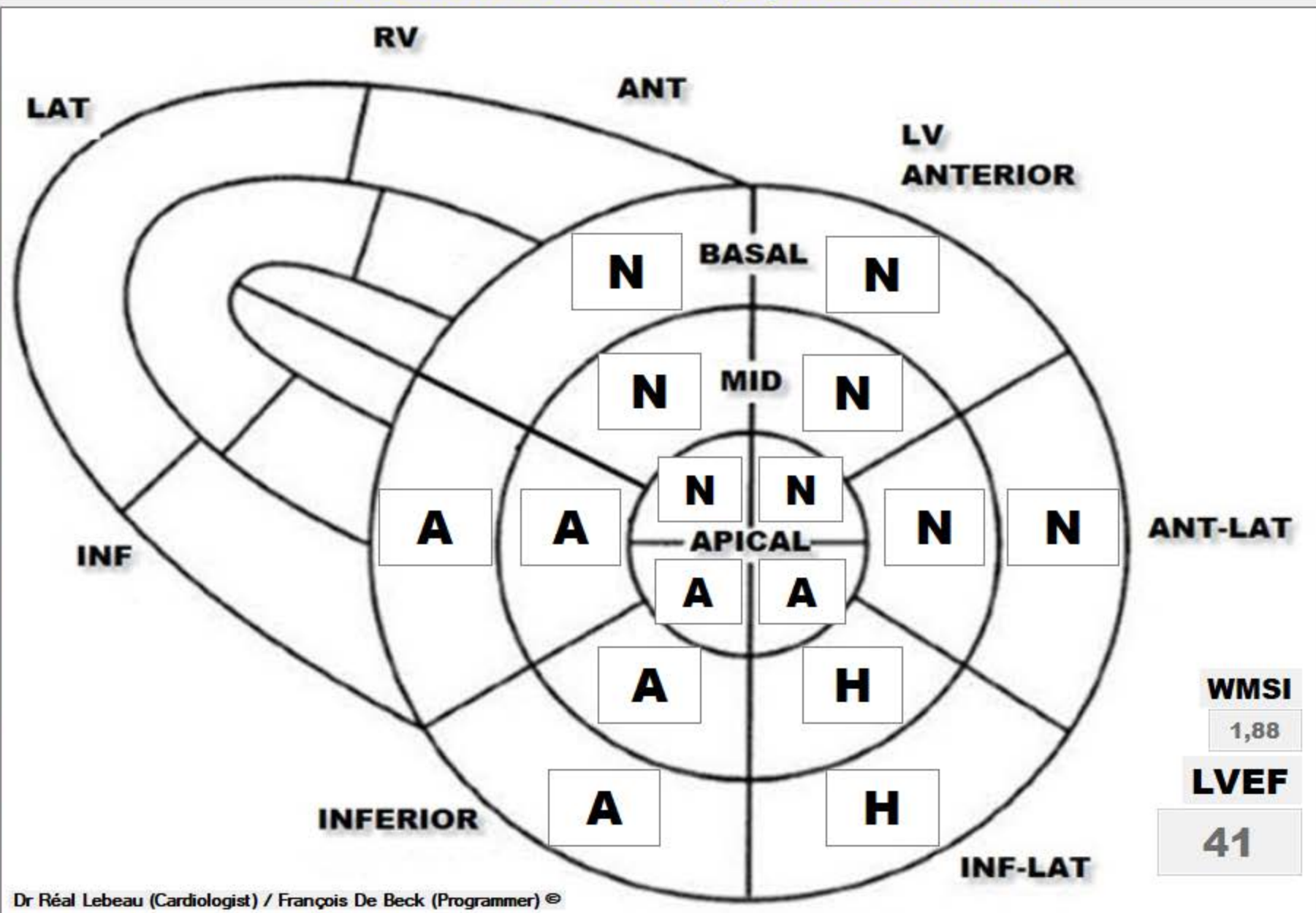
ECG.: your conclusion...



ECG.:Acute inferior with posterolateral extension

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-02-17
 NAME: GROM
 SURNAME:
 BIRTH DATE: 1960-01-1

Left Ventricle

Basal #1	1
Basal #2	1 Dx.:
Basal #3	2 Inferior infarction
Basal #4	3 (RCA)
Basal #5	3
Basal #6	1
Mid #7	1
Mid #8	1
Mid #9	2
Mid #10	3
Mid #11	3
Mid #12	1
Apical #13	1
Apical #14	3
Apical #15	3
Apical #16	1

WMSI
1,88

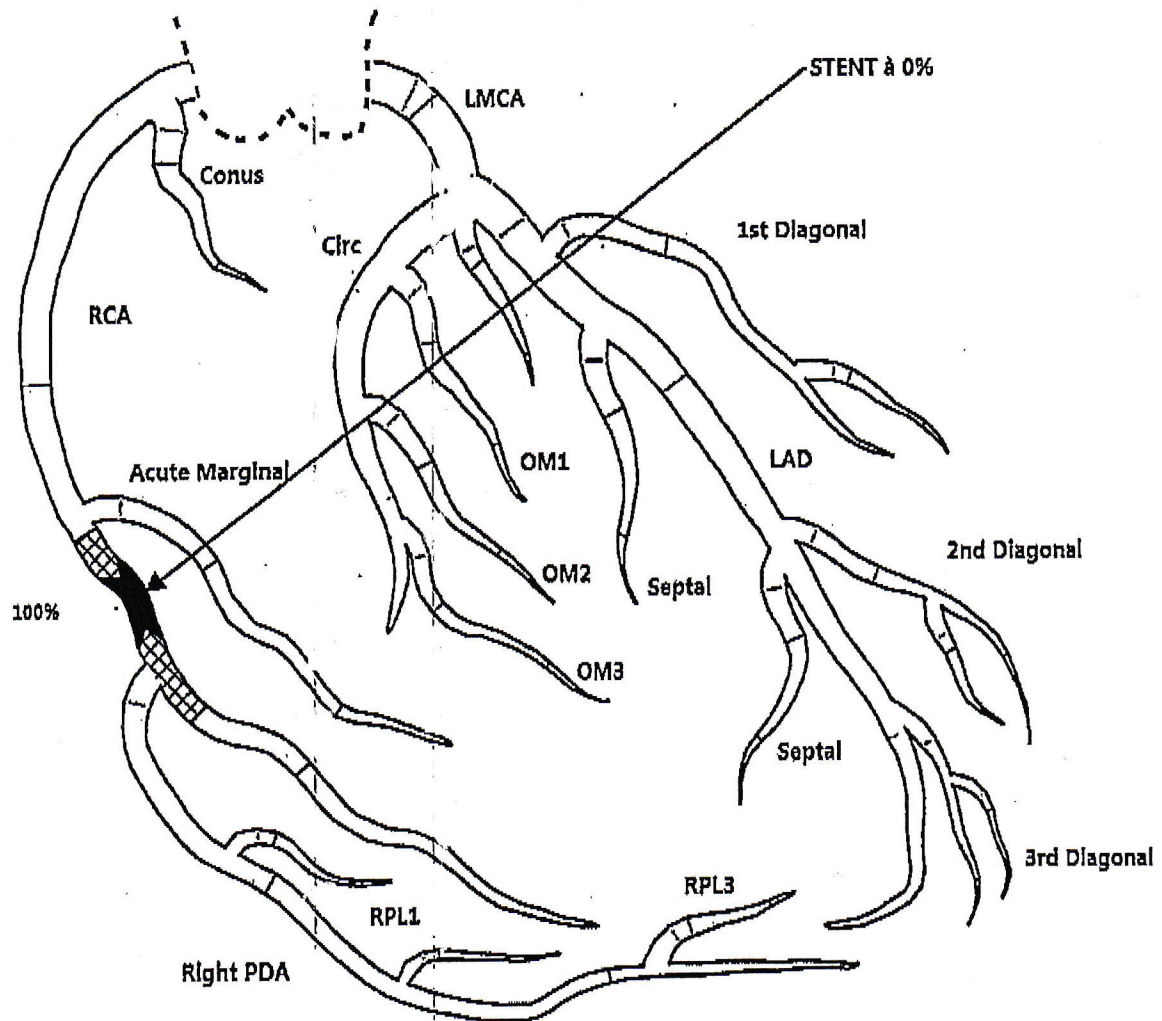
LVEF
41

WMSI=(Score 16 segments)/16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

No 5

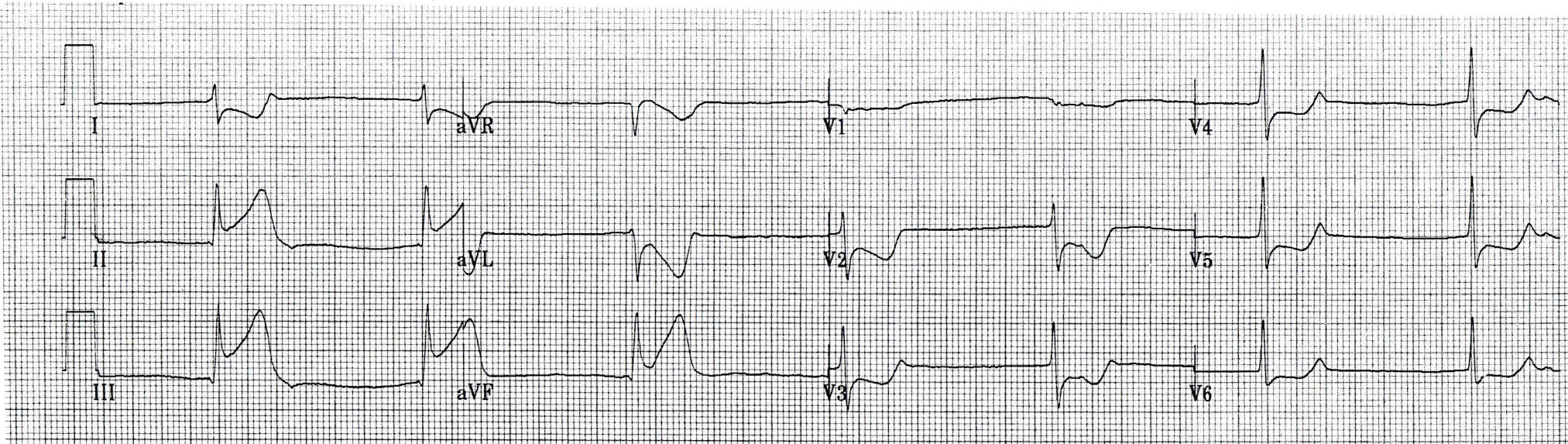
Coron.: Occlusion of RCA stented



No 6

F 52y Myocardial infarction

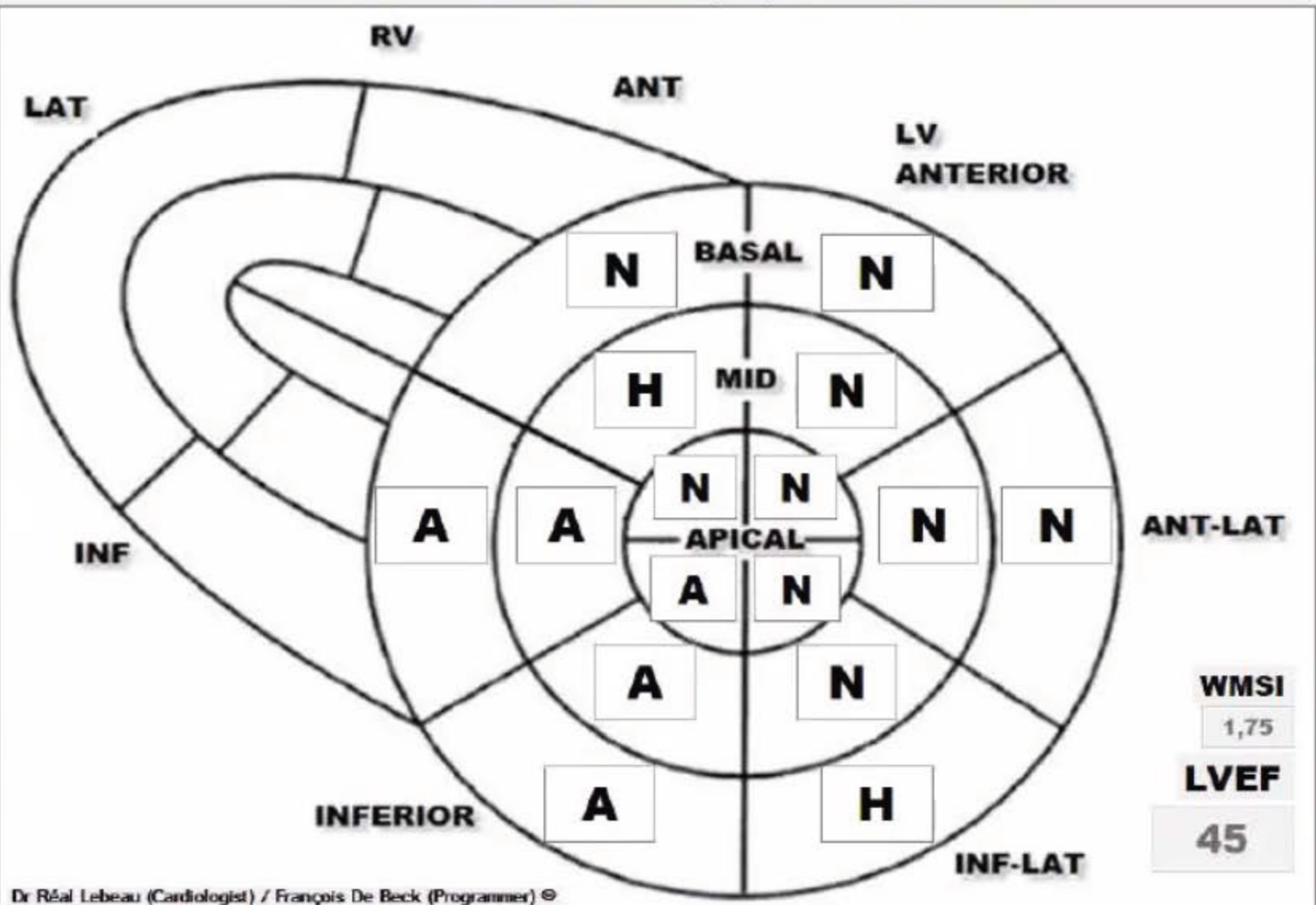
ECG.: your conclusion...



ECG.: Acute infero-postero-lateral infarction (note unusual injury in V4,5,6)

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE:

NAME:

SURNAME:

BIRTH DATE:

Left Ventricle

Basal #1	1	
Basal #2	1	Dx.:
Basal #3	2	inferior infarction
Basal #4	3	(RCA)
Basal #5	3	
Basal #6	1	
Mid #7	1	
Mid #8	1	
Mid #9	1	
Mid #10	3	
Mid #11	3	
Mid #12	2	
Apical #13	1	
Apical #14	1	
Apical #15	3	
Apical #16	1	

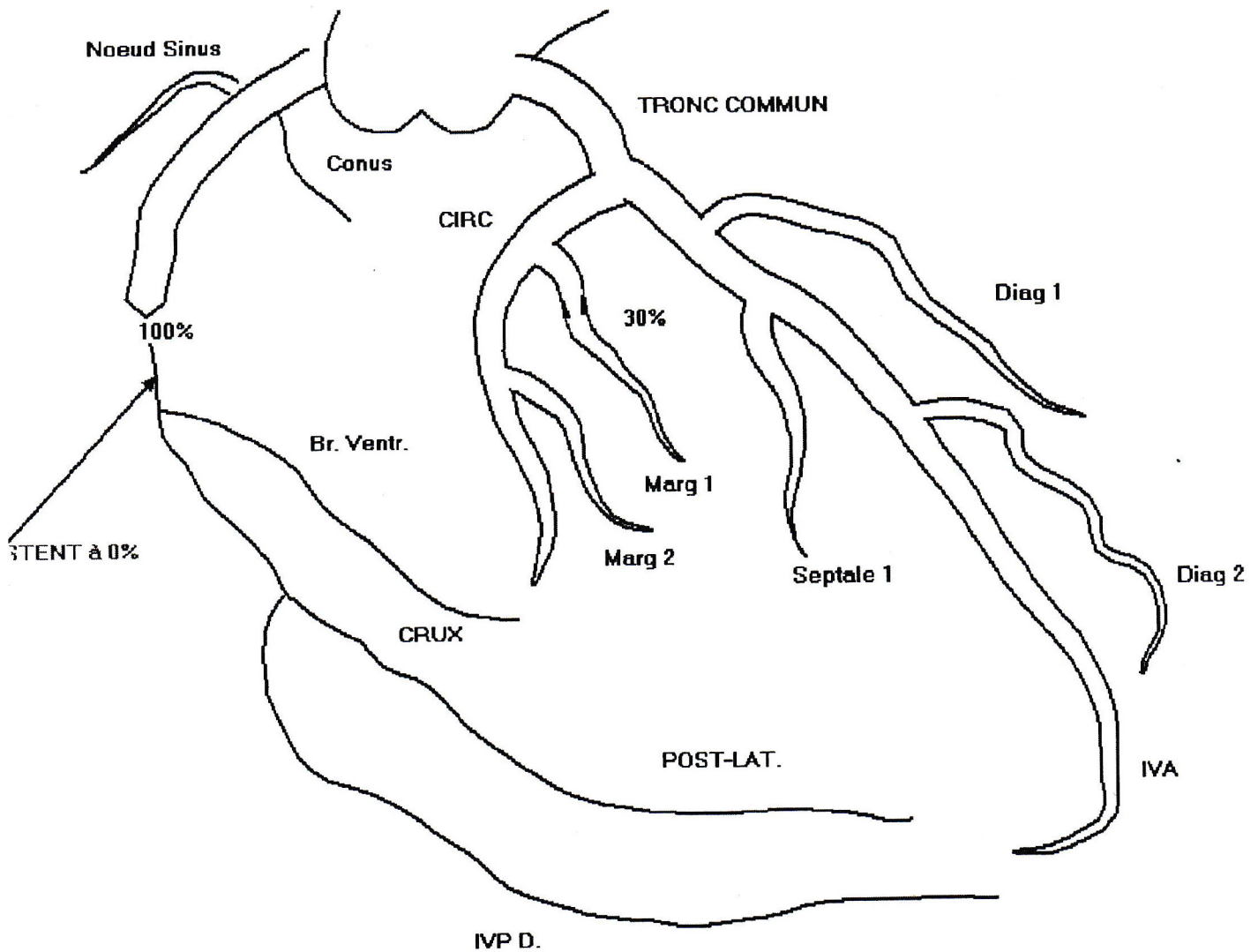
WMSI 1,75

LVEF 45

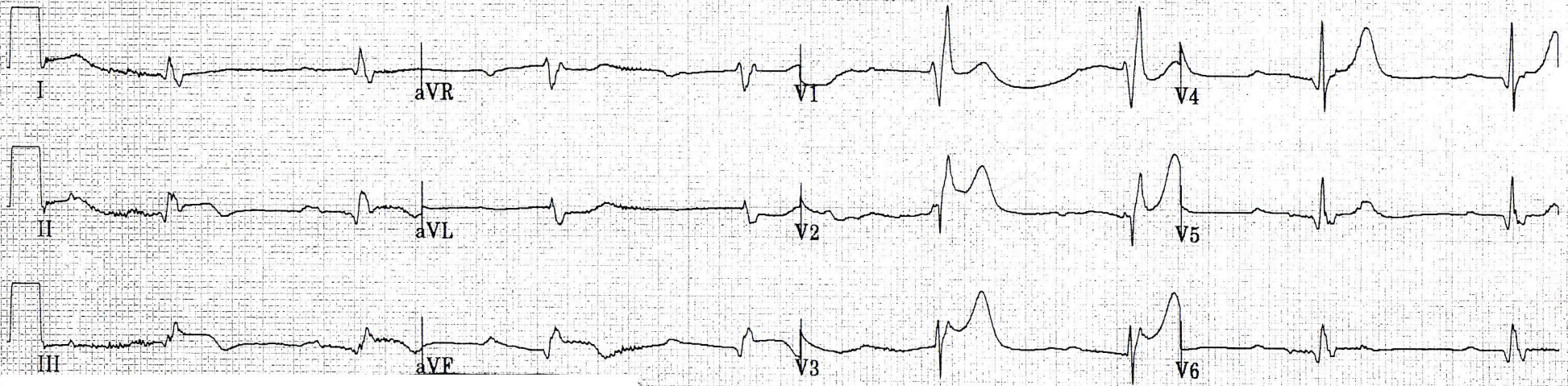
WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2):91-98

Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

No 6
Coron.: Acute occlusion of RCA stented



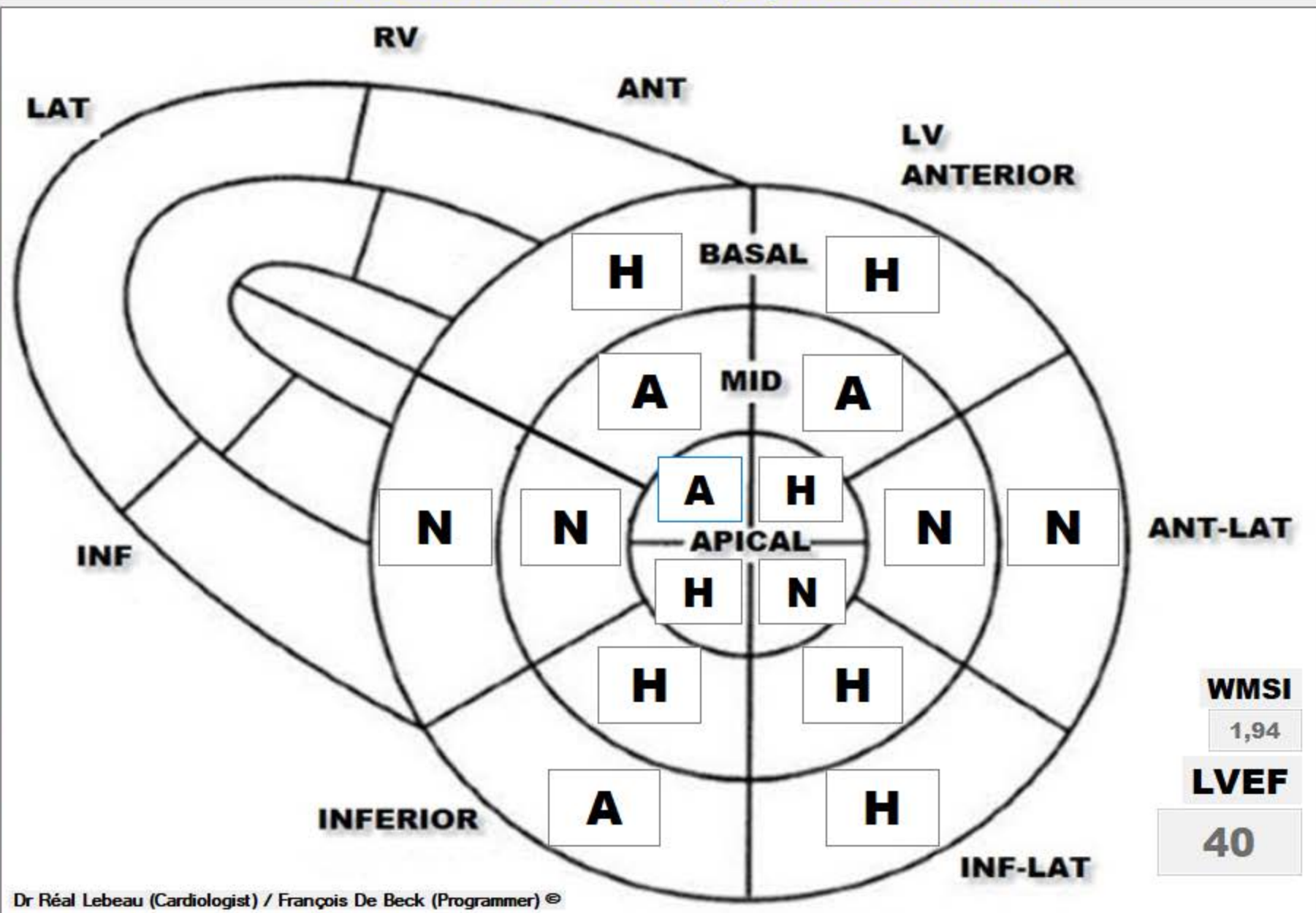
No 7
M 67y . Acute infarction
ECG .: your conclusion...



ECG.: Acute inferior infarction and old lateral infarction
Anterior injury .RBBB

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-09-03
 NAME:
 SURNAME:
 BIRTH DATE: 2020-09-03

Left Ventricle

Basal #1	2	
Basal #2	1	DX.:
Basal #3	2	2 vessels
Basal #4	3	disease
Basal #5	1	LAD ,RCA
Basal #6	2	
Mid #7	3	
Mid #8	1	
Mid #9	2	
Mid #10	2	
Mid #11	1	
Mid #12	3	
Apical #13	2	
Apical #14	1	
Apical #15	2	
Apical #16	3	

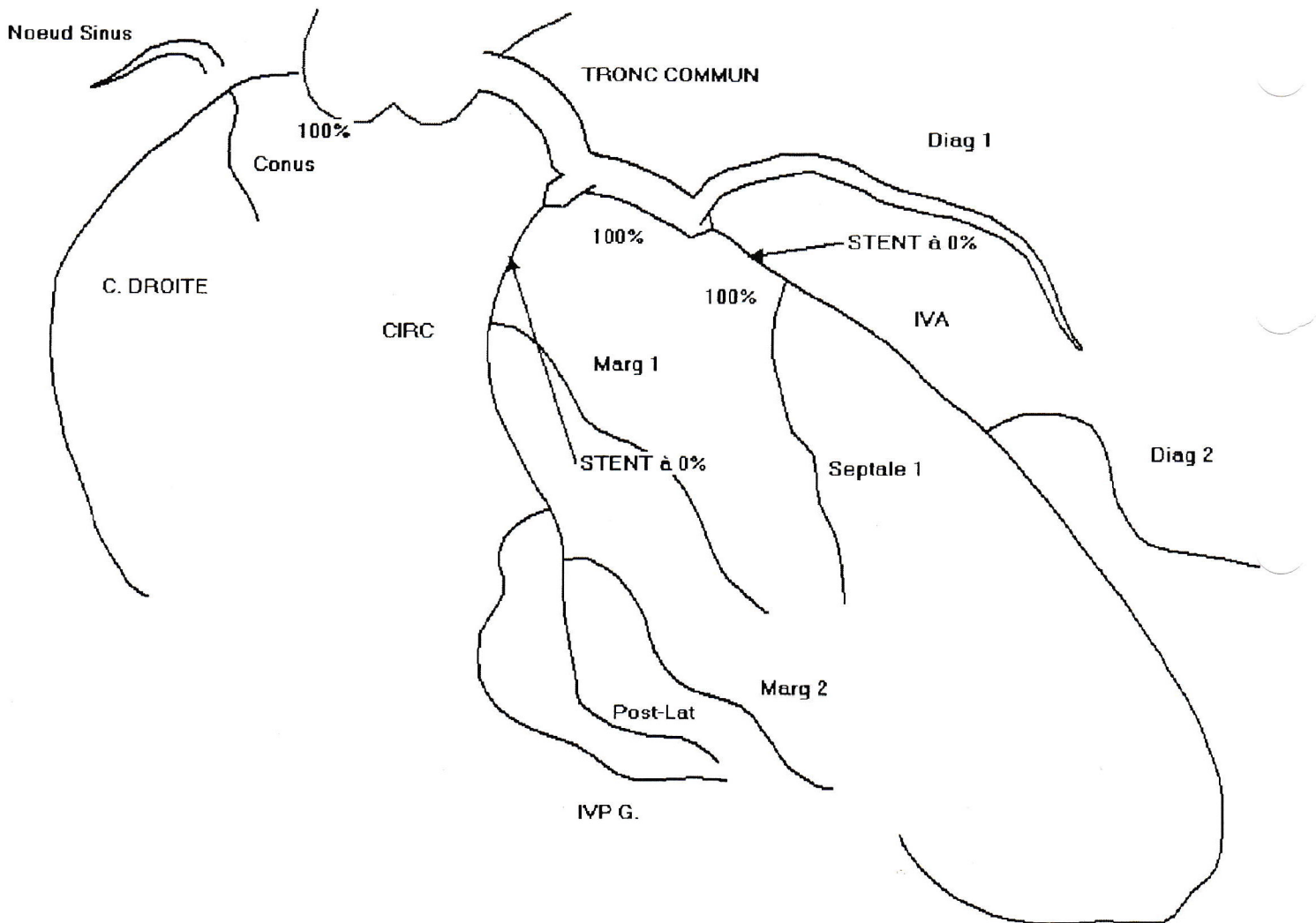
WMSI
1,94

LVEF
40

WMSI=(Score 16 segments)/16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98
 Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

No 7

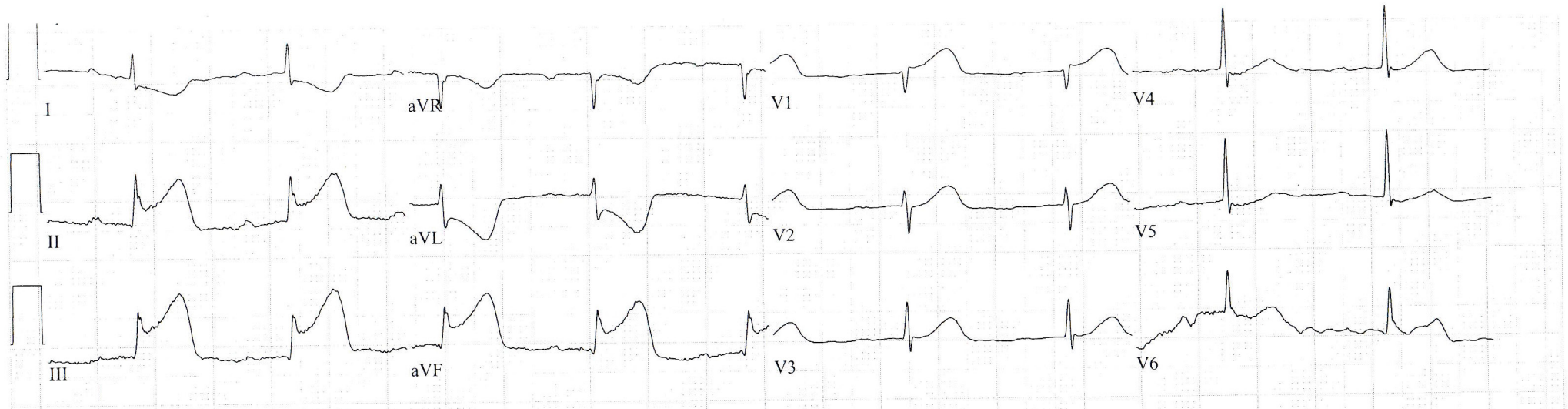
Coron.: Occlusion of LAD and Cx artery stented



No 8

F 67y Myocardial infarction

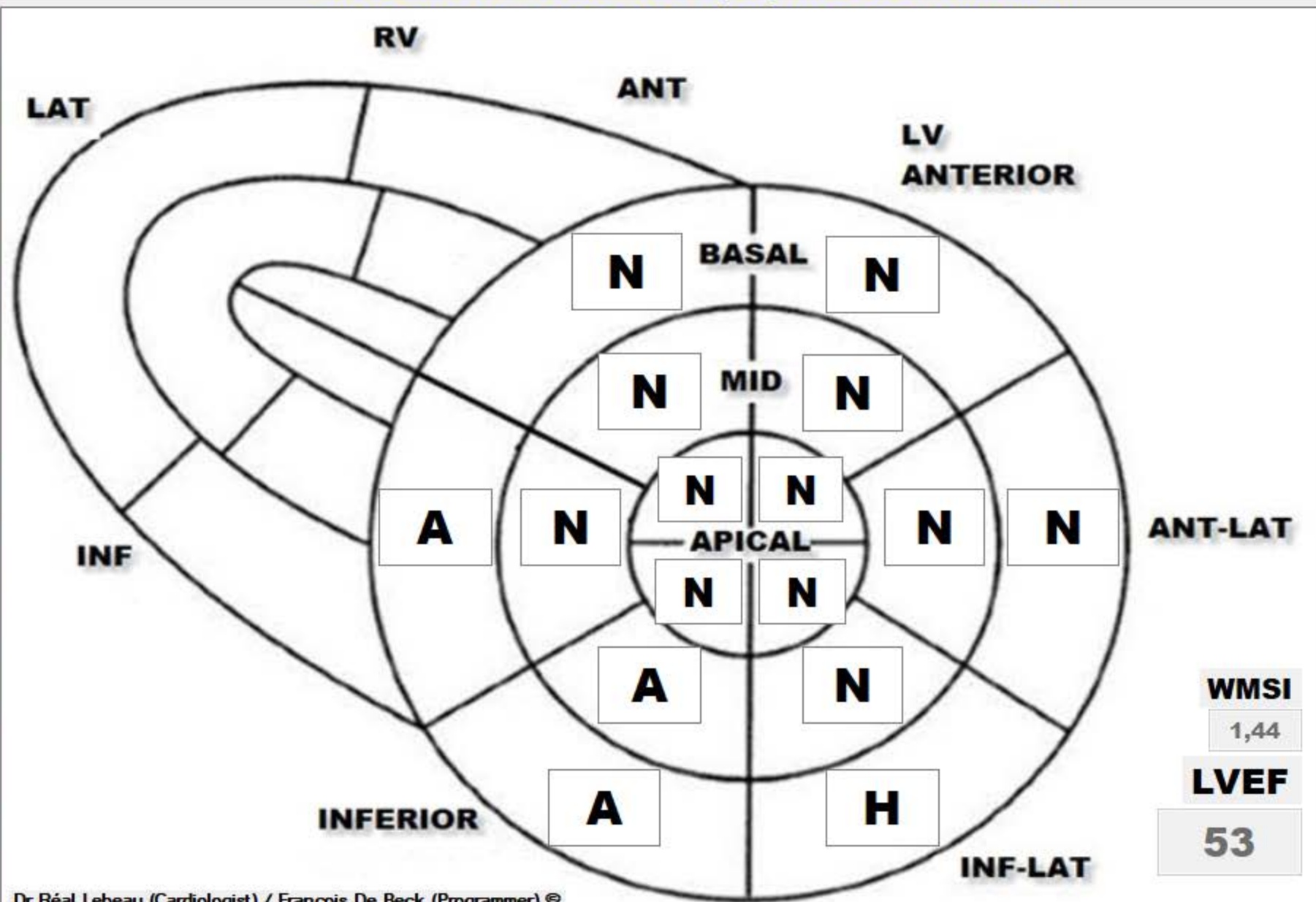
ECG.: your conclusion...



ECG.: Acute inferior infarction with possible anterior injury

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2019-02-14
 NAME: KHAA
 SURNAME:
 BIRTH DATE: 1960-01-1

Left Ventricle

Basal #1	1
Basal #2	1 Dx.:
Basal #3	2 Inferior infarction
Basal #4	3 (RCA)
Basal #5	3
Basal #6	1
Mid #7	1
Mid #8	1
Mid #9	1
Mid #10	3
Mid #11	1
Mid #12	1
Apical #13	1
Apical #14	1
Apical #15	1
Apical #16	1

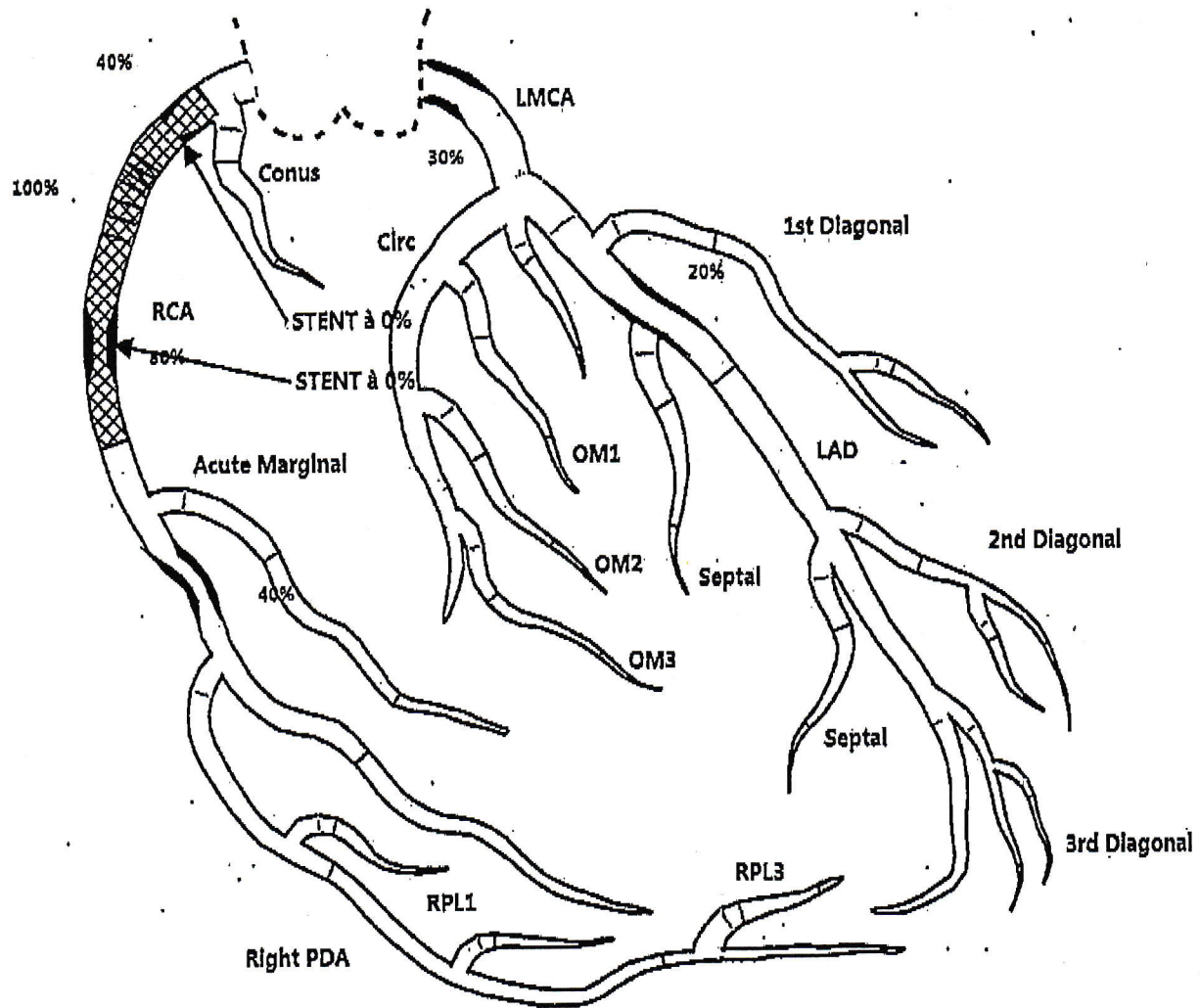
WMSI
1,44

LVEF
53

WMSI=(Score 16 segments)/16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98
 Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

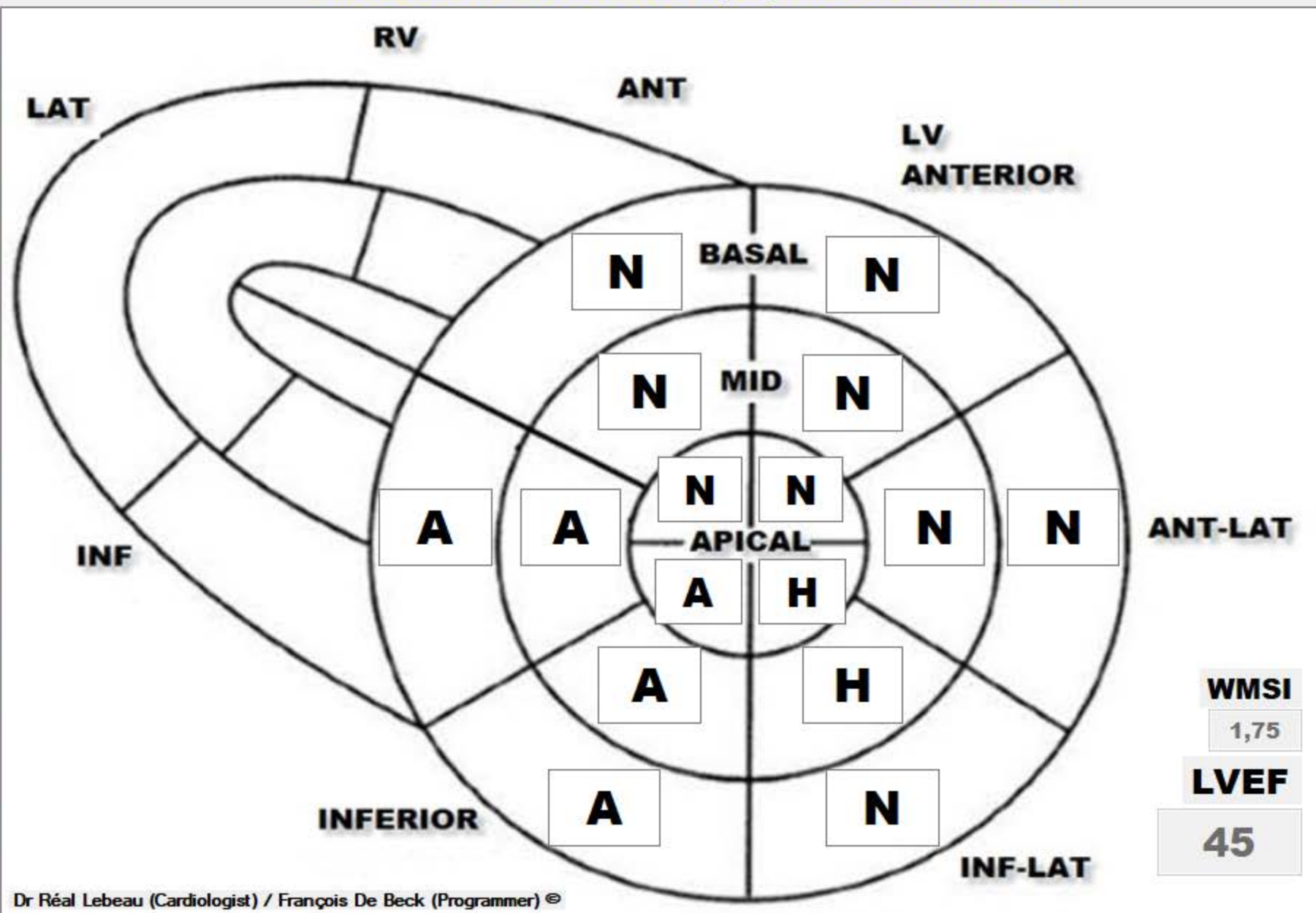
No 8

Coron.: Acute occlusion of RCA



EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2014-11-17
 NAME: DESM
 SURNAME:
 BIRTH DATE: 1960-01-1

Left Ventricle

Basal #1	1	
Basal #2	1	Dx.:
Basal #3	1	Inferior infarction
Basal #4	3	(RCA)
Basal #5	3	
Basal #6	1	
Mid #7	1	
Mid #8	1	
Mid #9	2	
Mid #10	3	
Mid #11	3	
Mid #12	1	
Apical #13	1	
Apical #14	2	
Apical #15	3	
Apical #16	1	

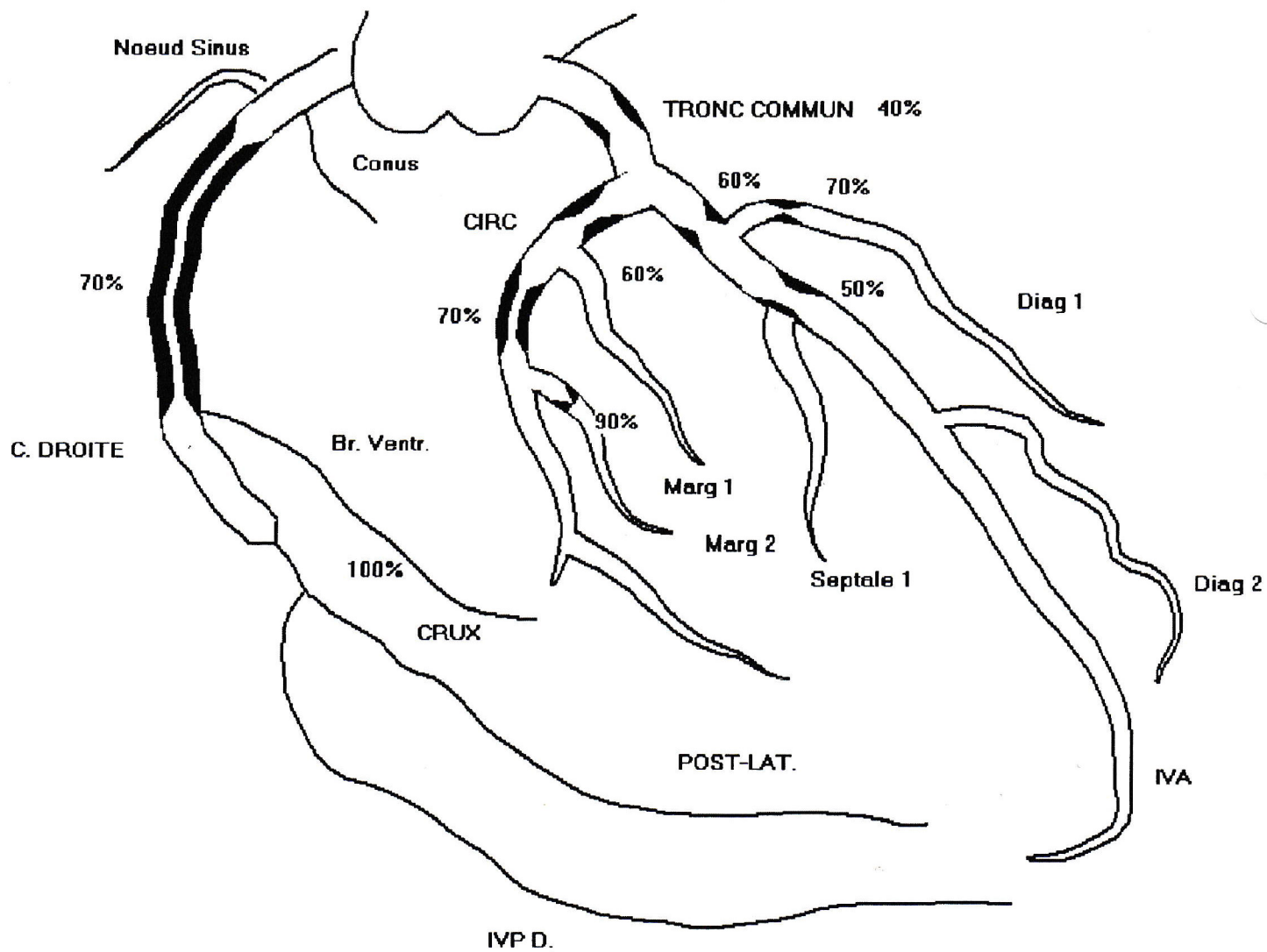
WMSI
1,75

LVEF
45

WMSI=(Score 16 segments)/16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98
 Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

No 9

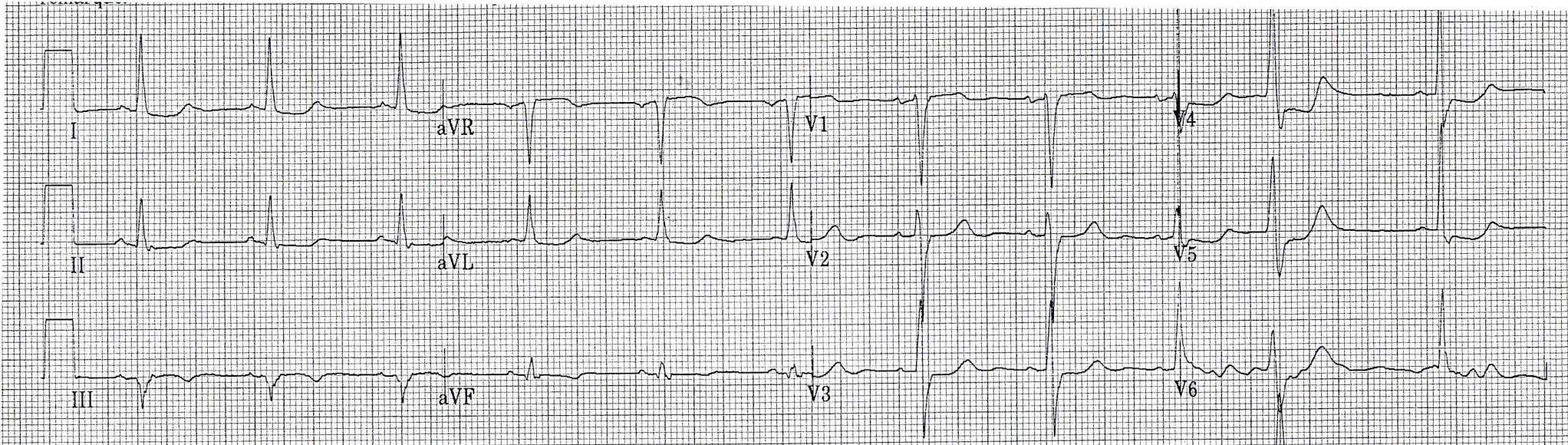
Coron.: Dilatation of RCA occlusion



No 10

F 75y. Cardiac insufficiency

ECG.: your conclusion...

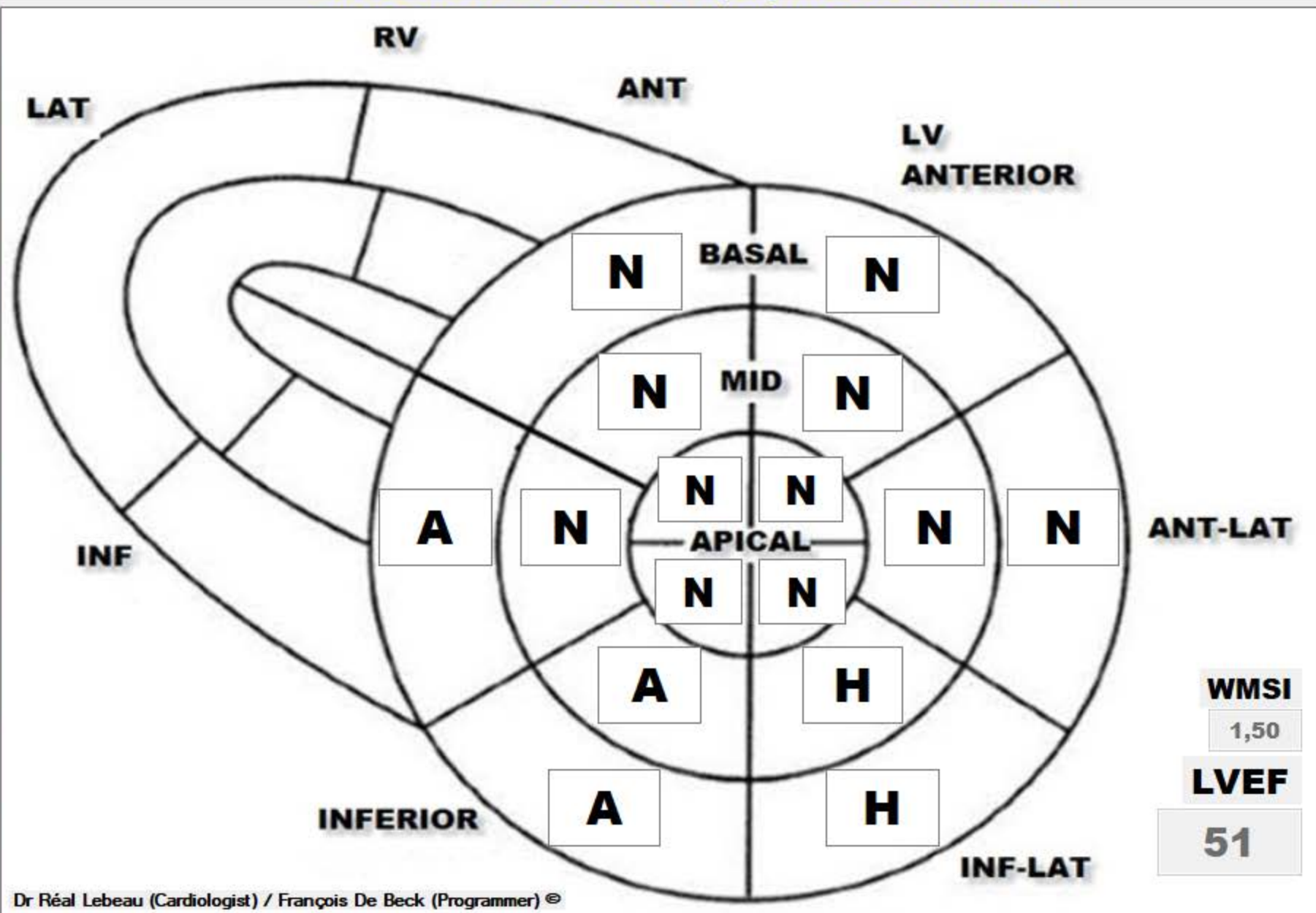


ECG.: Inferior ischemia cannot exclude old inferior infarction

Possible lateral ischemia

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2012-11-29
 NAME: JASR
 SURNAME:
 BIRTH DATE: 1960-01-1

Left Ventricle

Basal #1	1	
Basal #2	1	Dx.:
Basal #3	2	Inferior infarction
Basal #4	3	(RCA)
Basal #5	3	
Basal #6	1	
Mid #7	1	
Mid #8	1	
Mid #9	2	
Mid #10	3	
Mid #11	1	
Mid #12	1	
Apical #13	1	
Apical #14	1	
Apical #15	1	
Apical #16	1	

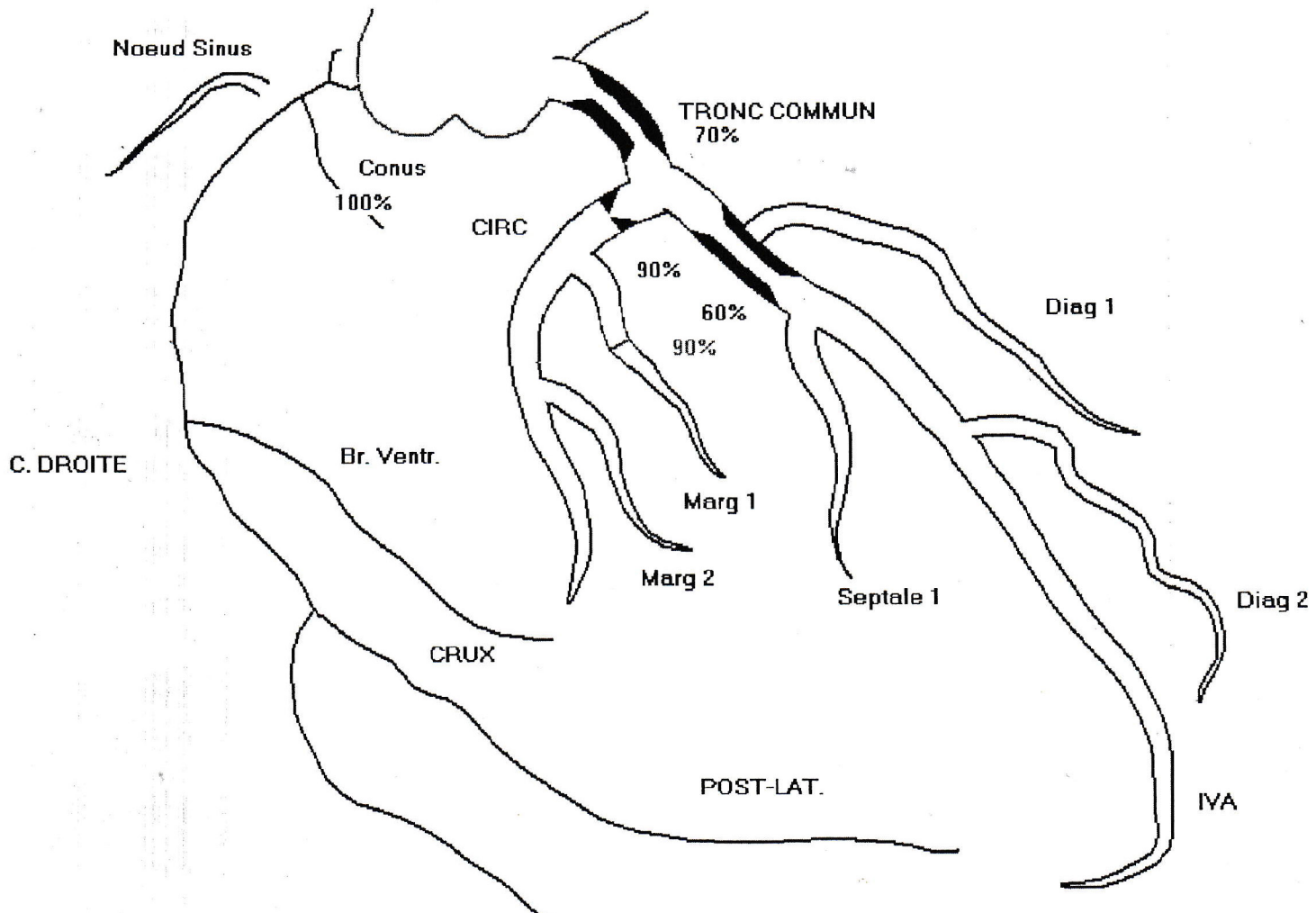
WMSI
1,50

LVEF
51

WMSI=(Score 16 segments)/16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98
 Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

NO 10

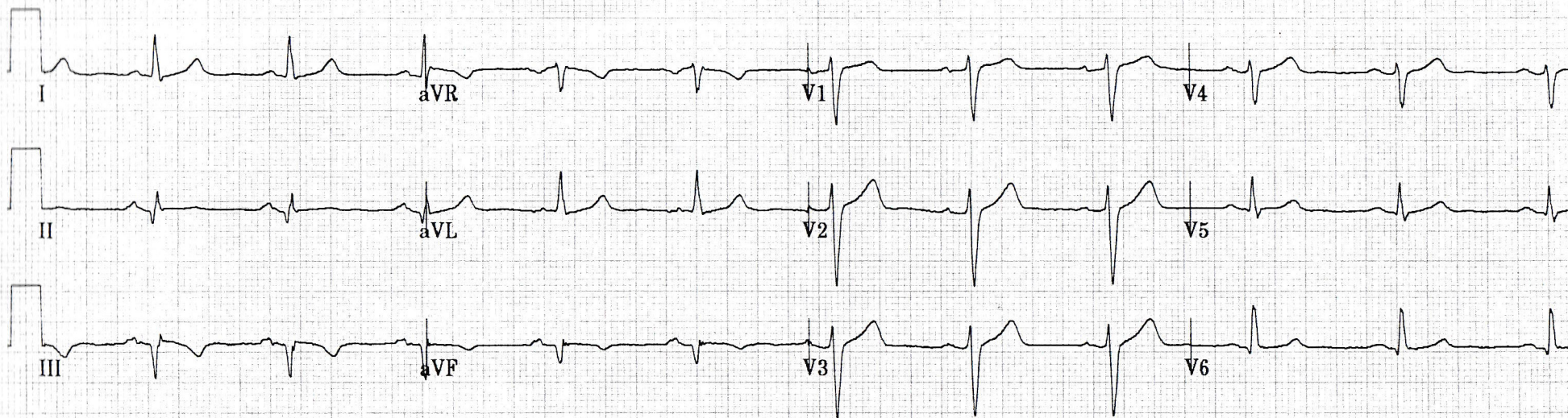
Coron.: Occlusion of RCA . 3 vessels disease .
Consultation for cardiac surgery



No 11

M 63y . Stress angina

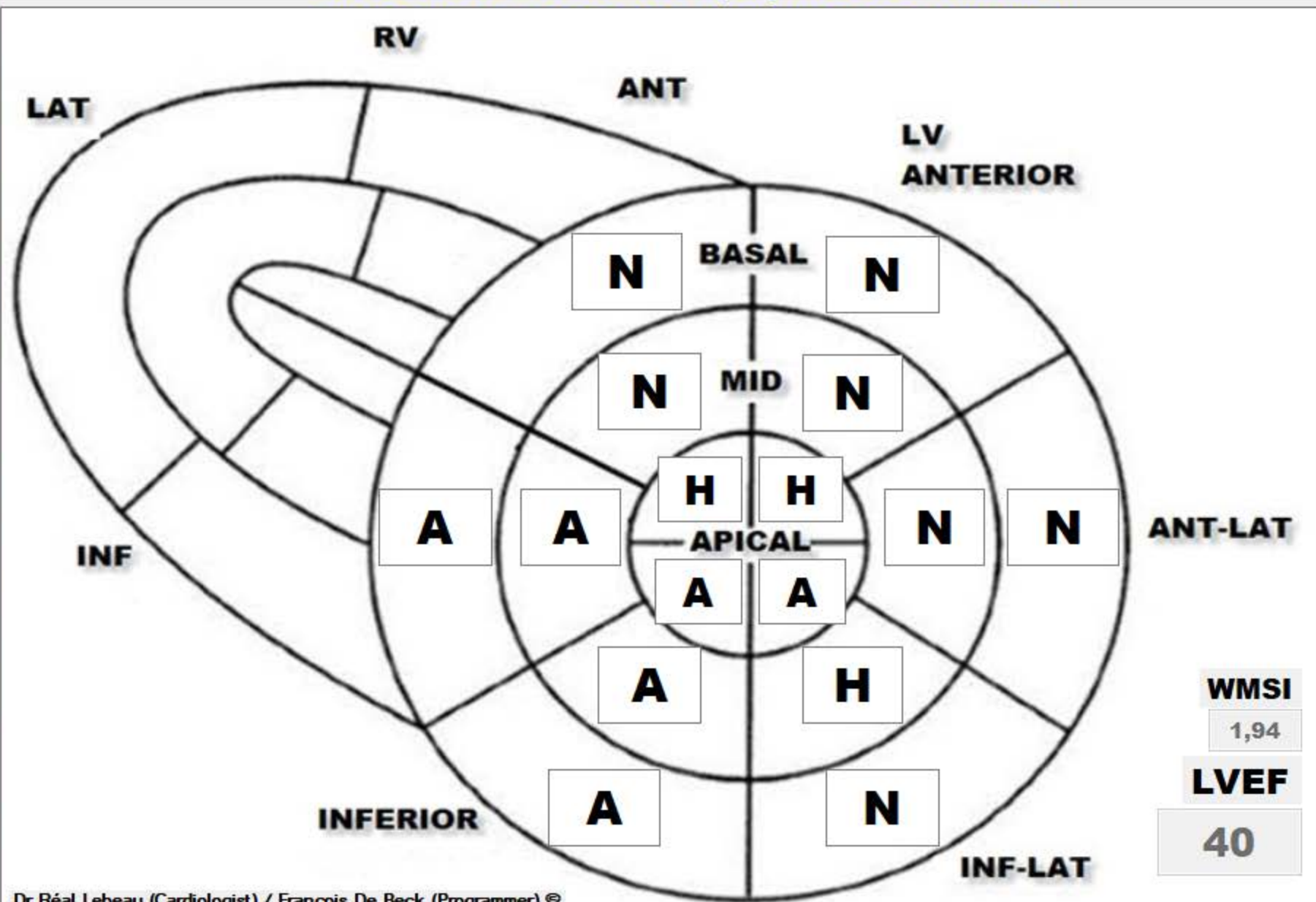
ECG.: your conclusion...



ECG.: Probable recent inferior infarction

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2014-07-28
 NAME: RIDG
 SURNAME:
 BIRTH DATE: 1960-01-1

Left Ventricle

Basal #1	1	
Basal #2	1	Dx.:
Basal #3	1	Inferior infarction
Basal #4	3	(RCA)
Basal #5	3	
Basal #6	1	
Mid #7	1	
Mid #8	1	
Mid #9	2	
Mid #10	3	
Mid #11	3	
Mid #12	1	
Apical #13	2	
Apical #14	3	
Apical #15	3	
Apical #16	2	

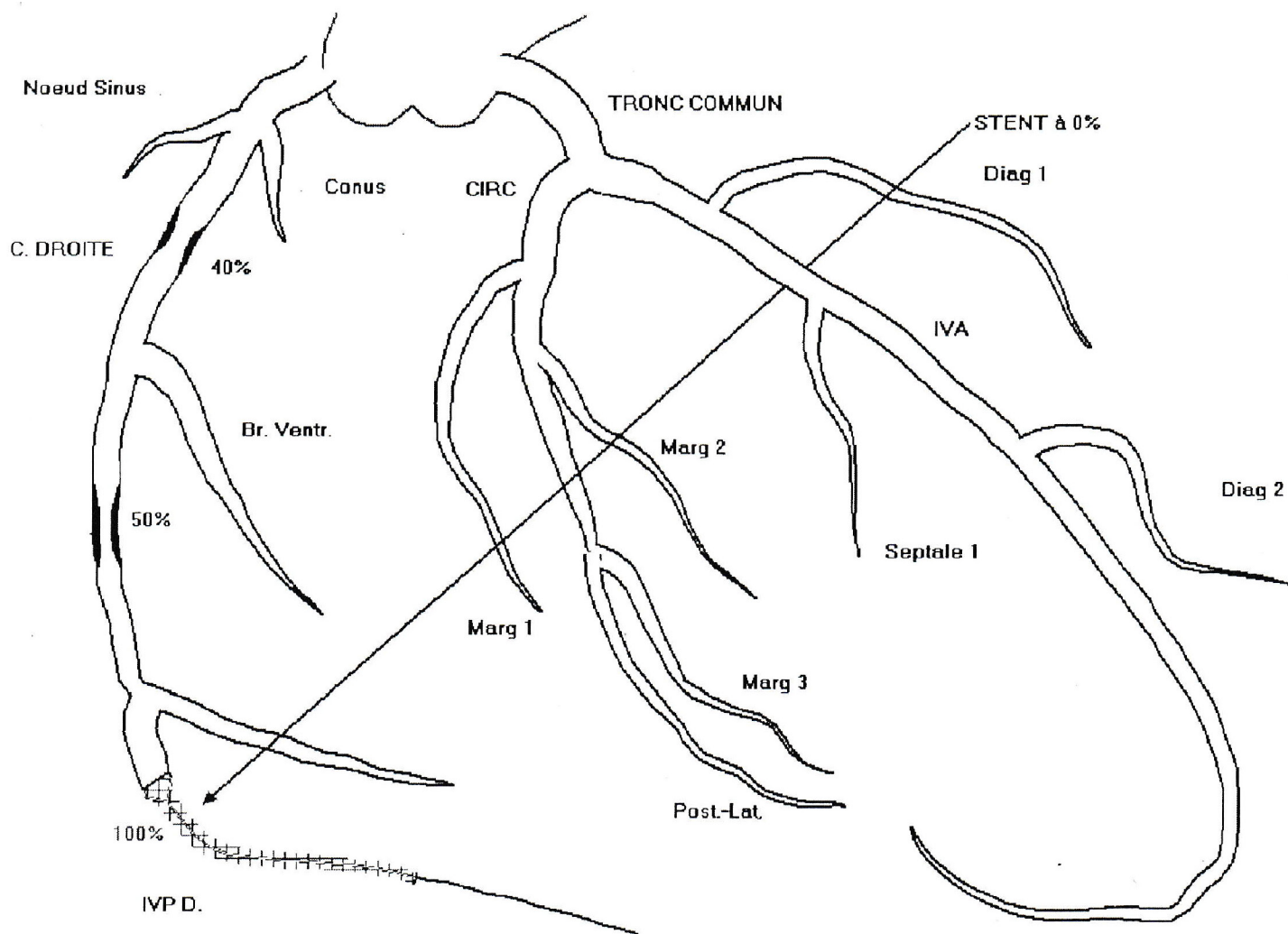
WMSI
1,94

LVEF
40

WMSI=(Score 16 segments)/16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98
 Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

No 11

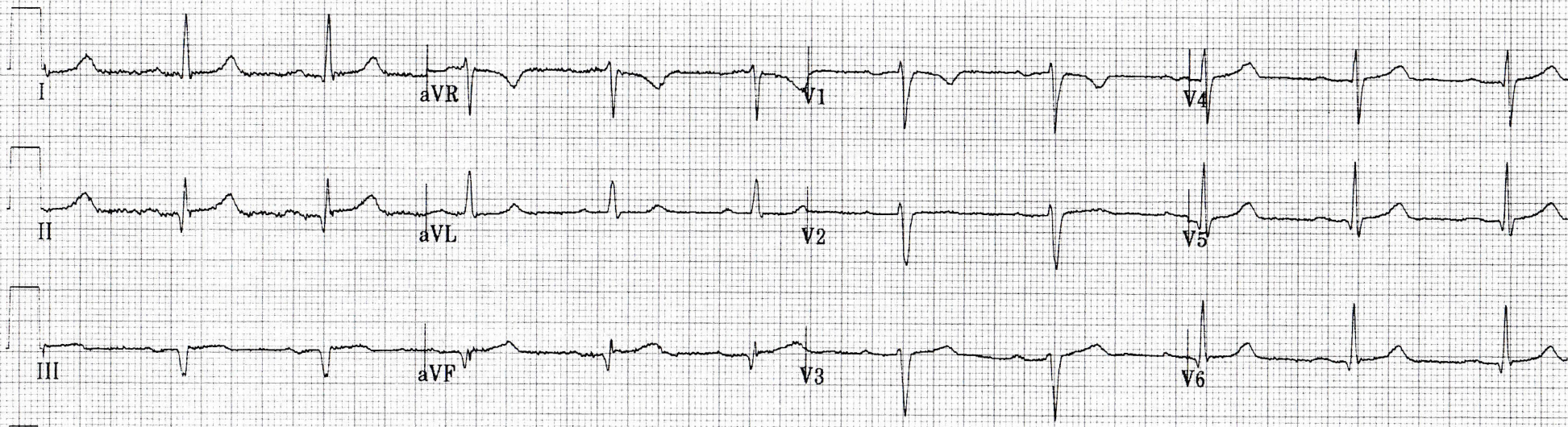
Coron.: Occlusion of distal RCA stented.



No 12

M 69y. Ischemic heart disease.

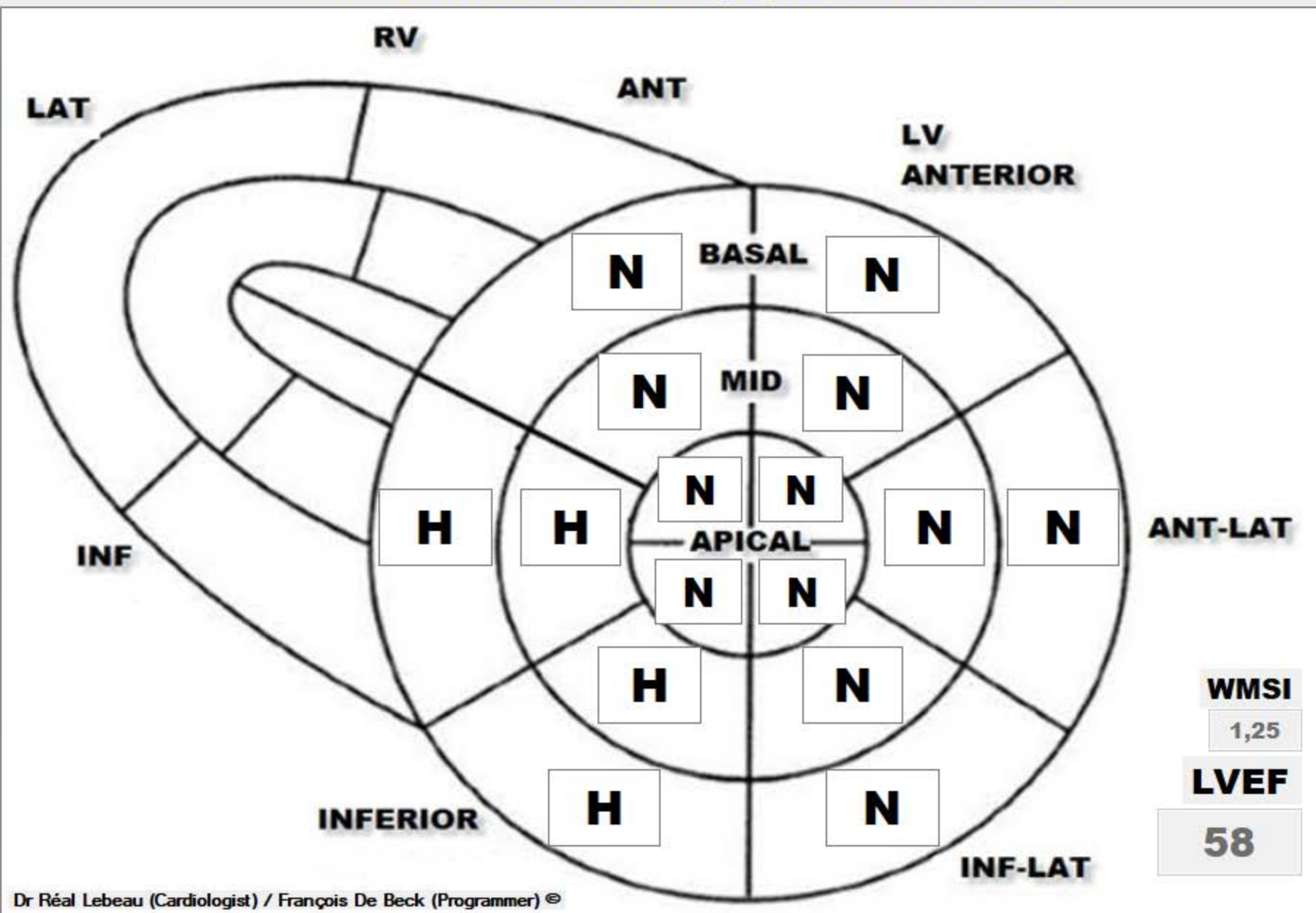
ECG.: your conclusion...



ECG.: Possible recent inferior infarction and old non transmural anterior infarction

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2016-10-19
 NAME: LAMJ
 SURNAME:
 BIRTH DATE: 1960-01-1

Left Ventricle

Basal #1	1	
Basal #2	1	Dx.:
Basal #3	1	Inferior infarctio
Basal #4	2	(RCA)
Basal #5	2	
Basal #6	1	
Mid #7	1	
Mid #8	1	
Mid #9	1	
Mid #10	2	
Mid #11	2	
Mid #12	1	
Apical #13	1	
Apical #14	1	
Apical #15	1	
Apical #16	1	

WMSI
1,25

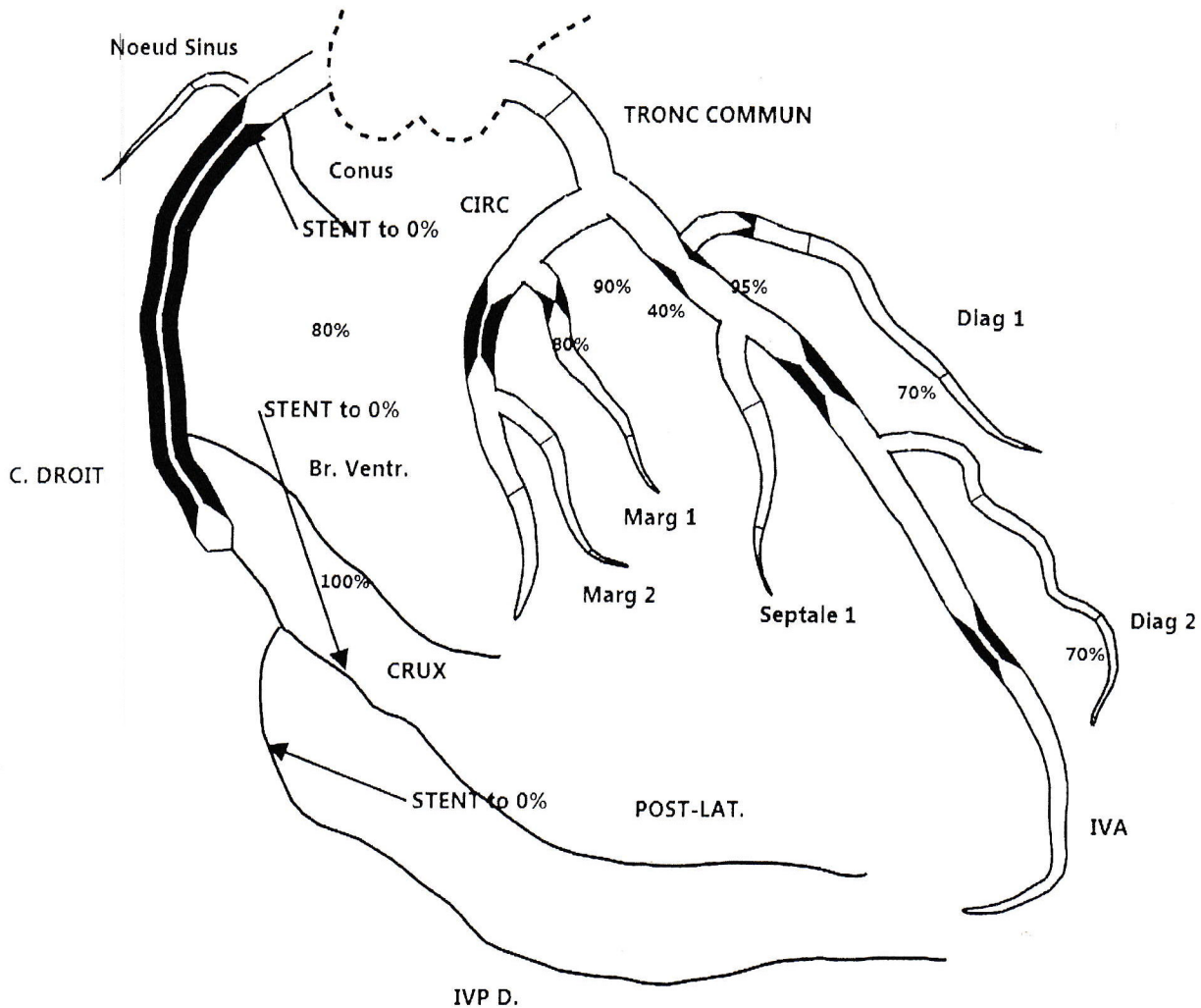
LVEF
58

WMSI=(Score 16 segments)/16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98
 Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

No 12

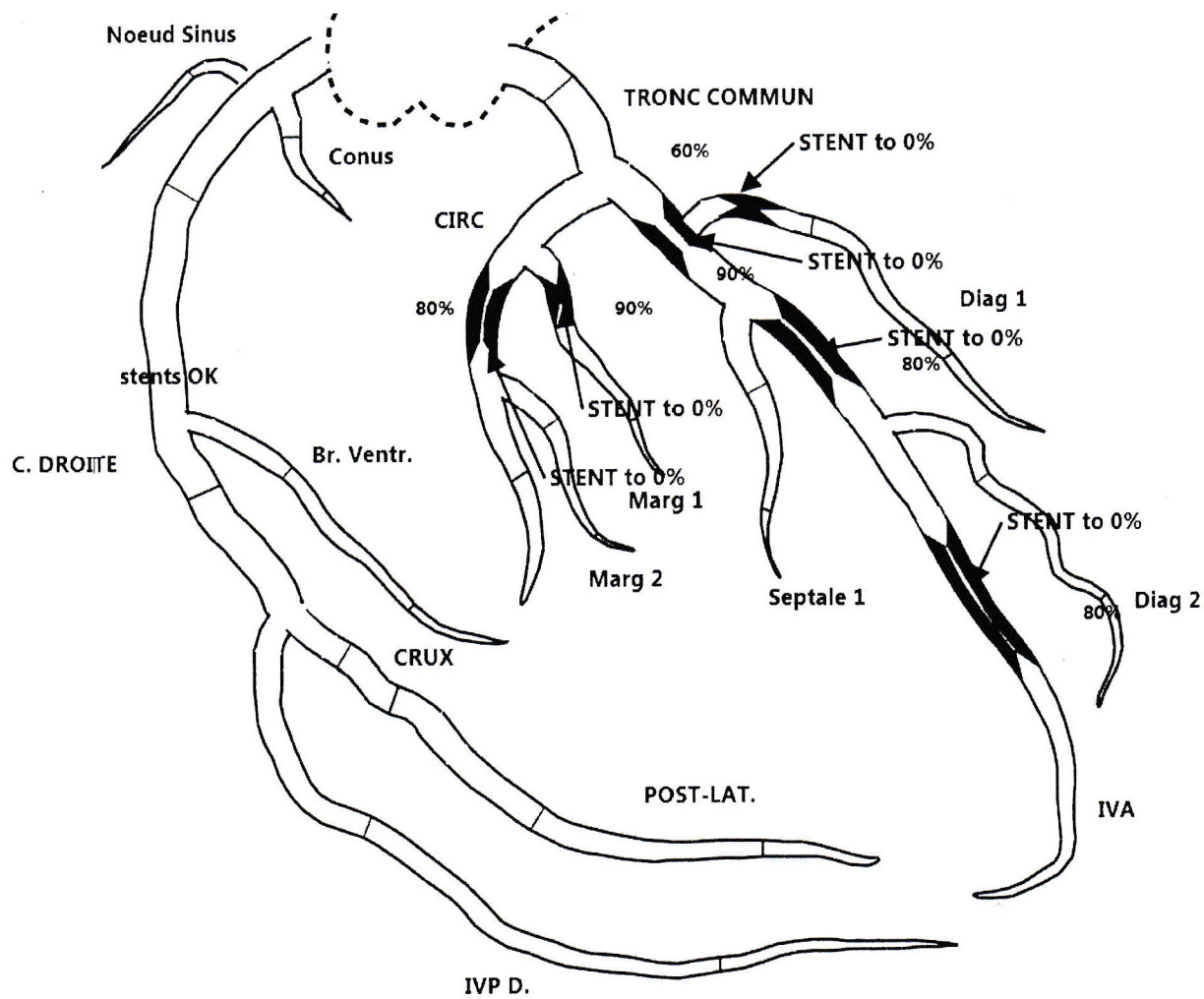
Coron.: Occlusion of RCA stented

NB.: LAD and CX stented 2 days later

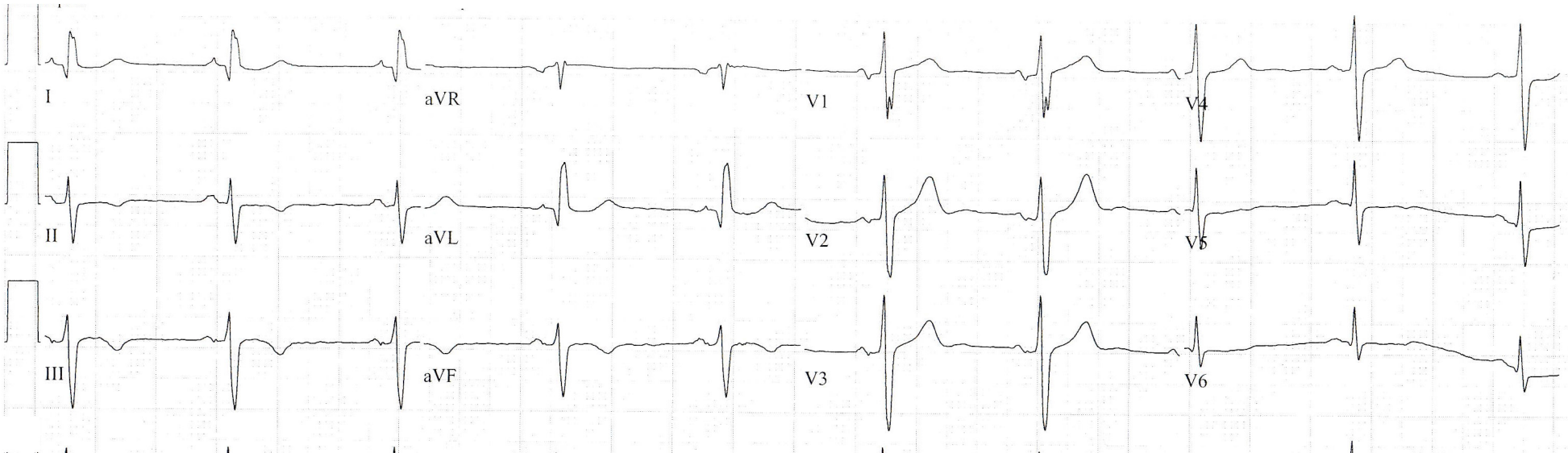


No 12

Stented CX and LAD



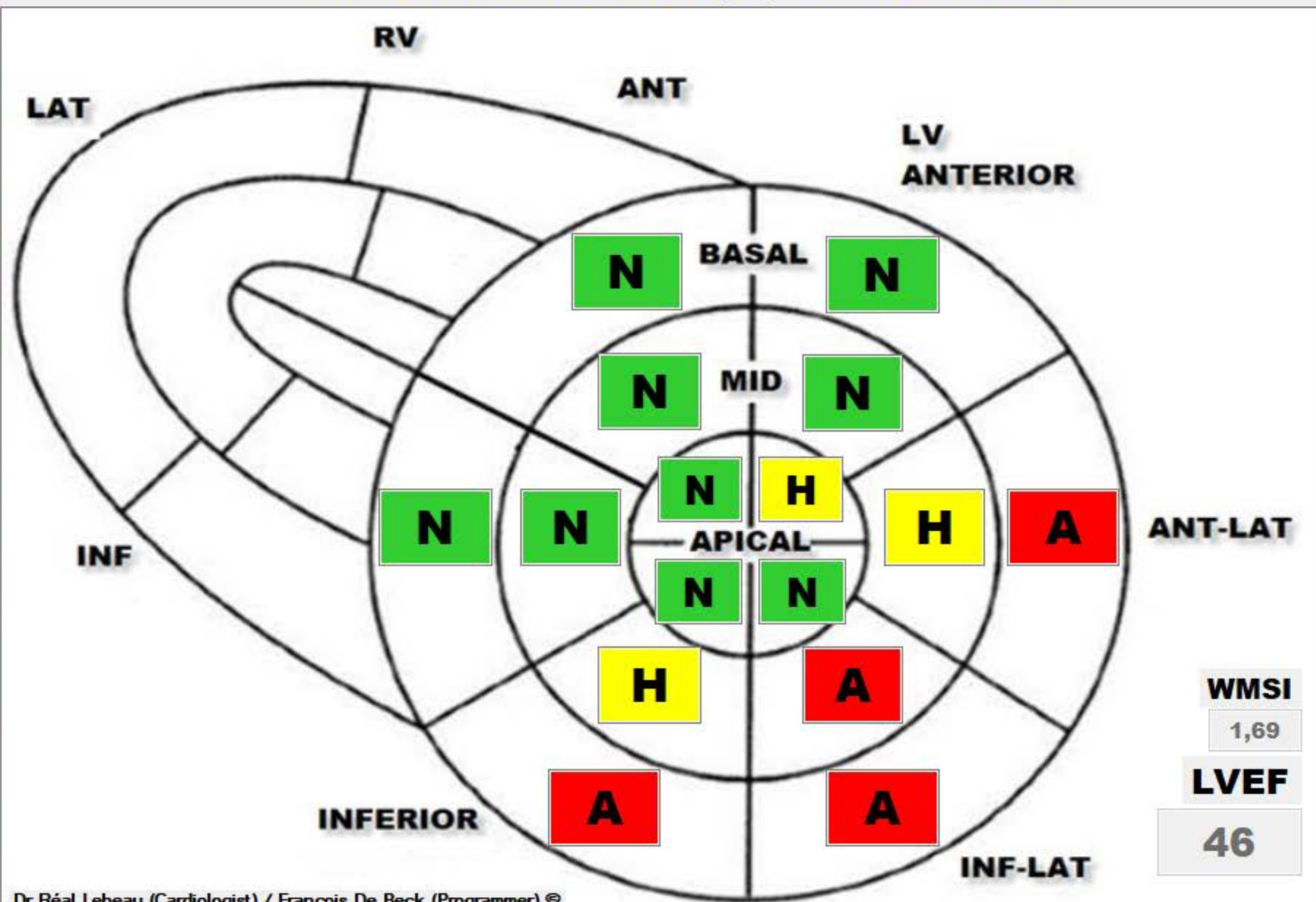
No 13
M 65y . Myocardial infarction.
ECG .: your conclusion...



ECG.: Left anterior hemiblock. Old posterior infarction

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2019-02-12
 NAME: LECC
 SURNAME:
 BIRTH DATE: 1960-01-1

Left Ventricle

Basal #1	1	
Basal #2	3	Dx.:
Basal #3	3	Lateral infarction
Basal #4	3	(Cx)
Basal #5	1	
Basal #6	1	
Mid #7	1	
Mid #8	2	
Mid #9	3	
Mid #10	2	
Mid #11	1	
Mid #12	1	
Apical #13	2	
Apical #14	1	
Apical #15	1	
Apical #16	1	

WMSI
1,69

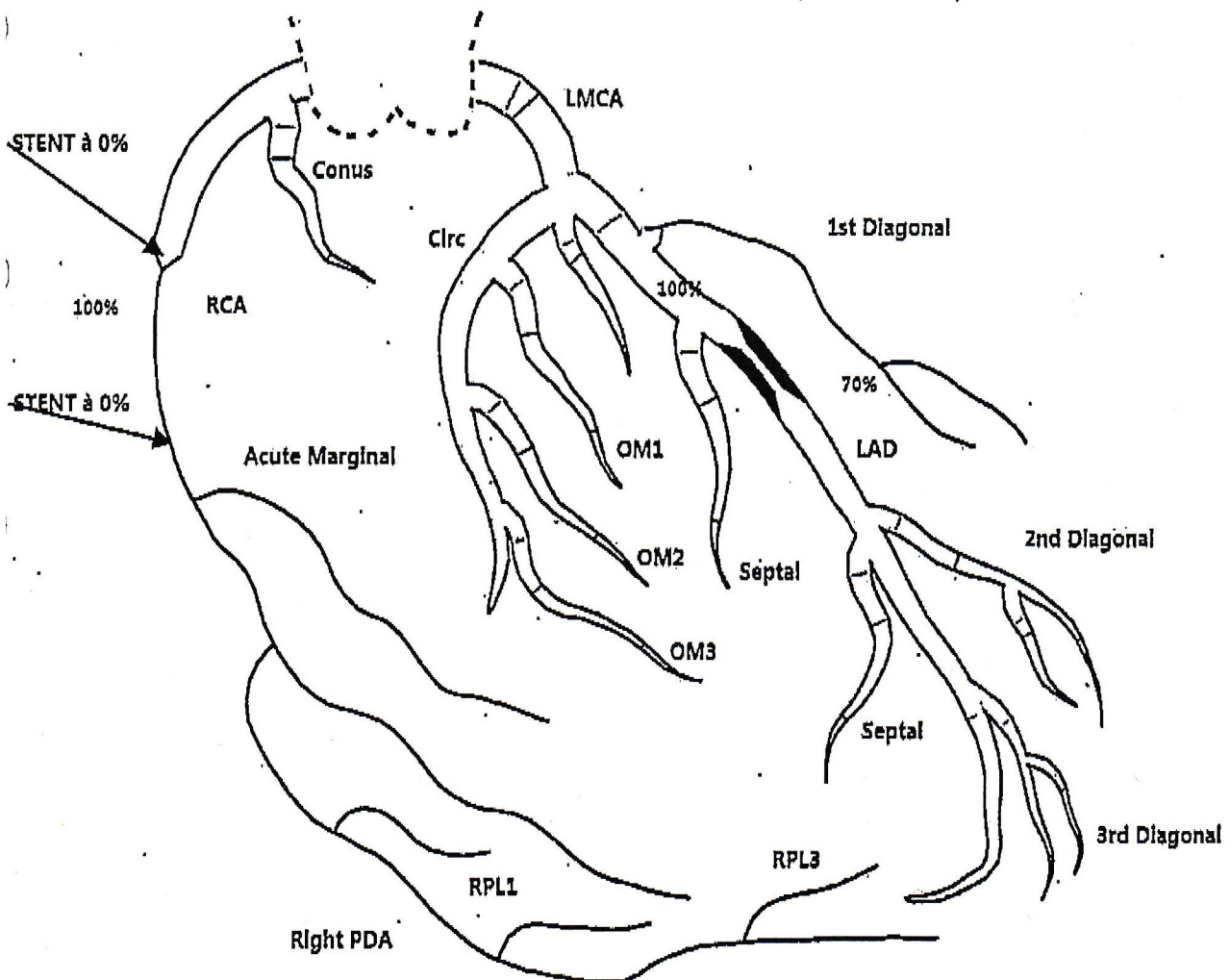
LVEF
46

WMSI=(Score 16 segments)/16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98
 Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

No 13

Coron.: Occlusion of RCA stented.

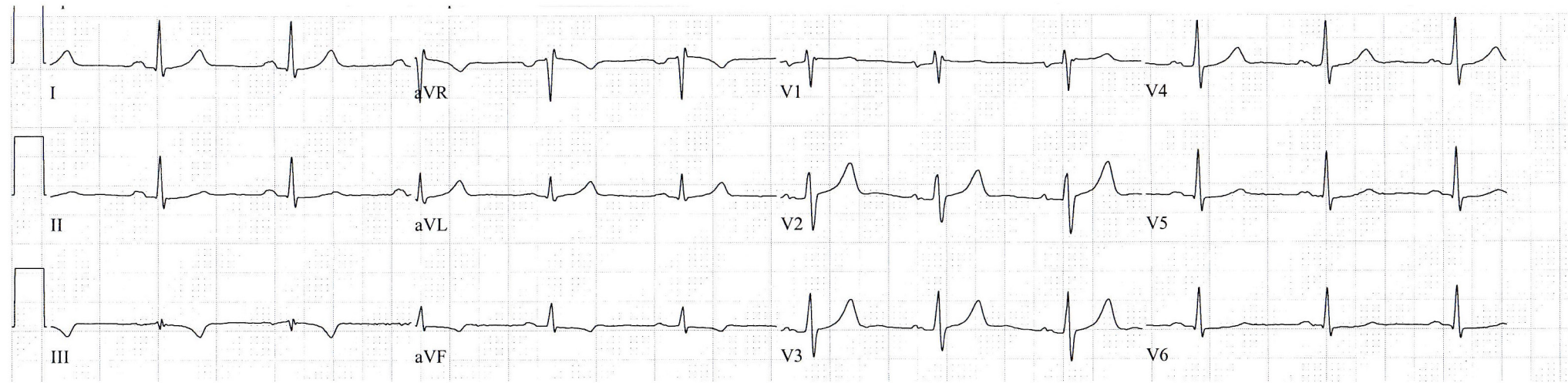
N.B.: very unusual Cx territory on echo by RCA



No 14

M 47y . Instable angina.

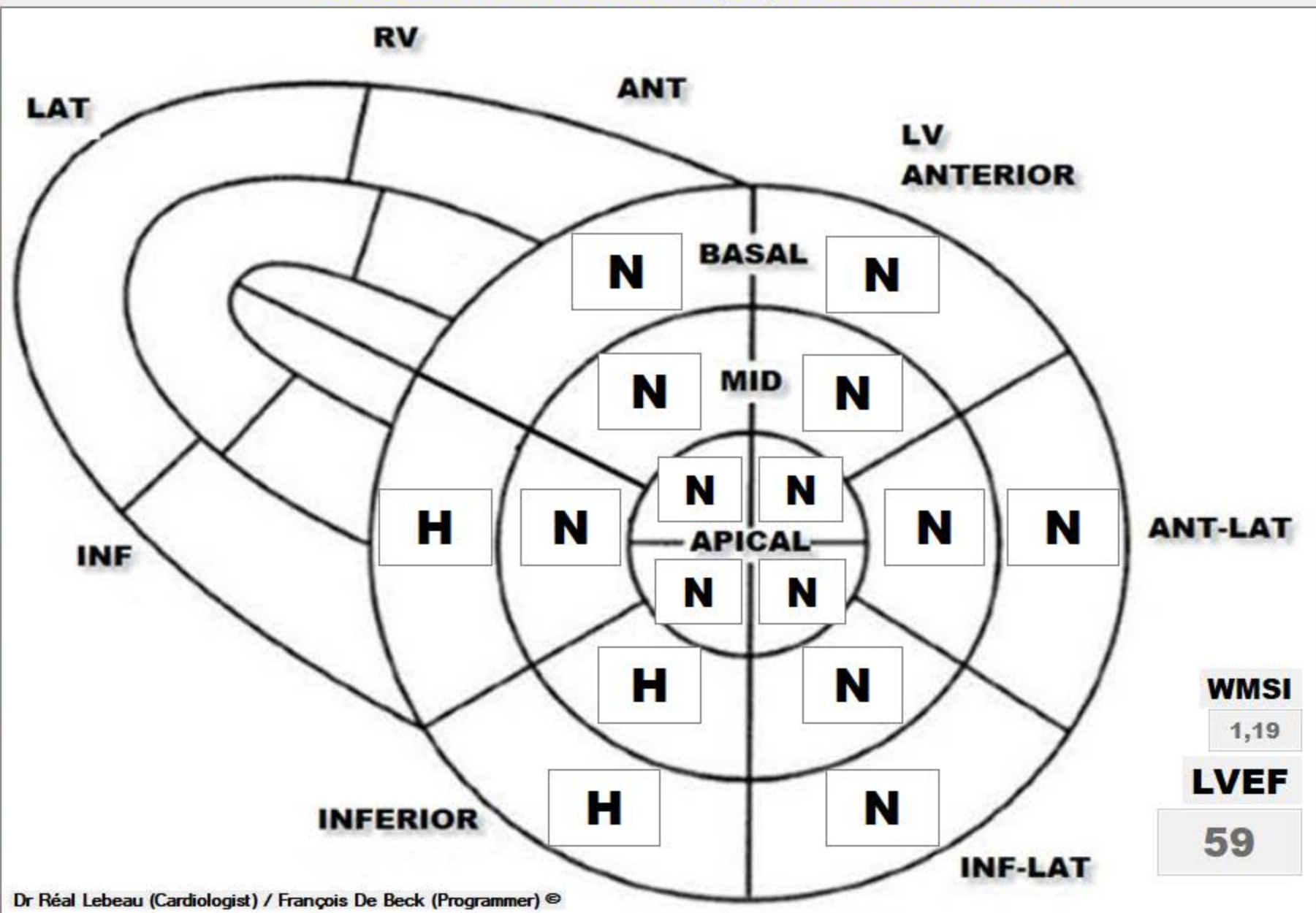
ECG.: your interprétation...



ECG.: Inferior ischemia

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2012-05-15
 NAME: PARS
 SURNAME:
 BIRTH DATE: 1960-01-1

Left Ventricle

Basal #1	1	
Basal #2	1	Dx.: inferior
Basal #3	1	infarction
Basal #4	2	(incomplete)
Basal #5	2	
Basal #6	1	
Mid #7	1	
Mid #8	1	
Mid #9	1	
Mid #10	2	
Mid #11	1	
Mid #12	1	
Apical #13	1	
Apical #14	1	
Apical #15	1	
Apical #16	1	

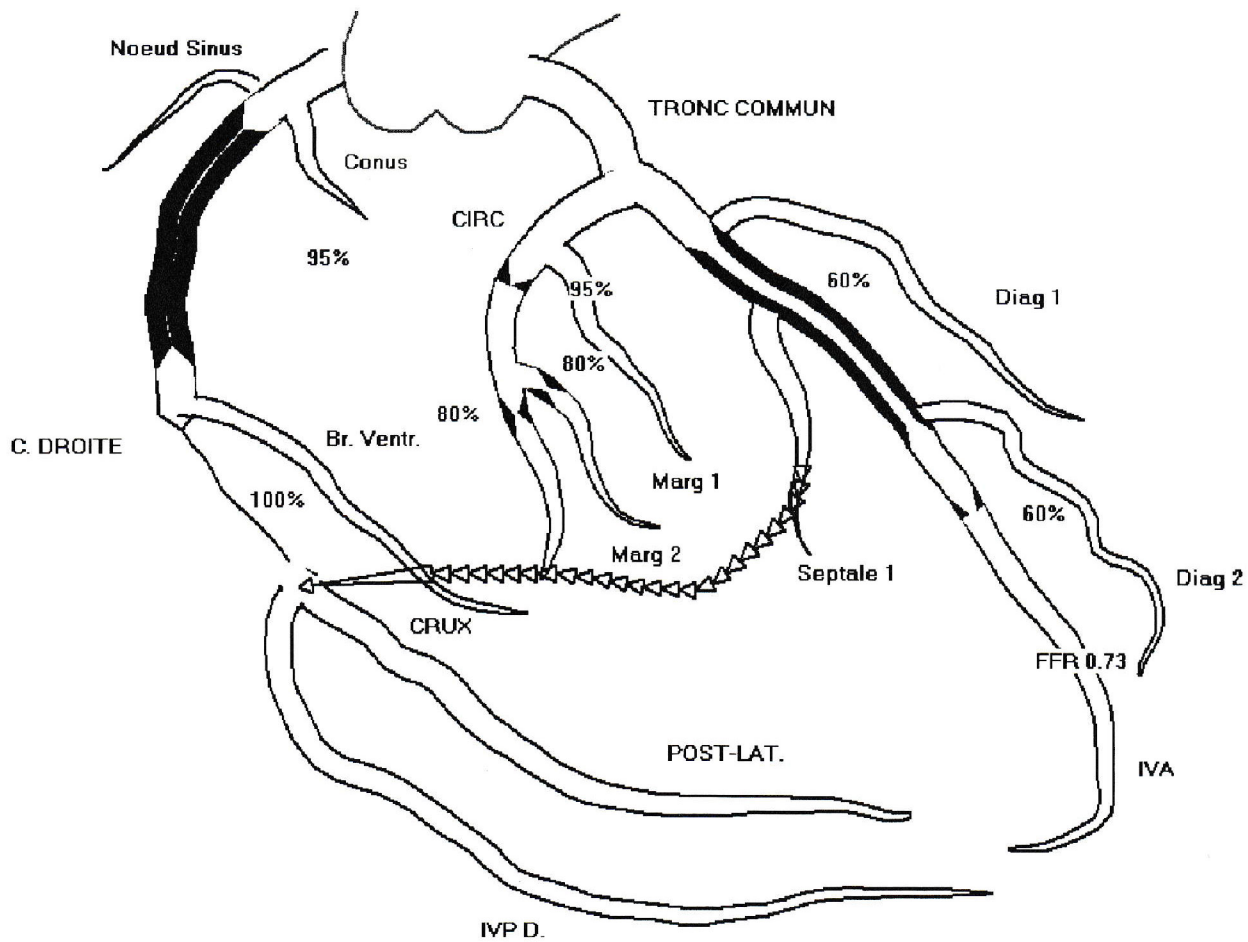
WMSI
1,19

LVEF
59

WMSI=(Score 16 segments)/16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98
 Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

No 14

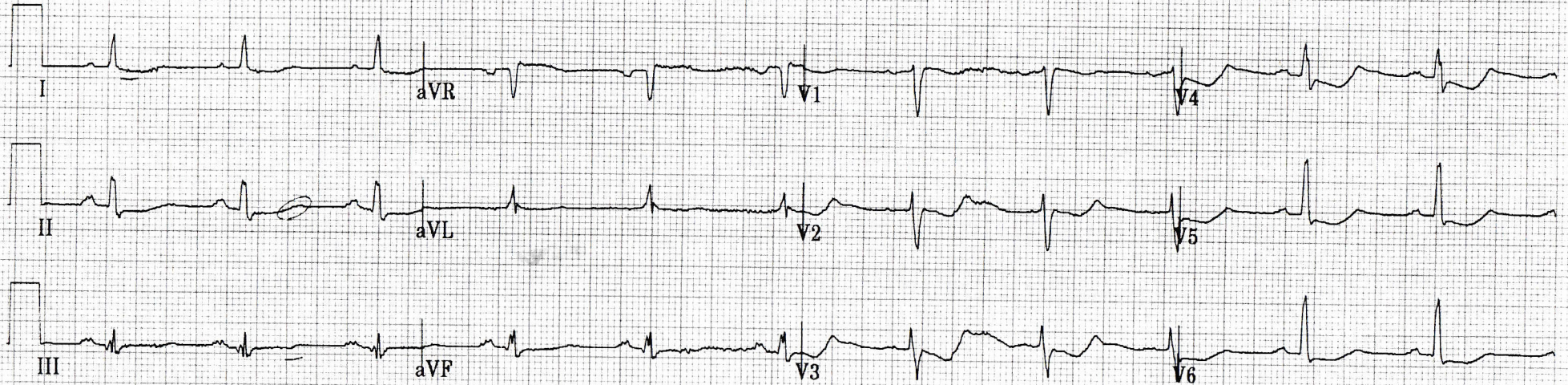
Coron.: Occlusion mid RCA with collateral could explain nontransmural infarction echo



No 15

F 73y . NSTEMI.

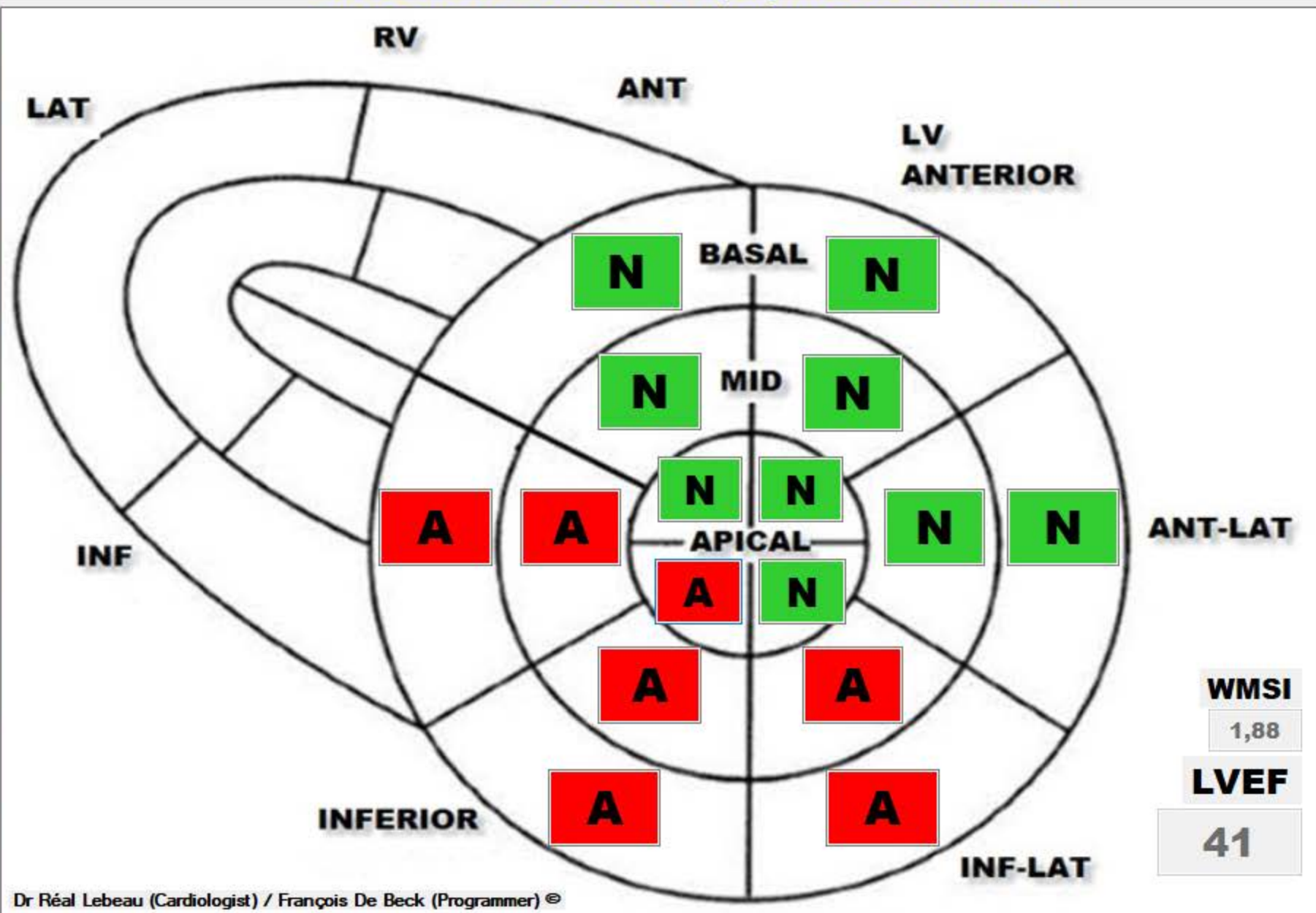
ECG.: your conclusion...



ECG.: Infero-postero-lateral injury

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-01

NAME:

SURNAME:

BIRTH DATE: 2020-11-01

Left Ventricle

Basal #1	1
Basal #2	1
Basal #3	3
Basal #4	3
Basal #5	3
Basal #6	1
Mid #7	1
Mid #8	1
Mid #9	3
Mid #10	3
Mid #11	3
Mid #12	1
Apical #13	1
Apical #14	1
Apical #15	3
Apical #16	1

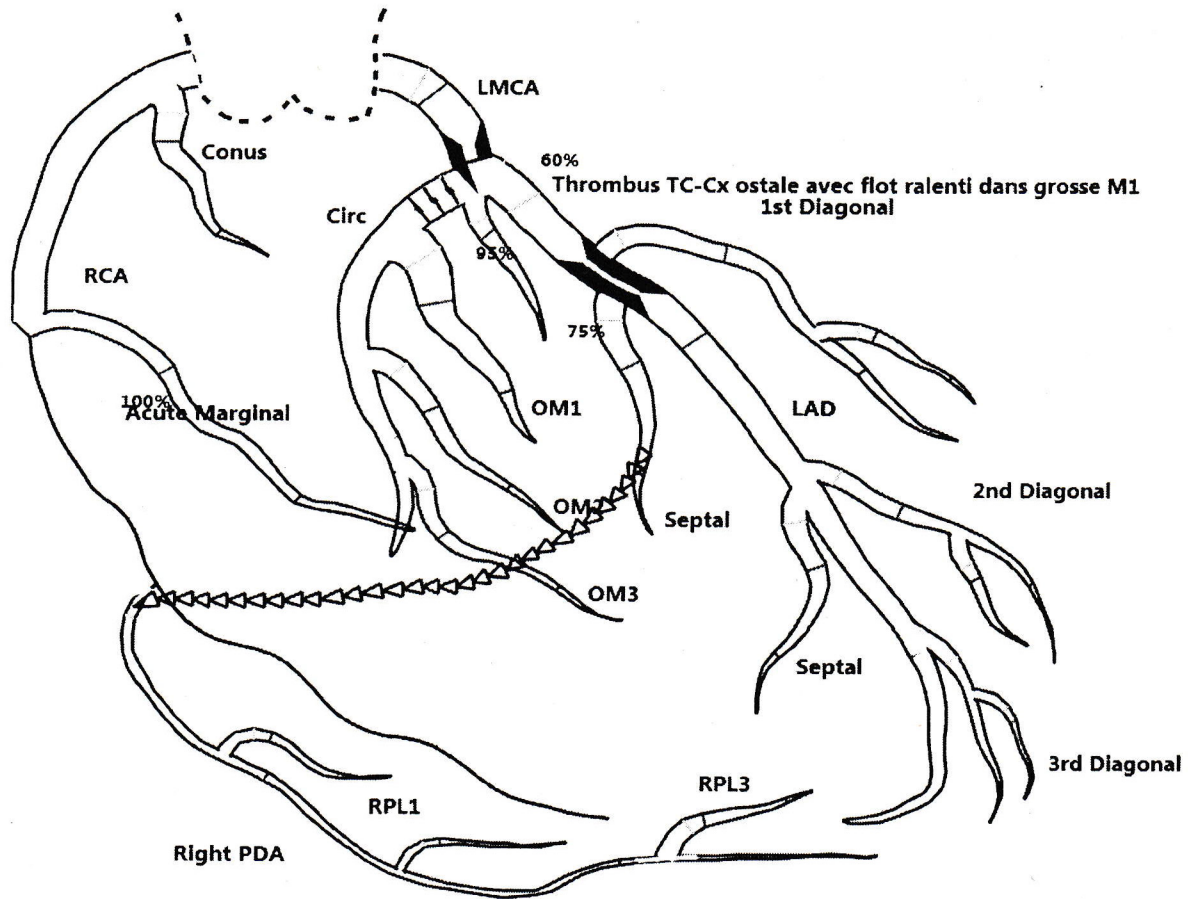
WMSI=(Score 16 segments)/16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

No 15

Coron.: Acute occlusion of RCA .

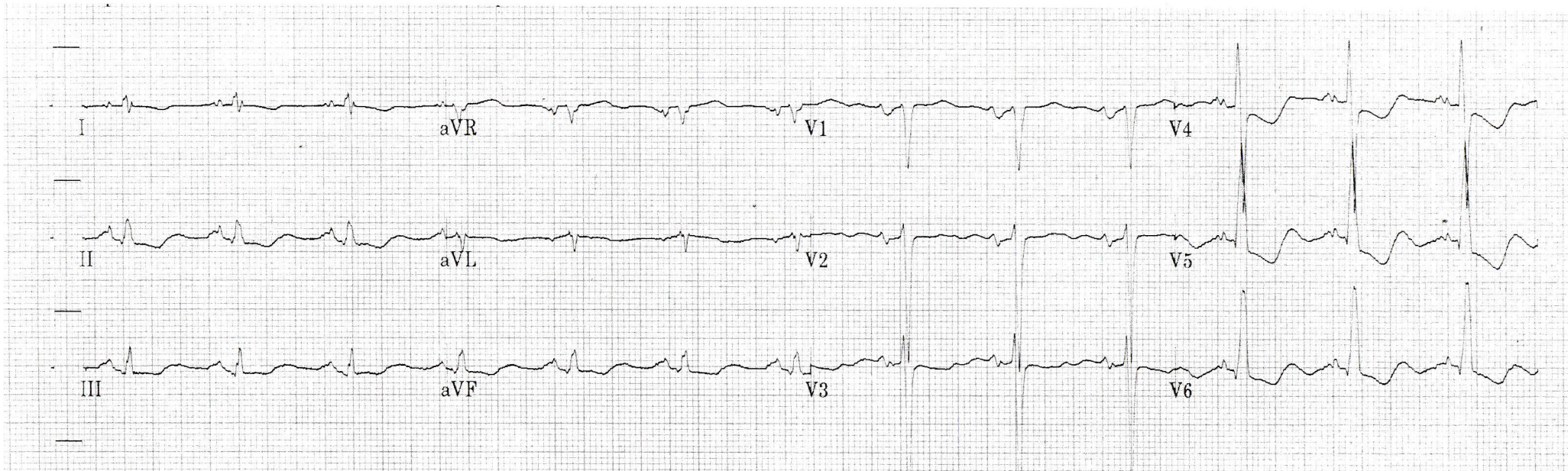
Collateral from LAD



No 16

M 78y. Acute pulmonary oedema.

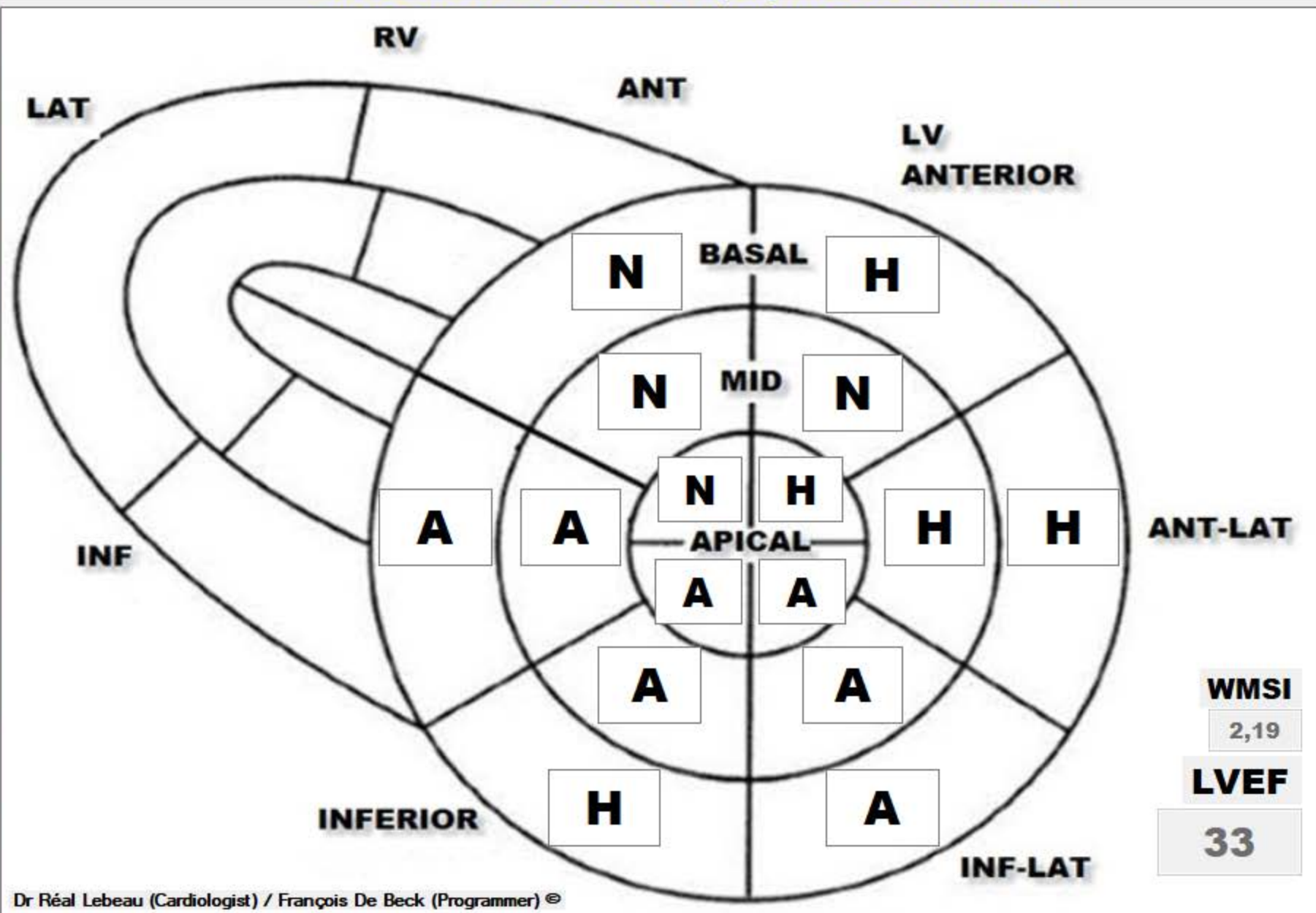
ECG.: your conclusion...



ECG.: Possible sub endocardial inferolateral injury

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2017-06-06
 NAME: SERV
 SURNAME:
 BIRTH DATE: 1960-01-1

Left Ventricle

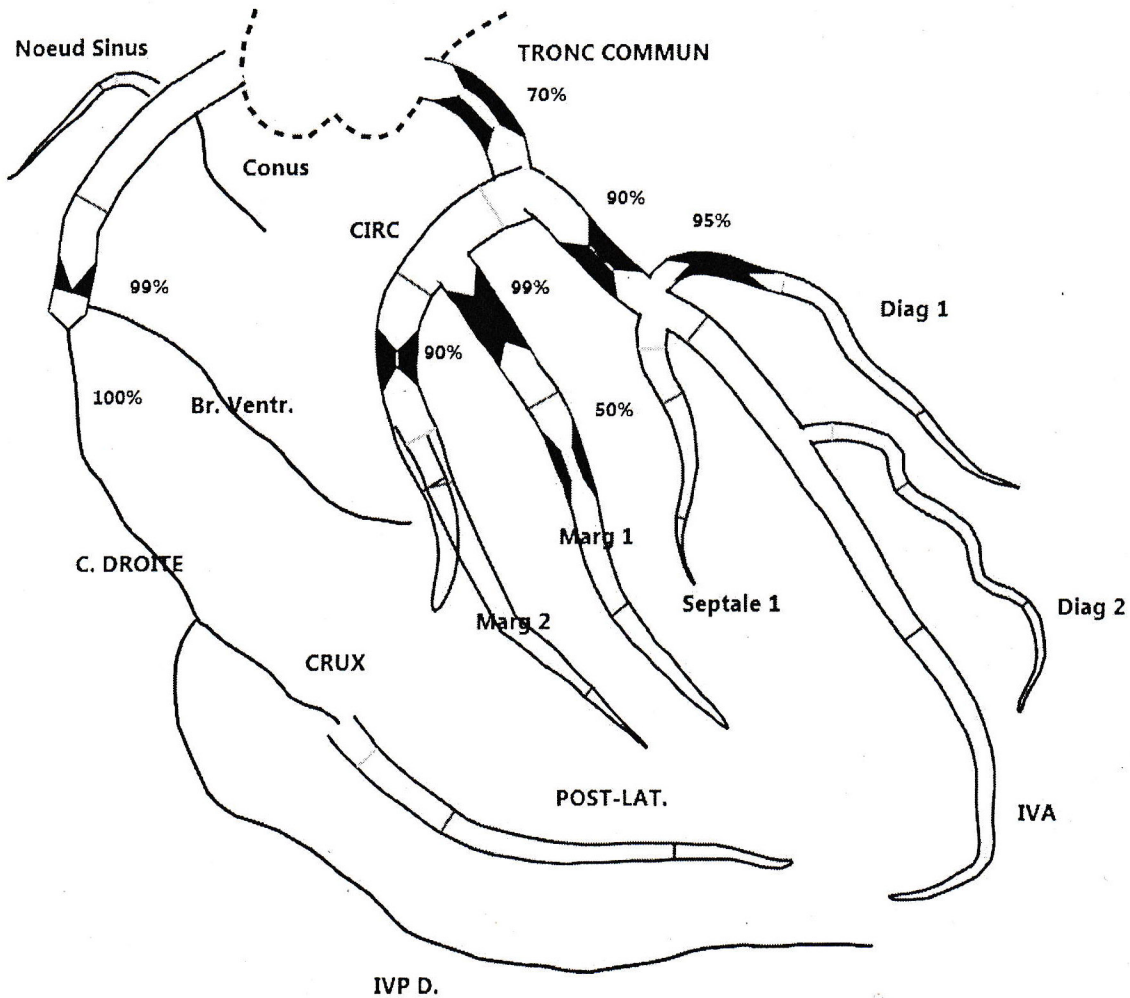
Basal #1	2	
Basal #2	2	Dx.:
Basal #3	3	inferior and
Basal #4	2	lateral
Basal #5	3	infarction
Basal #6	1	(R-Cx)
Mid #7	1	
Mid #8	2	
Mid #9	3	
Mid #10	3	
Mid #11	3	
Mid #12	1	
Apical #13	2	
Apical #14	3	
Apical #15	3	
Apical #16	1	

WMSI
2,19

LVEF
33

WMSI=(Score 16 segments)/16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98
 Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

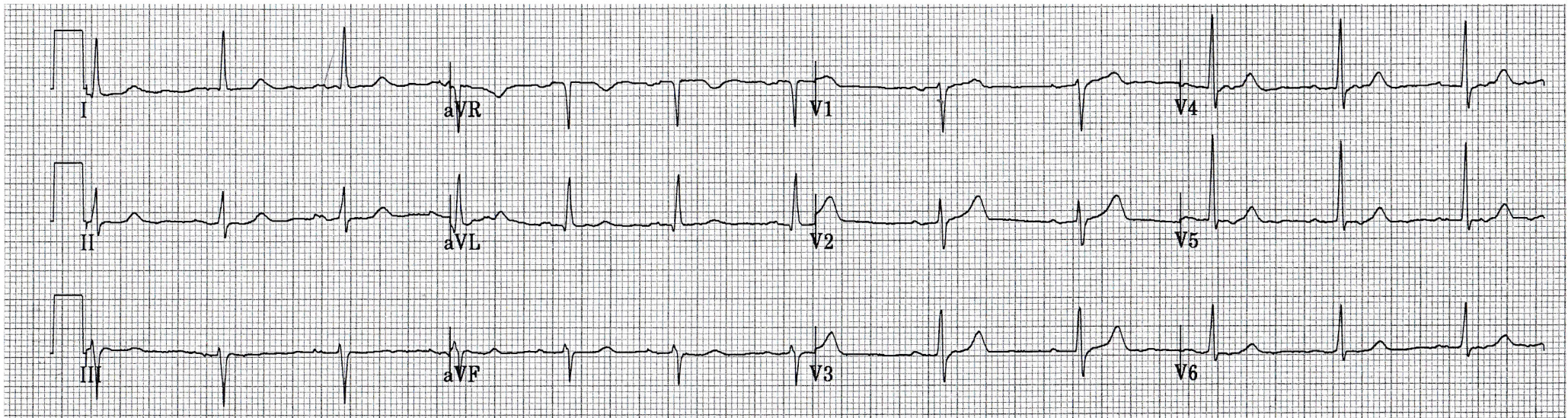
Coron.: Acute occlusion of RCA.
Severe atheromatose of LAD and CX.
Consultation cardiac surgery



NO 17

F 77y. Ischemic heart disease

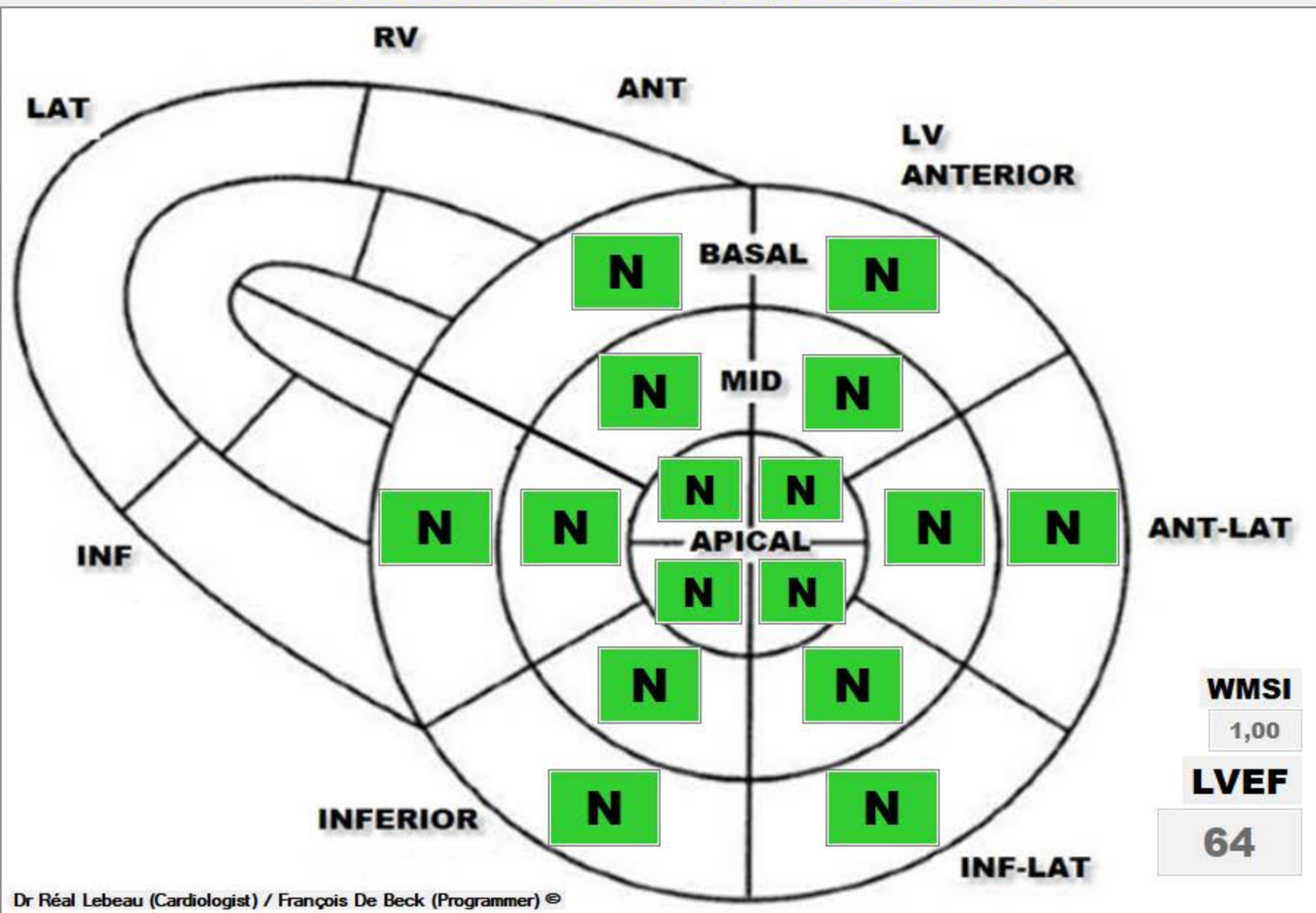
ECG.: your conclusion...



ECG.: Normal

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2011-12-21
 NAME: RICJ
 SURNAME:
 BIRTH DATE: 1960-01-1

Left Ventricle

- Basal #1 1
- Basal #2 1
- Basal #3 1
- Basal #4 1
- Basal #5 1
- Basal #6 1
- Mid #7 1
- Mid #8 1
- Mid #9 1
- Mid #10 1
- Mid #11 1
- Mid #12 1
- Apical #13 1
- Apical #14 1
- Apical #15 1
- Apical #16 1

Dx.: Normal

WMSI

1,00

LVEF

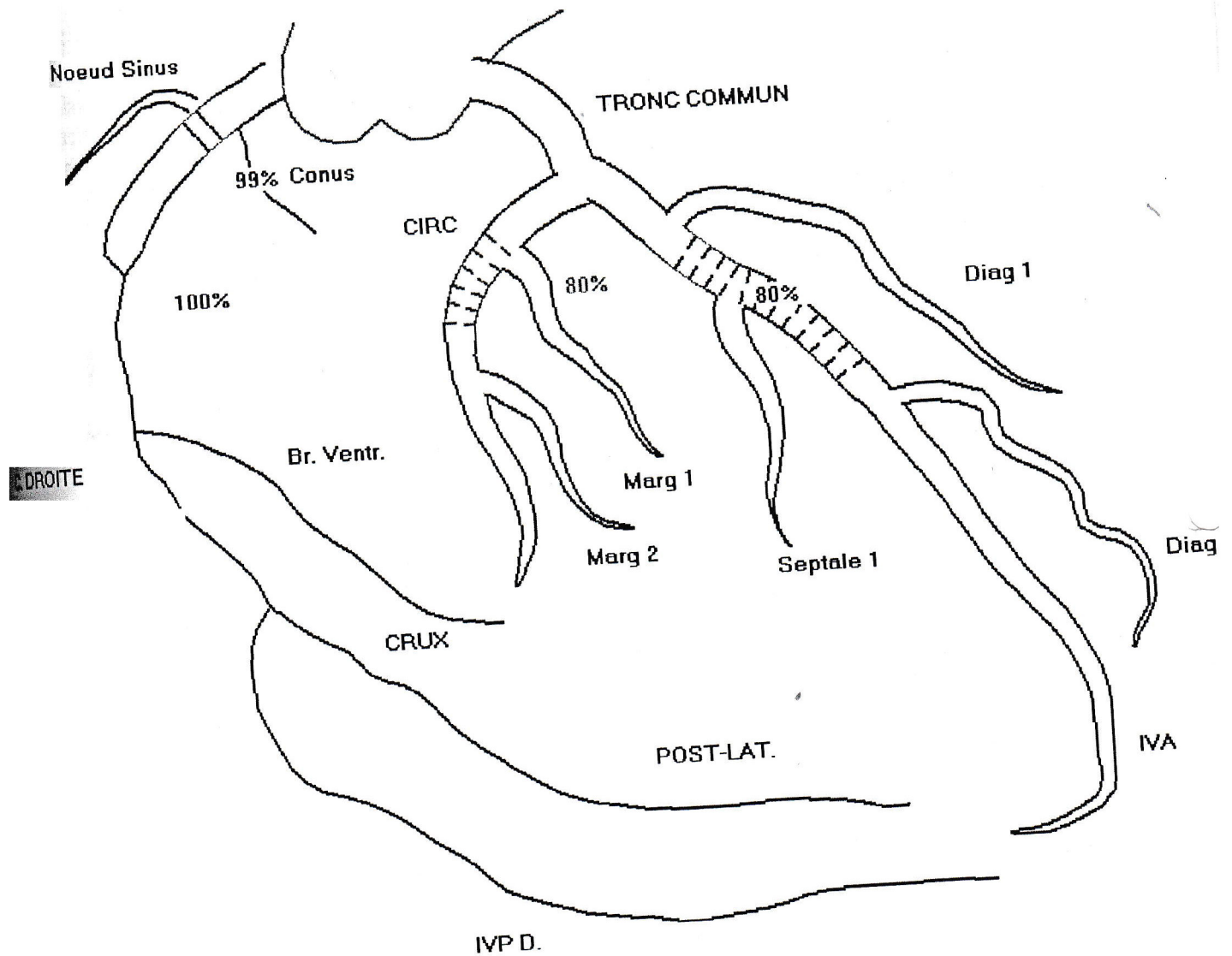
64

WMSI=(Score 16 segments)/16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

No 17

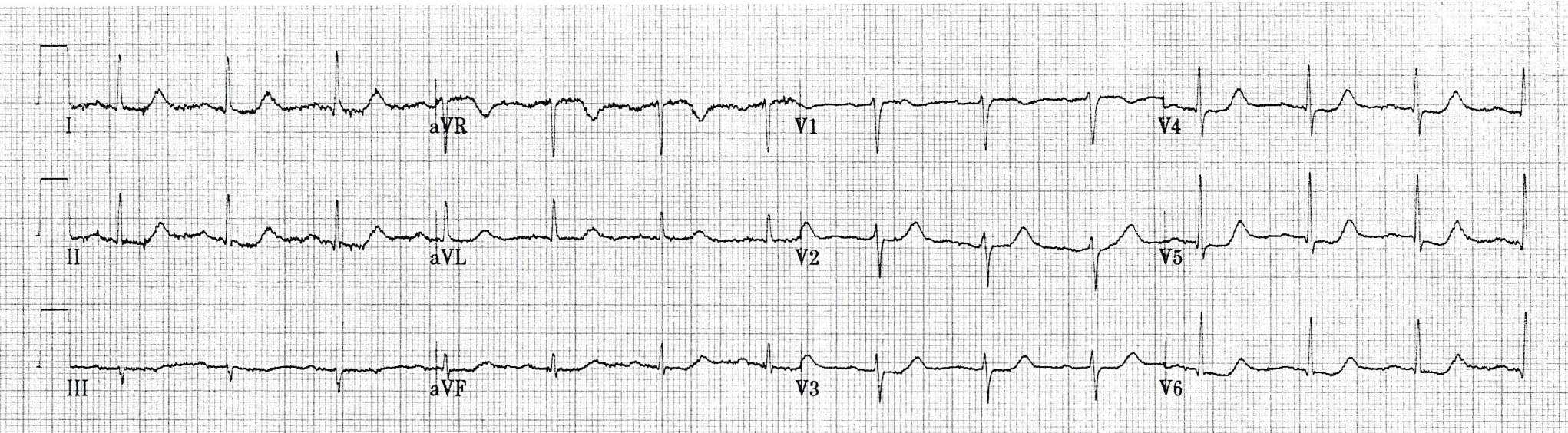
Coron.: Occlusion of RCA



No 18

F 82 y. Myocardial infarction

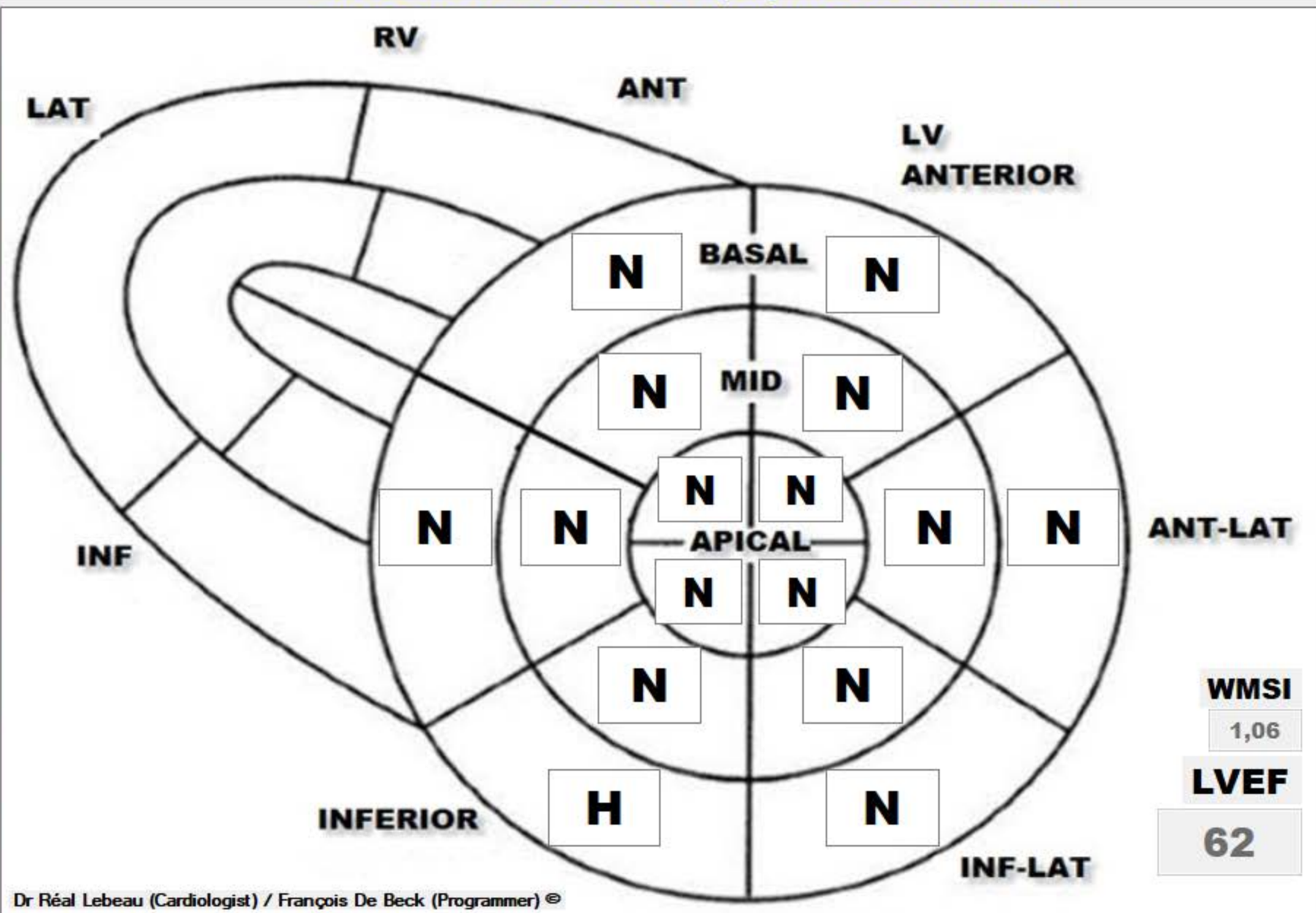
ECG.:Your conclusion...



ECG.: Non specific ST change. Possible infero-lateral ischemia.

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2014-02-03
 NAME: LAFM
 SURNAME:
 BIRTH DATE: 1960-01-1

Left Ventricle

Basal #1	1
Basal #2	1
Basal #3	1
Basal #4	2
Basal #5	1
Basal #6	1
Mid #7	1
Mid #8	1
Mid #9	1
Mid #10	1
Mid #11	1
Mid #12	1
Apical #13	1
Apical #14	1
Apical #15	1
Apical #16	1

DX.:
 Non specific WMA
 inferior territory

WMSI
1,06

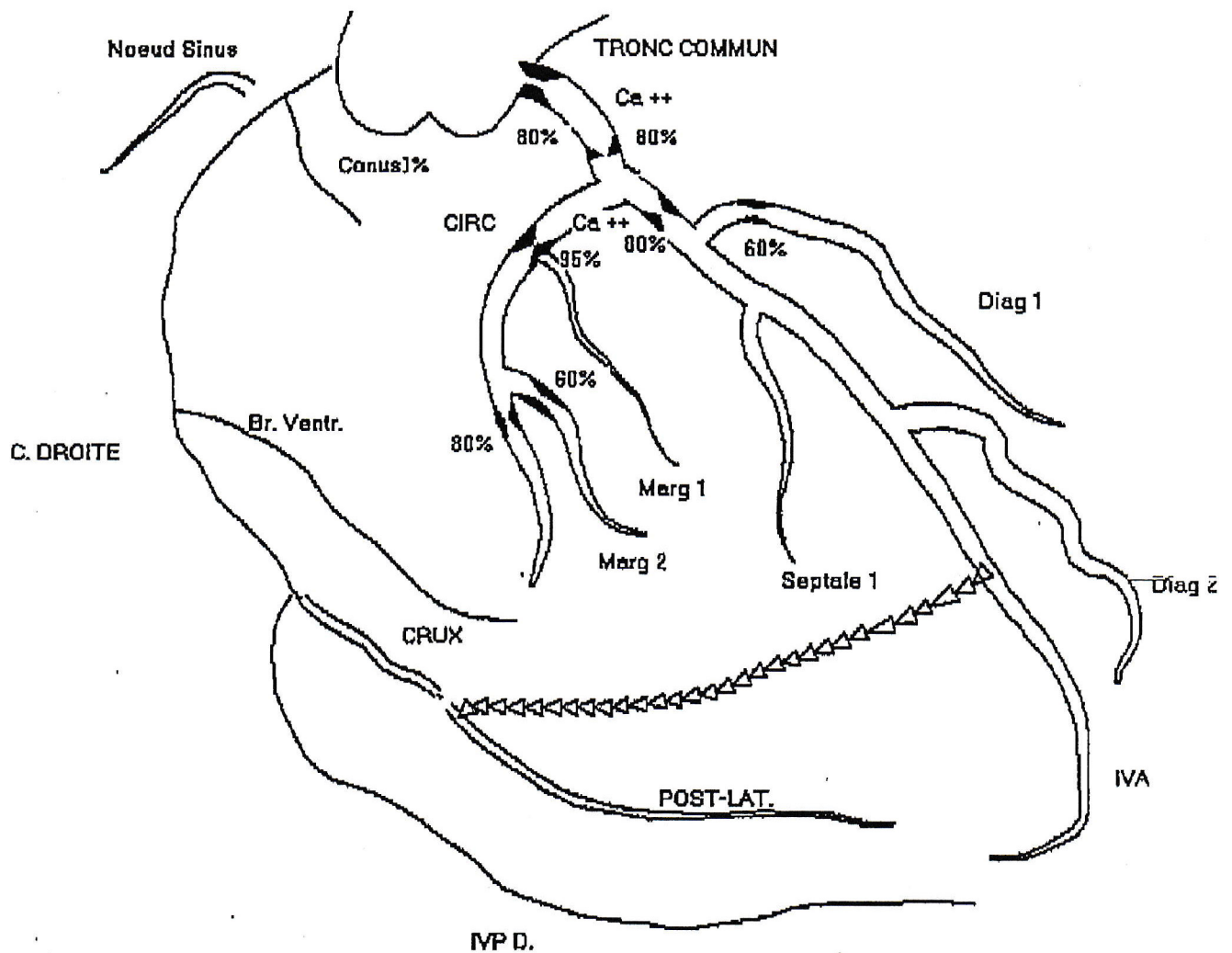
LVEF
62

WMSI=(Score 16 segments)/16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98
 Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

No 18

Coron.: Occlusion of RCA. 3 vessels disease.

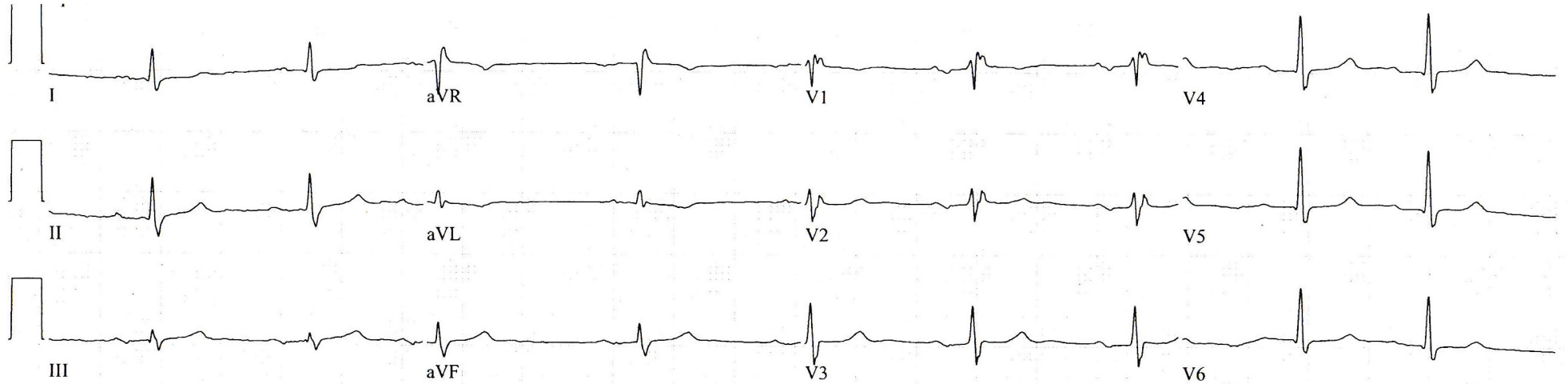
? collateral to explain echo



No 19

M 80y. Myocardial infarction

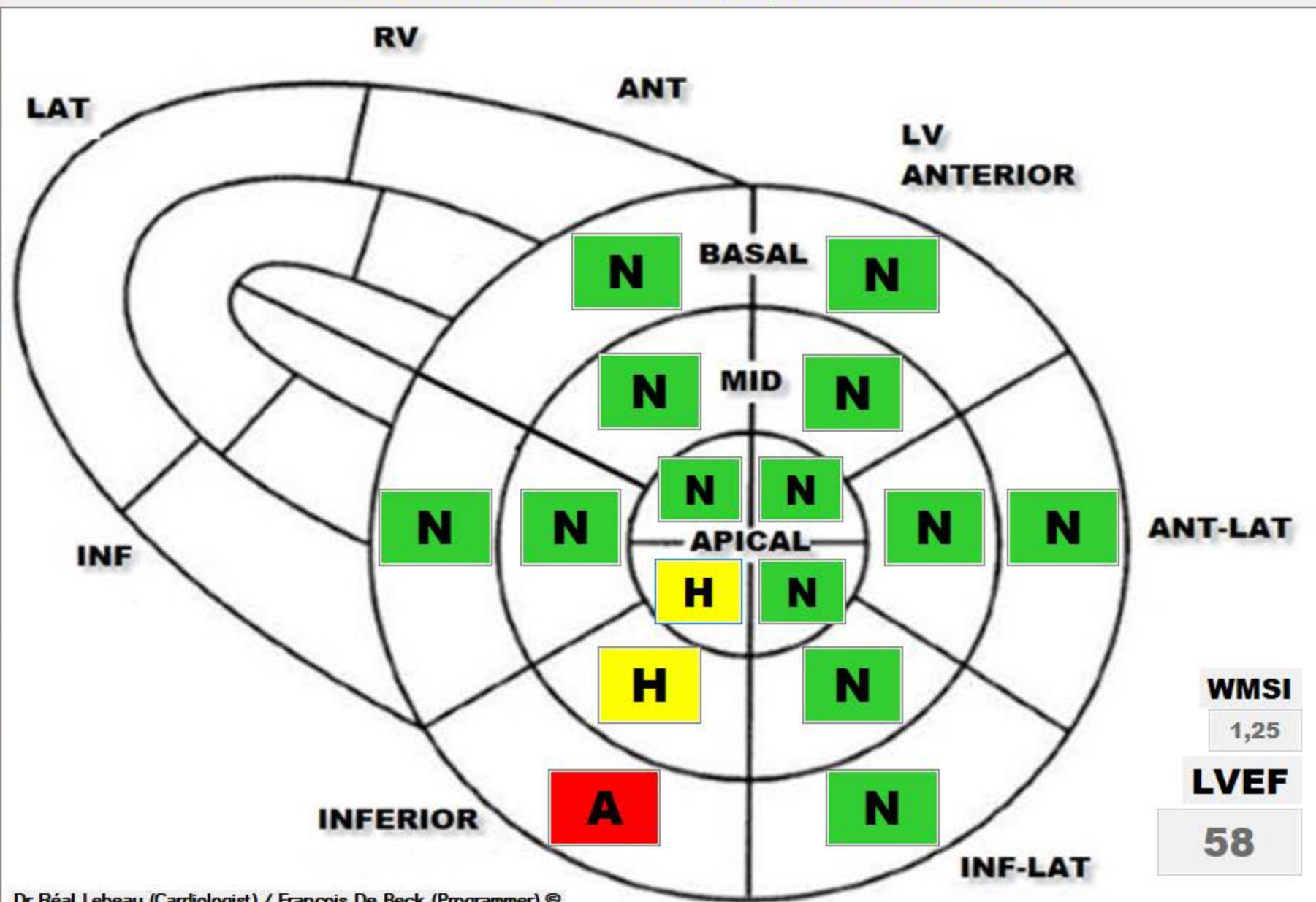
ECG.: your conclusion...



ECG.: Right bundle Branch block. Non specific ST

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-01
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-01

Left Ventricle

Basal #1	1
Basal #2	1
Basal #3	1
Basal #4	3
Basal #5	1
Basal #6	1
Mid #7	1
Mid #8	1
Mid #9	1
Mid #10	2
Mid #11	1
Mid #12	1
Apical #13	1
Apical #14	1
Apical #15	2
Apical #16	1

WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

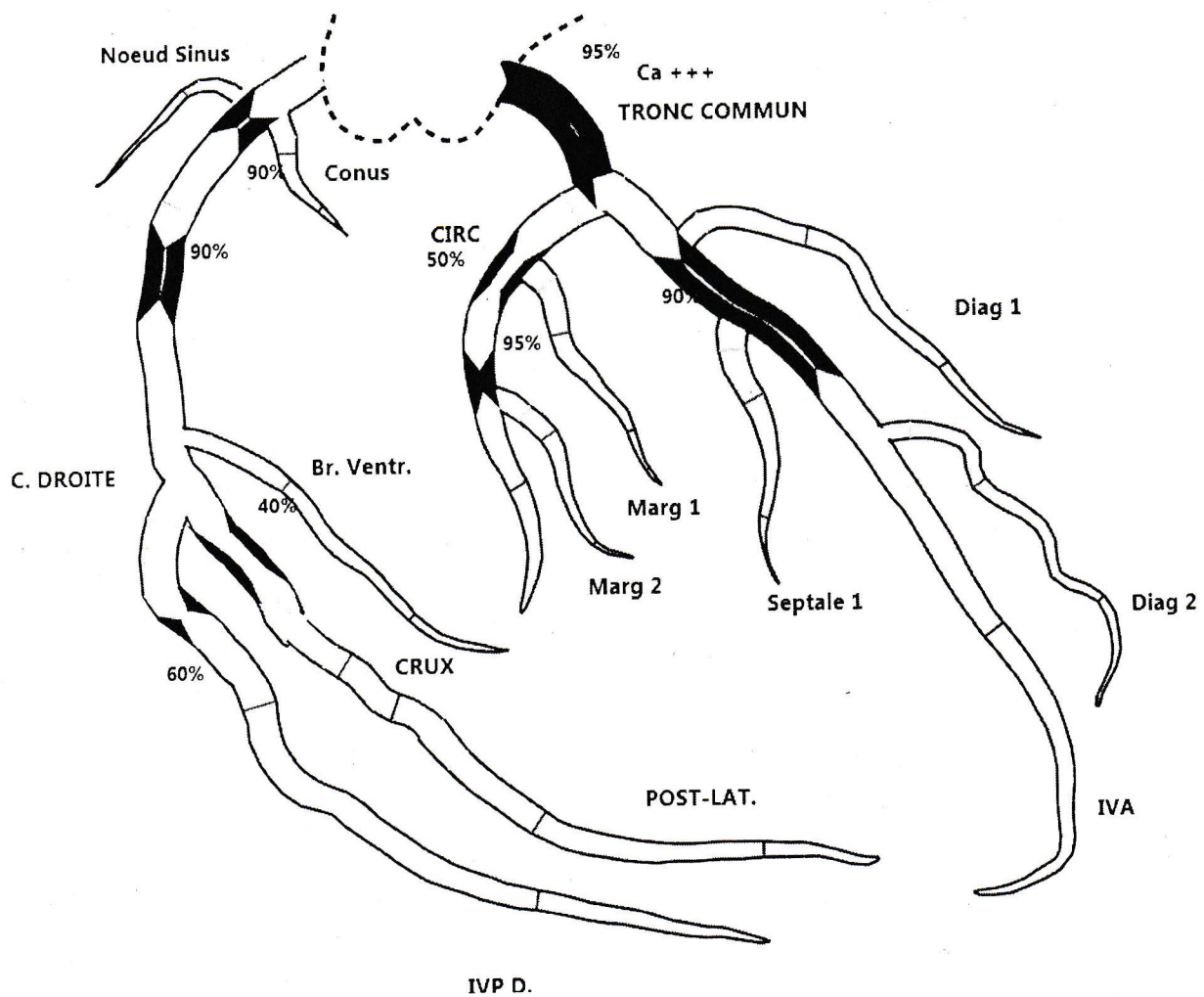
WMSI
1,25

LVEF
58

No 19

Coron.: Severe 3 vessels disease.

Cardiac surgery consultation.



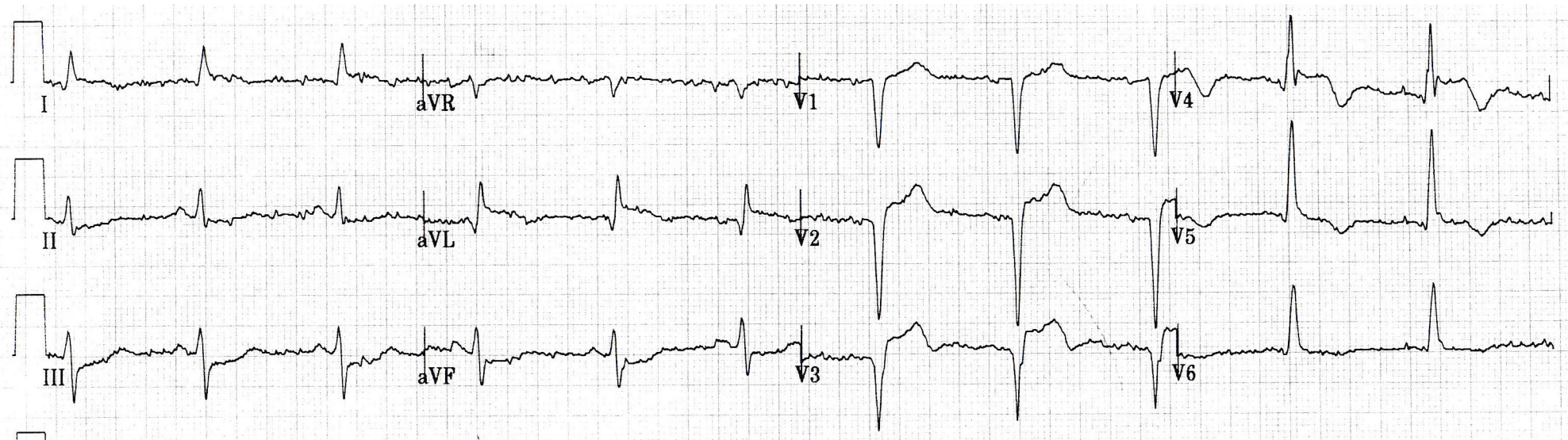
ANTERIOR INFARCTION (LAD)

20	Acute anterior infarction
21	Acute anterior infarction
22	Acute anterior infarction
23	Acute anterior infarction
24	Acute anterior infarction
25	Acute anterior infarction (MID)
26	Acute anterior infarction (MID)
27	Acute anterior infarction (Collateral)
28	Acute anterior infarction (Collateral)
29	Anterior ischemia
30	Anterior ischemia
31	Stress CMP (Tako)
32	Stress CMP (Tako)
33	Stress CMP (Tako)
34	ECG normal
35	ECG normal
36	ECG normal

No 20

M 57y Stemi

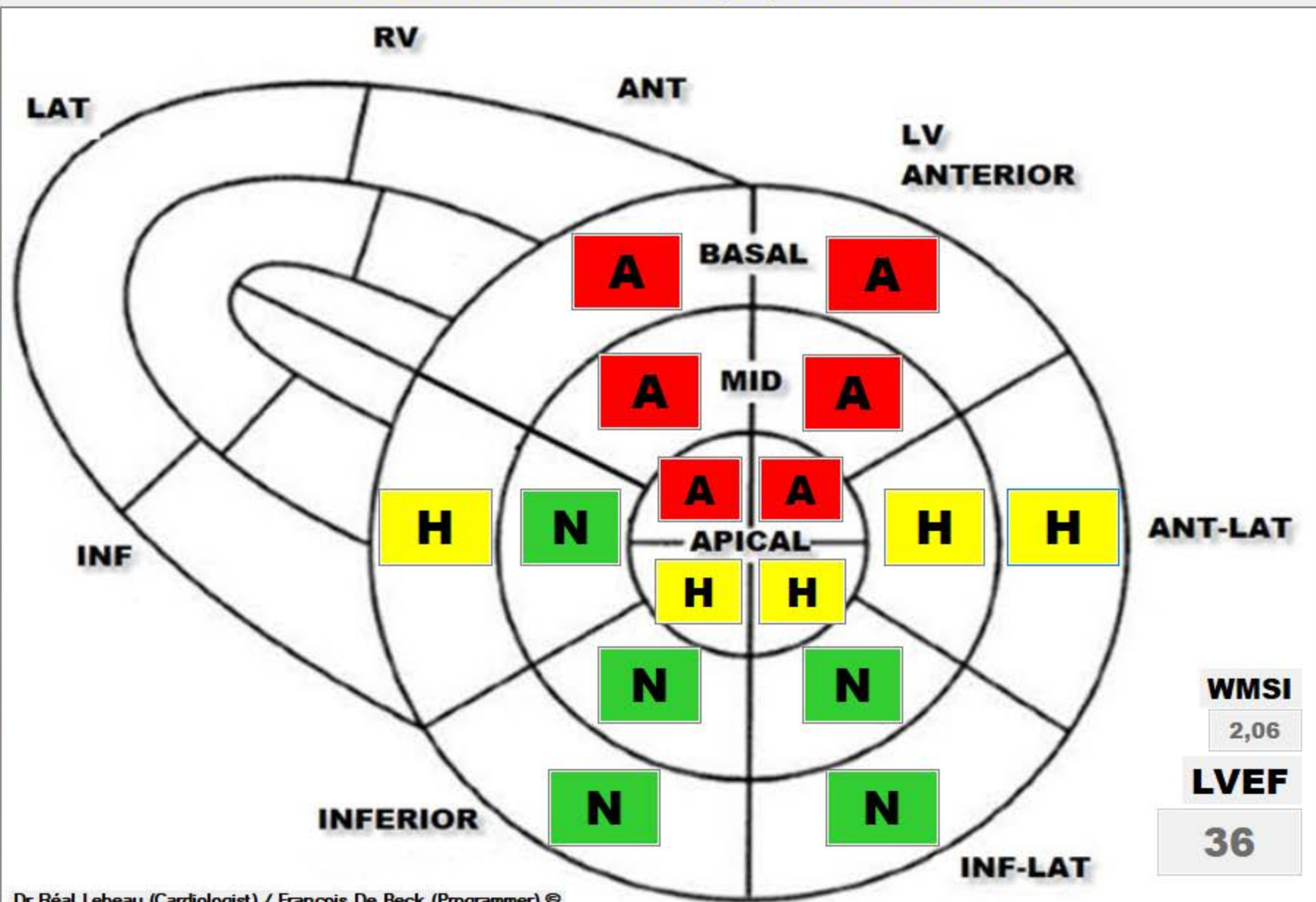
ECG.: your opinion...



ECG.: Acute anterior infarction

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-02

NAME:

SURNAME:

BIRTH DATE: 2020-11-02

Left Ventricle

Basal #1	3
Basal #2	2
Basal #3	1
Basal #4	1
Basal #5	2
Basal #6	3
Mid #7	3
Mid #8	2
Mid #9	1
Mid #10	1
Mid #11	1
Mid #12	3
Apical #13	3
Apical #14	2
Apical #15	2
Apical #16	3

WMSI=(Score 16 segments)/16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

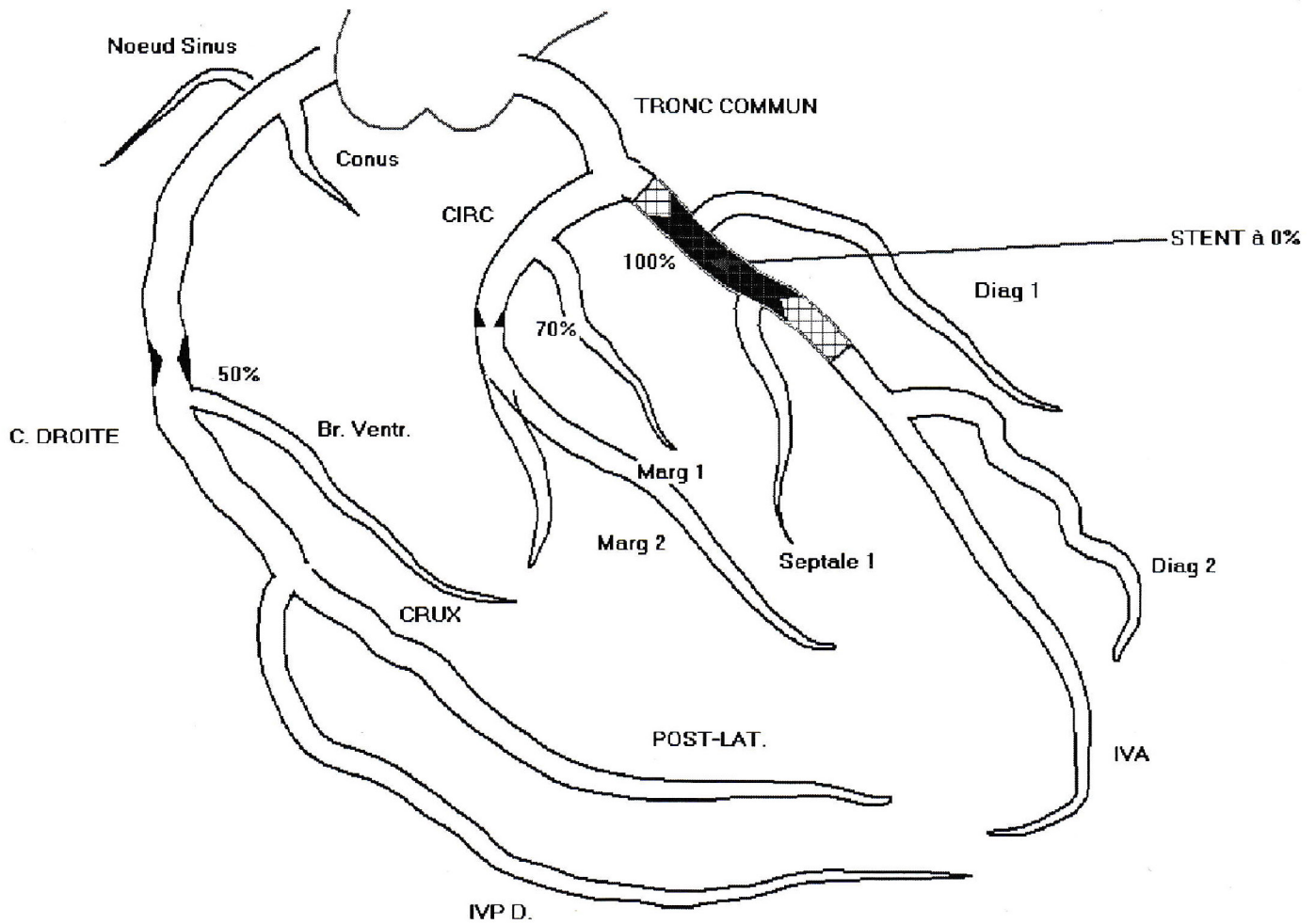
Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

WMSI
2,06

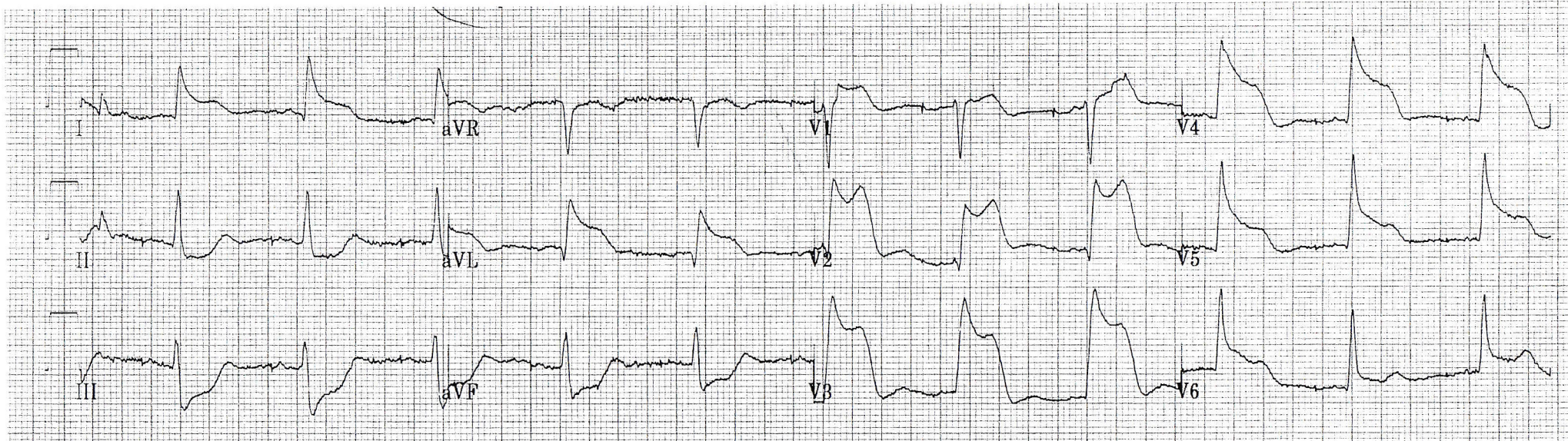
LVEF
36

No 20

Coron.: LAD occlusion stented.



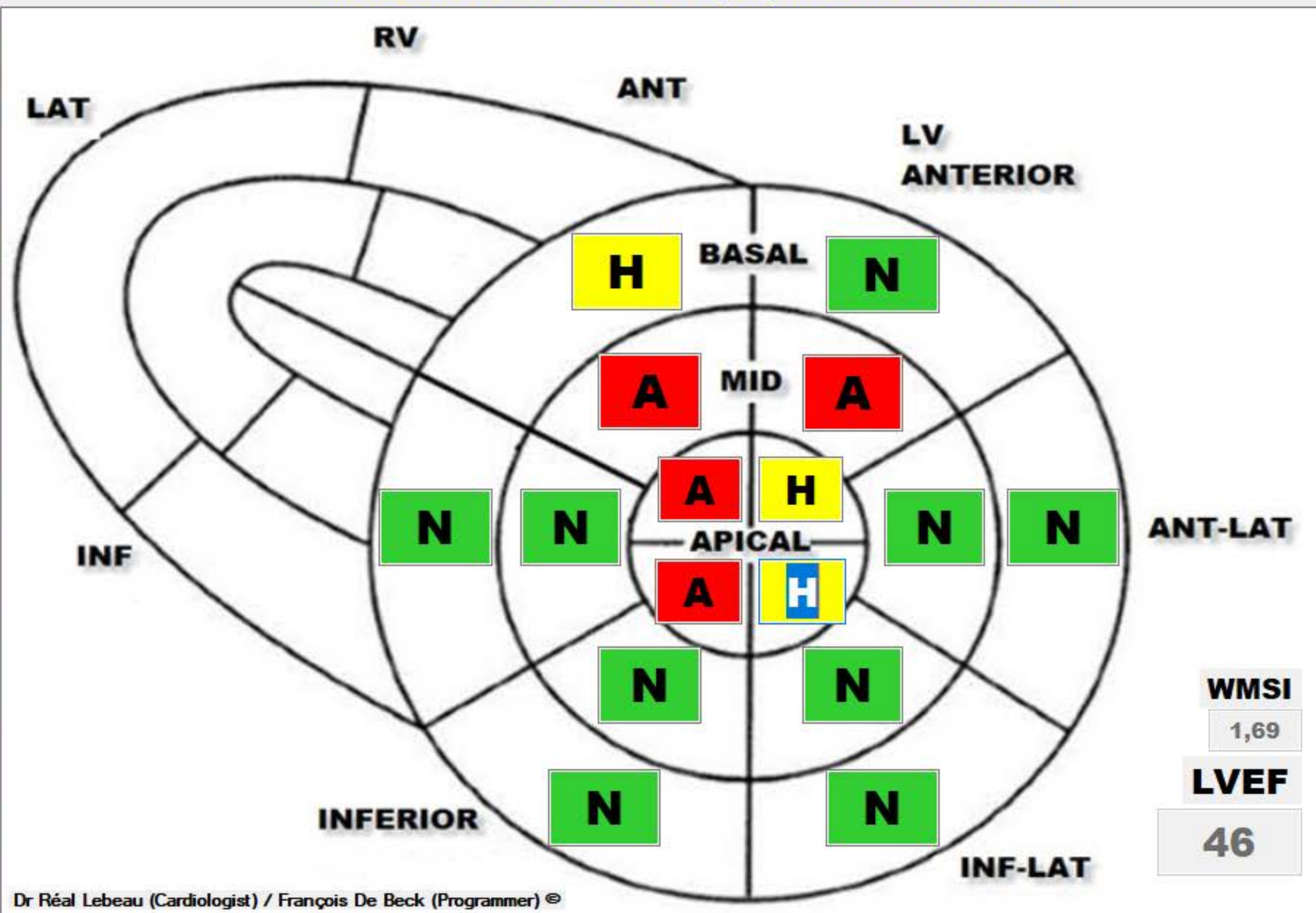
No 21
M 68y. STEMI
ECG.: your conclusion...



ECG.: Acute extensive anterior infarction.

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-02

NAME:

SURNAME:

BIRTH DATE: 2020-11-02

Left Ventricle

Basal #1	1
Basal #2	1
Basal #3	1
Basal #4	1
Basal #5	1
Basal #6	2
Mid #7	3
Mid #8	1
Mid #9	1
Mid #10	1
Mid #11	1
Mid #12	3
Apical #13	2
Apical #14	2
Apical #15	3
Apical #16	3

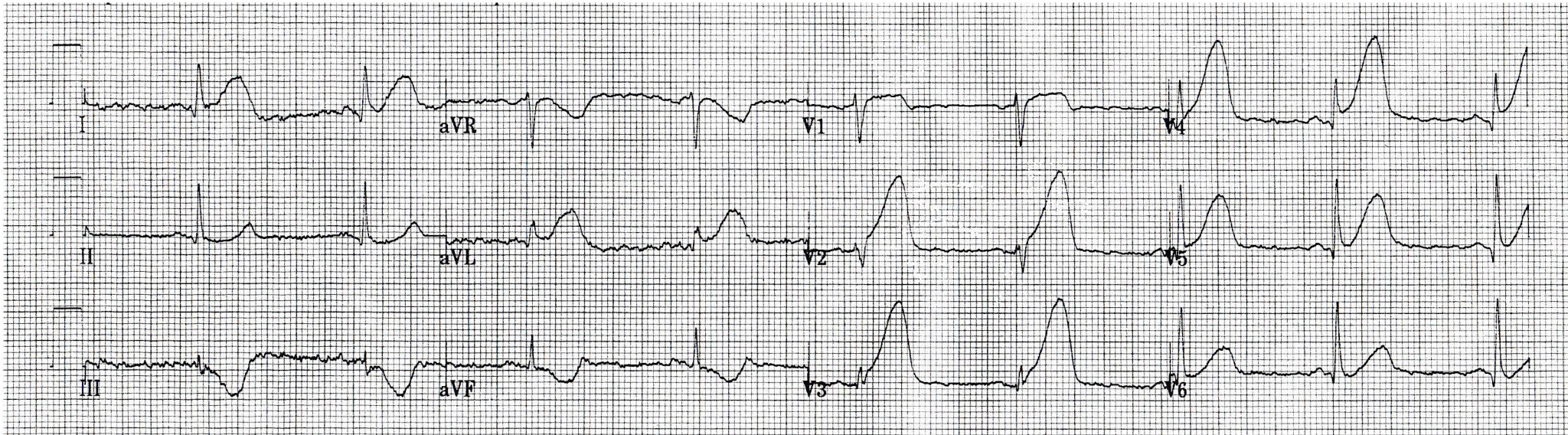
WMSI=(Score 16 segments)/16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

No 22.

M 66Y. Myocardial infarction

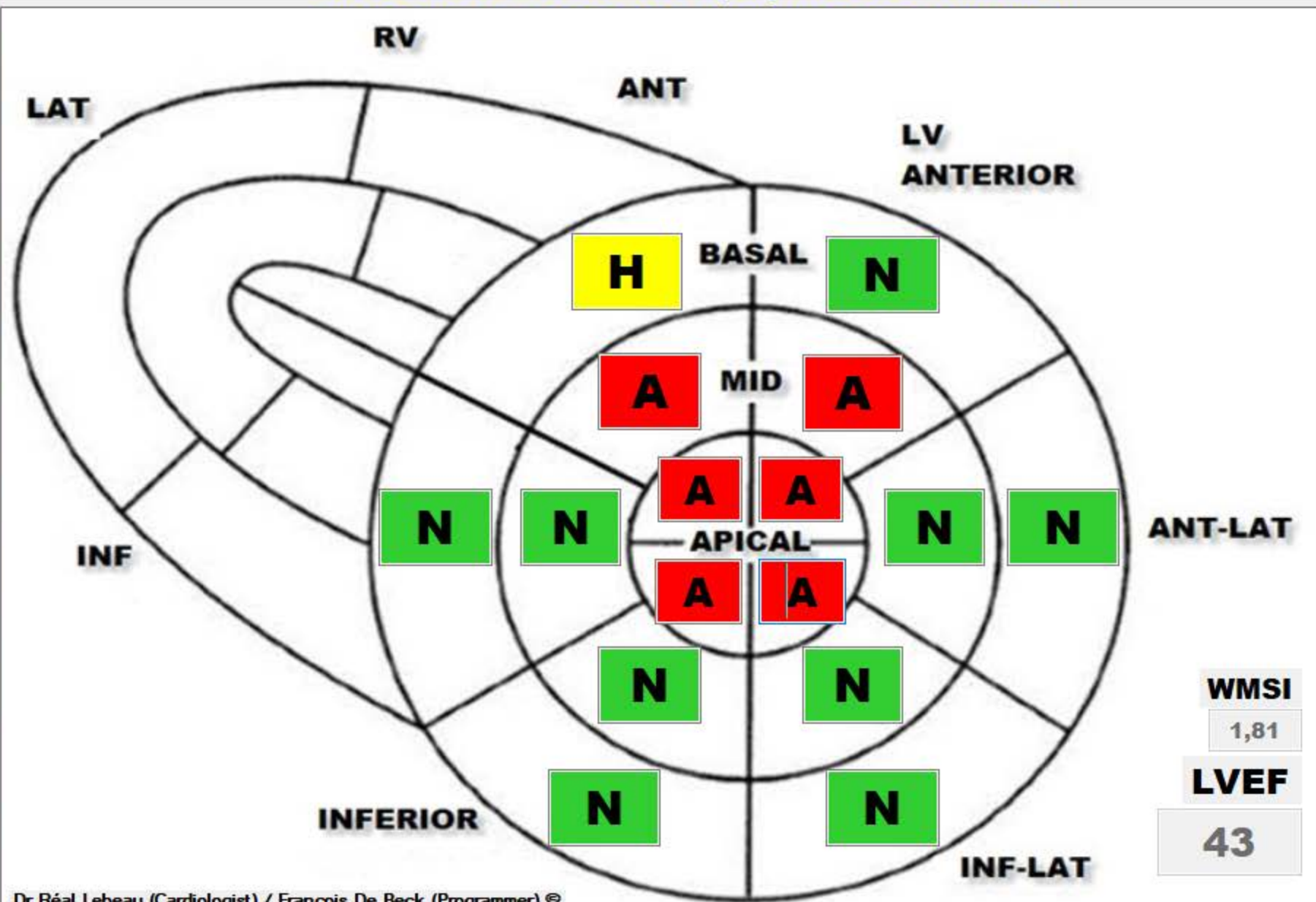
ECG.: your conclusion.



ECG.: Acute anteroseptal infarction.

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-02
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-02

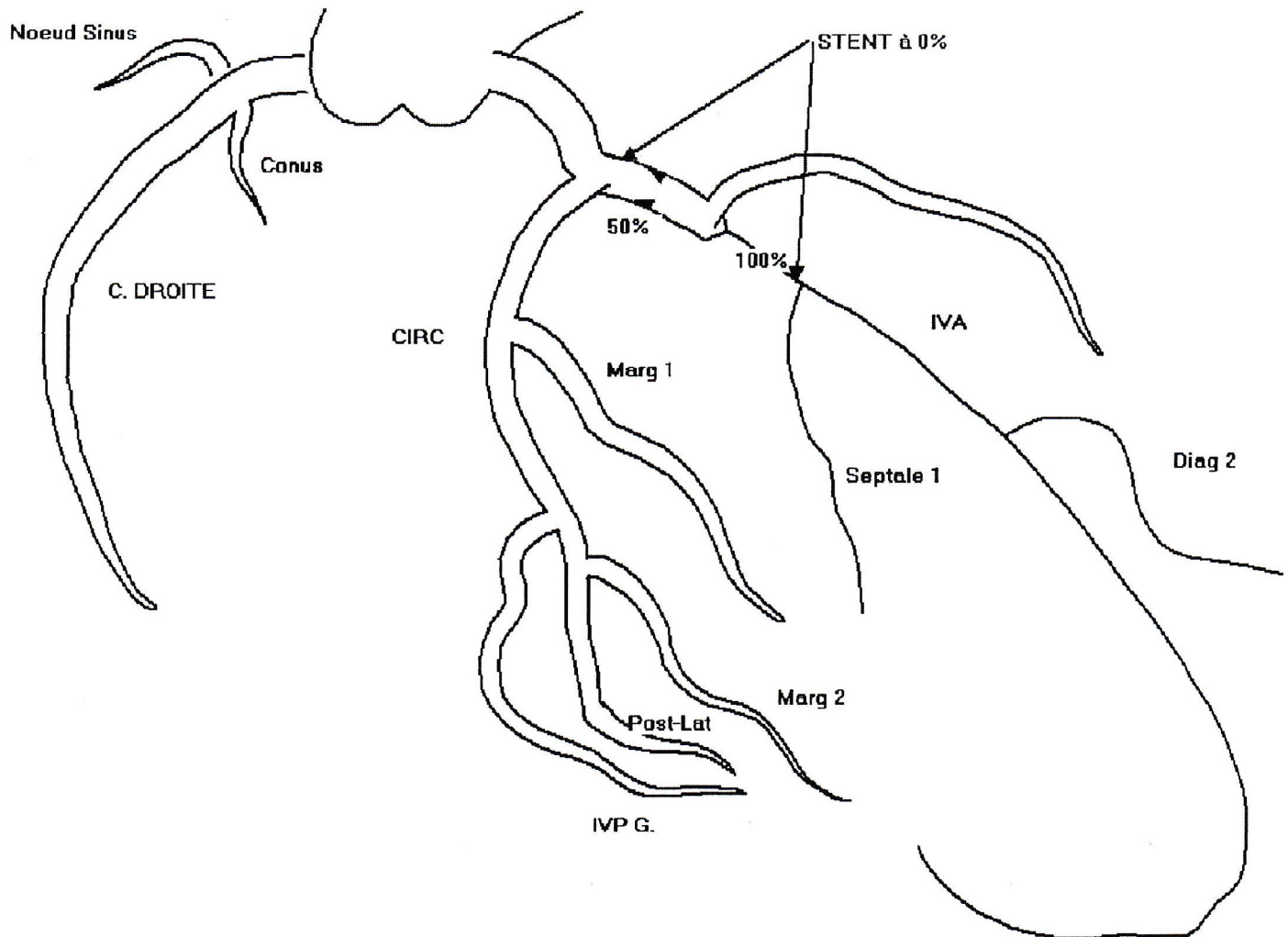
Left Ventricle

Basal #1	1
Basal #2	1
Basal #3	1
Basal #4	1
Basal #5	1
Basal #6	2
Mid #7	3
Mid #8	1
Mid #9	1
Mid #10	1
Mid #11	1
Mid #12	3
Apical #13	3
Apical #14	3
Apical #15	3
Apical #16	3

WMSI=(Score 16 segments)/16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98
 Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

No 22

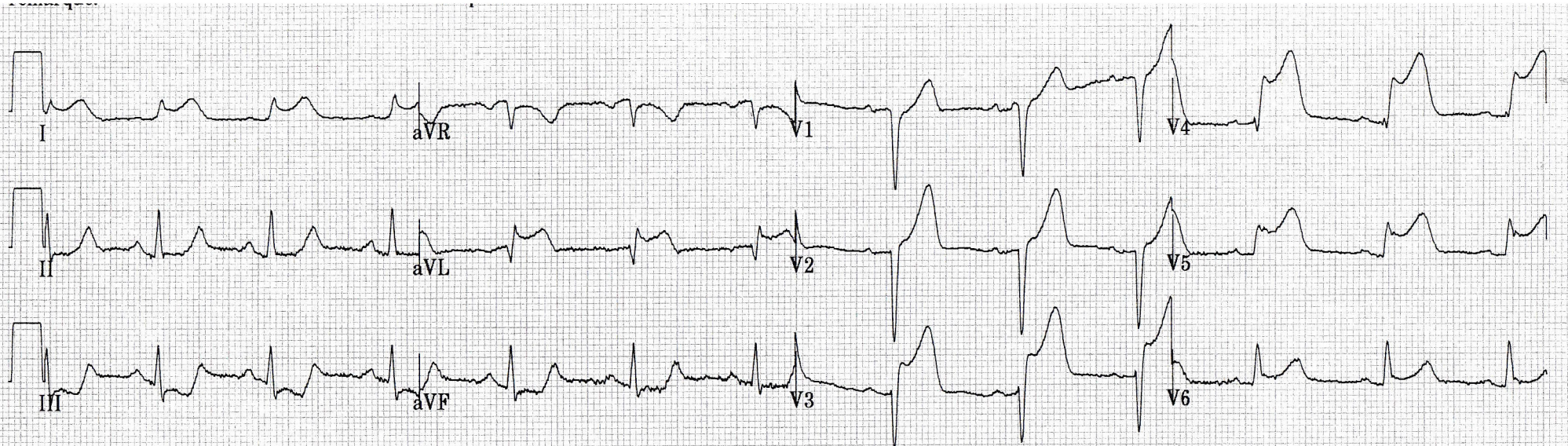
Coron.: Acute LAD occlusion stented.



No 23

M 57y . Myocardial infarction.

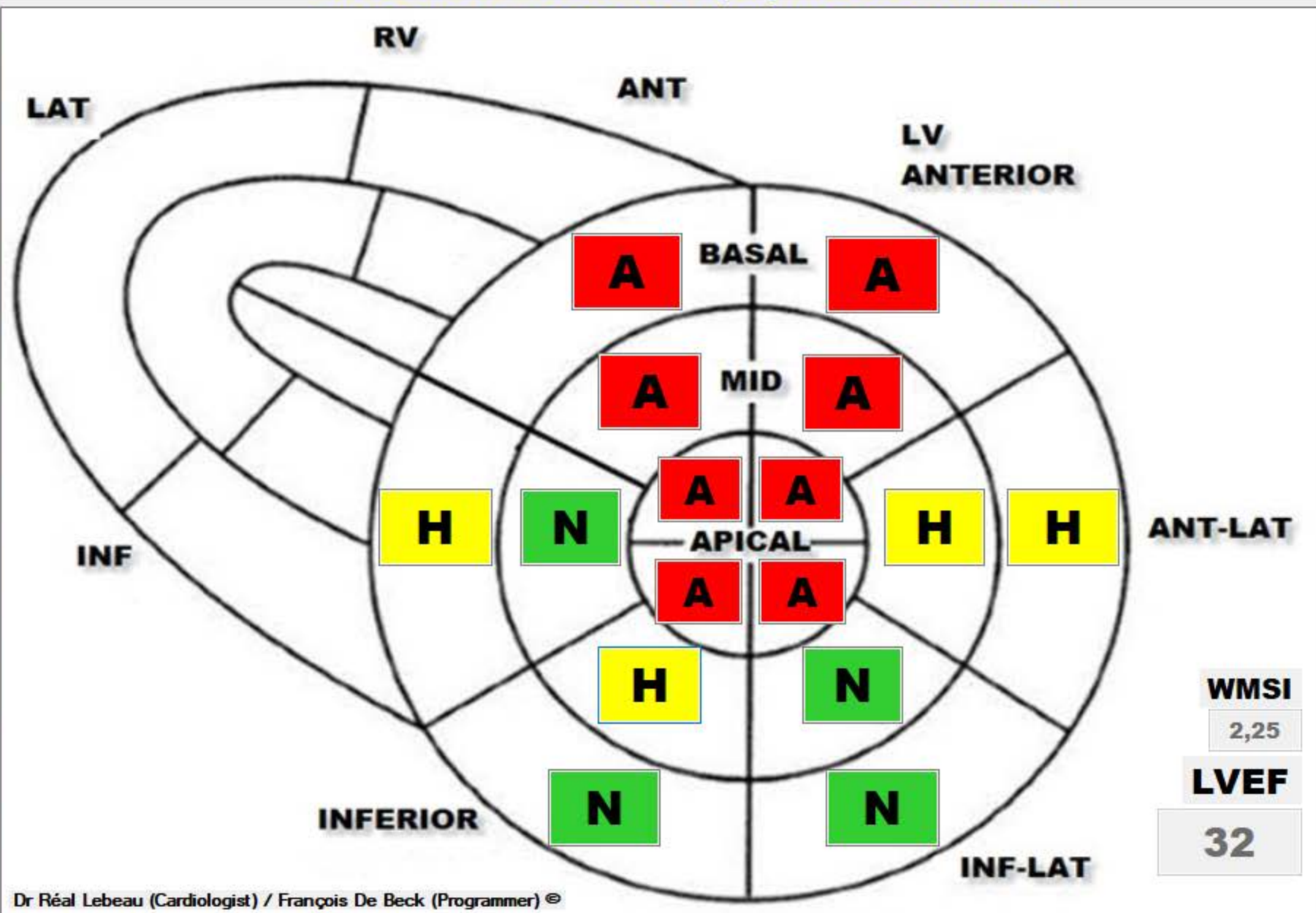
ECG.: your conclusion...



ECG.: Acute anterior infarction.

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-02
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-02

Left Ventricle

Basal #1	3
Basal #2	2
Basal #3	1
Basal #4	1
Basal #5	2
Basal #6	3
Mid #7	3
Mid #8	2
Mid #9	1
Mid #10	2
Mid #11	1
Mid #12	3
Apical #13	3
Apical #14	3
Apical #15	3
Apical #16	3

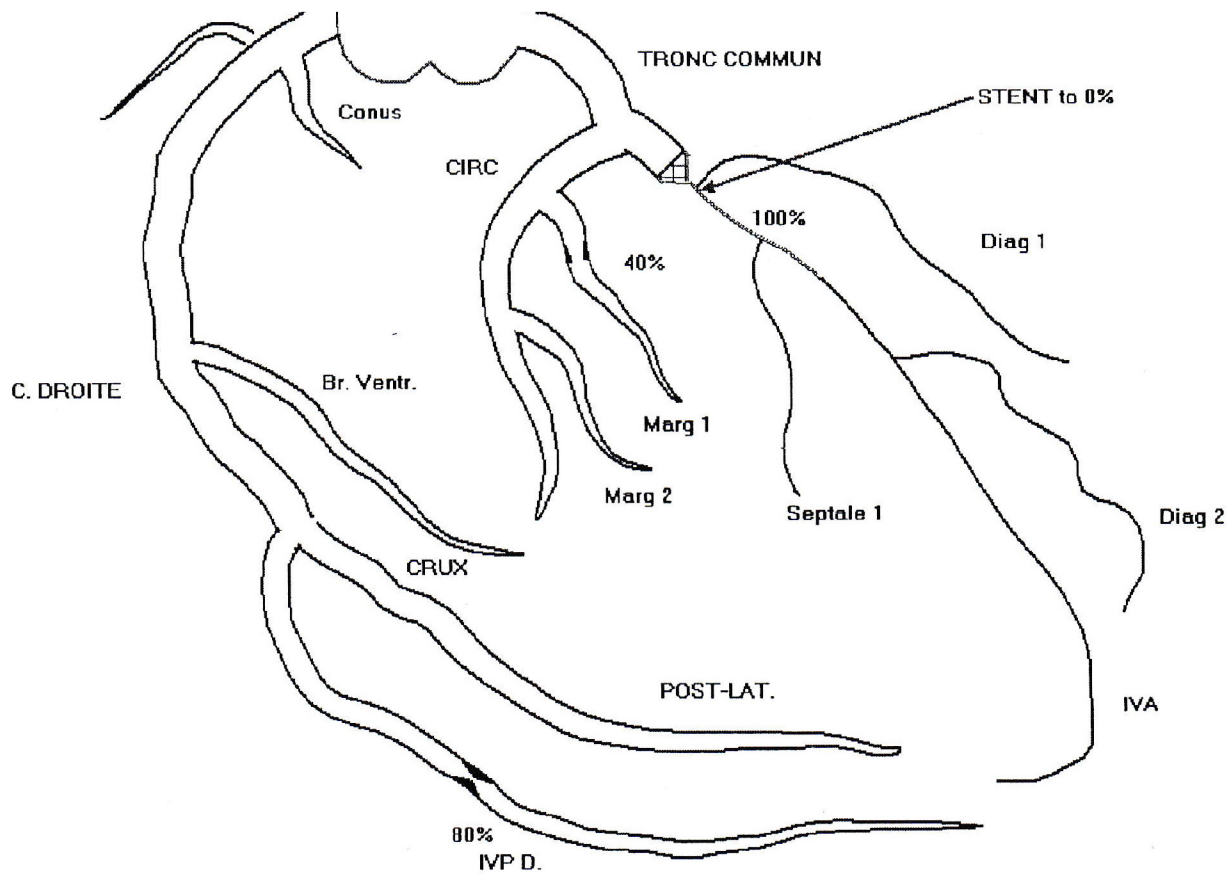
WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

WMSI
2,25

LVEF
32

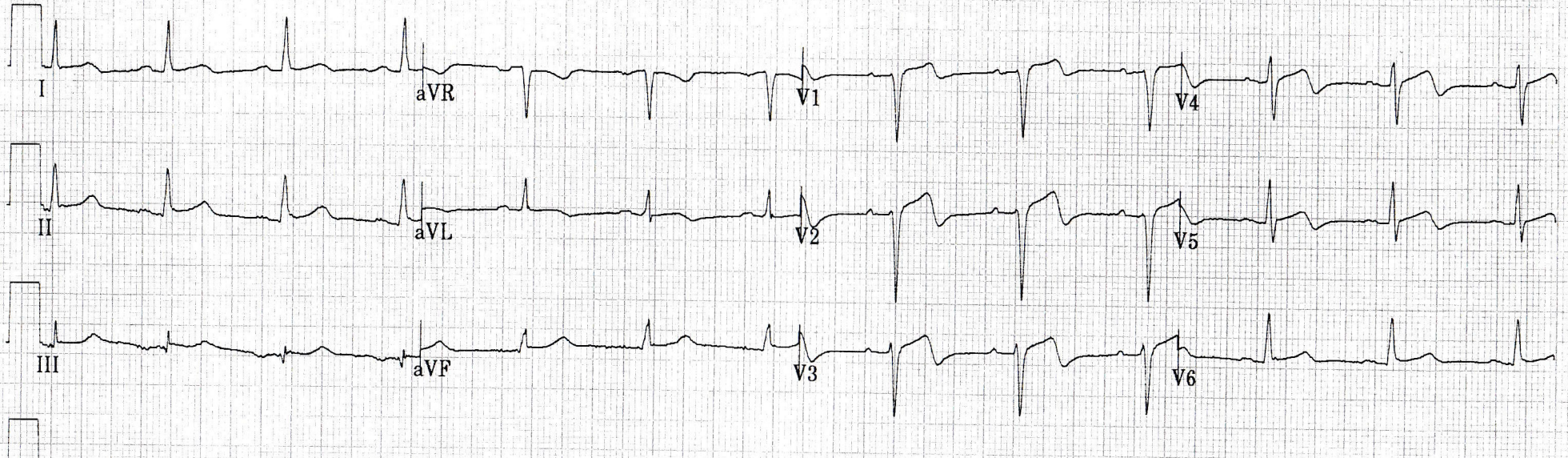
No 23
Coron.: Acute LAD occlusion stented.



No 24

M 65y. Myocardial infarction

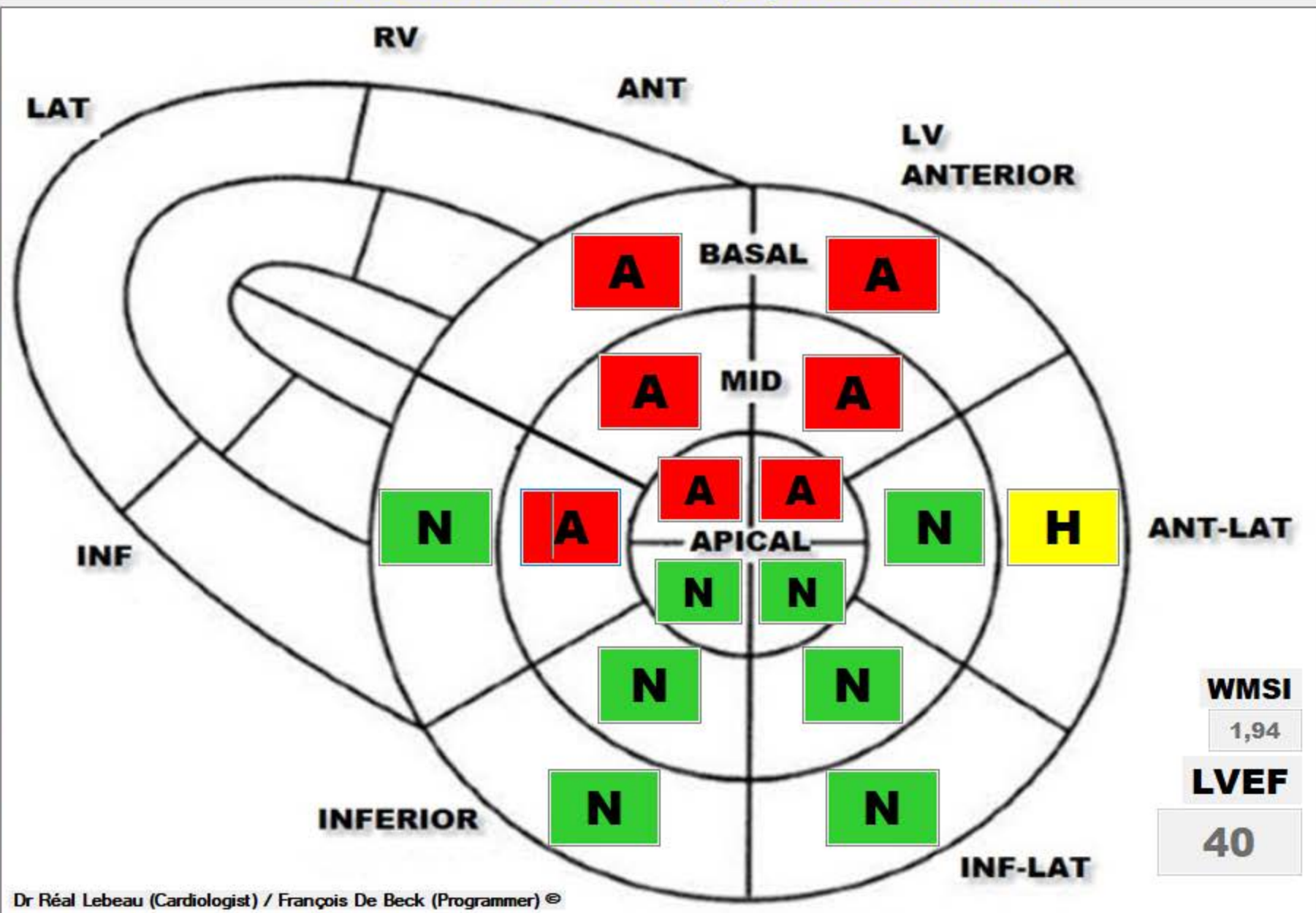
ECG.: your conclusion...



ECG.: Acute antero-septal infarction

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-02

NAME:

SURNAME:

BIRTH DATE: 2020-11-02

Left Ventricle

Basal #1	3
Basal #2	2
Basal #3	1
Basal #4	1
Basal #5	1
Basal #6	3
Mid #7	3
Mid #8	1
Mid #9	1
Mid #10	1
Mid #11	3
Mid #12	3
Apical #13	3
Apical #14	1
Apical #15	1
Apical #16	3

WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

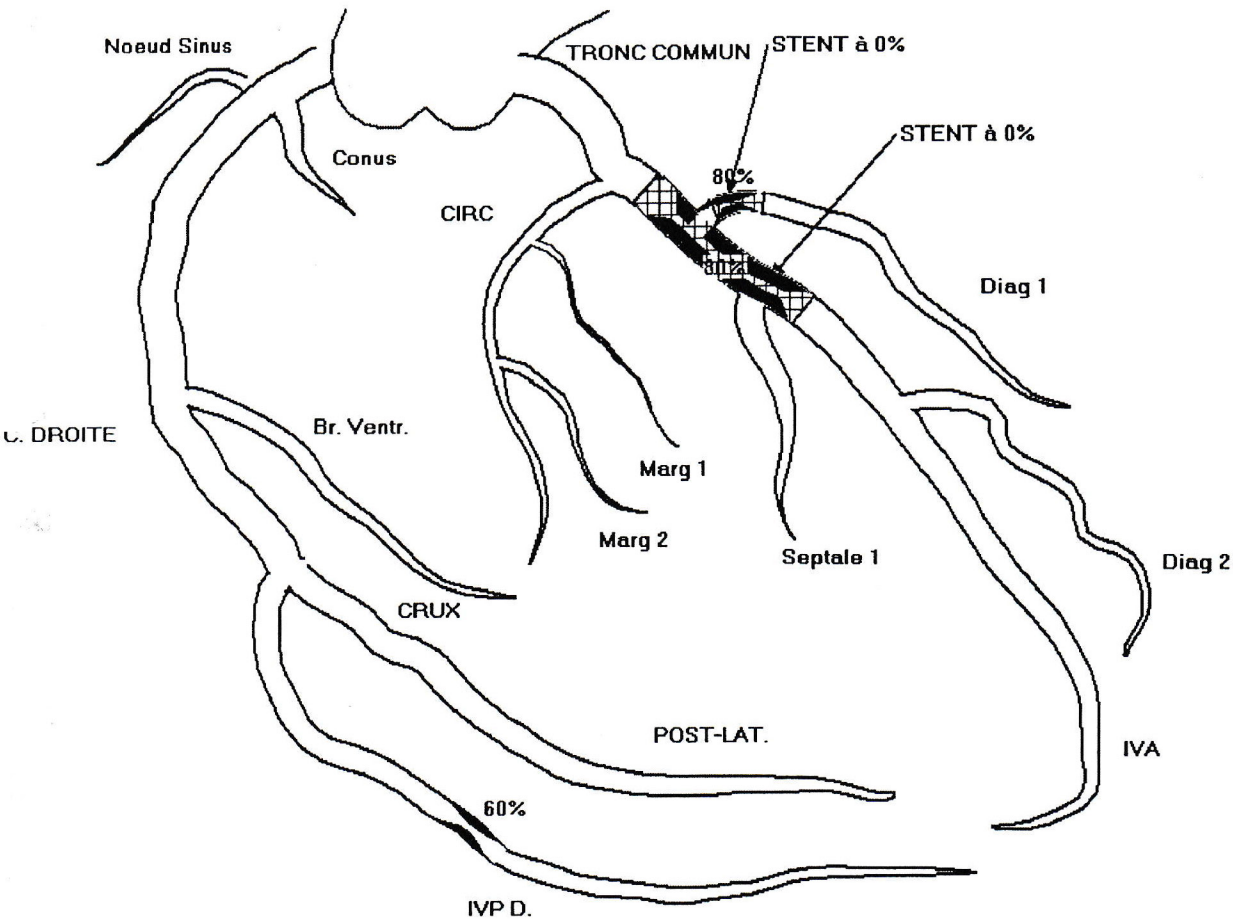
Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

WMSI
1,94

LVEF
40

No 24

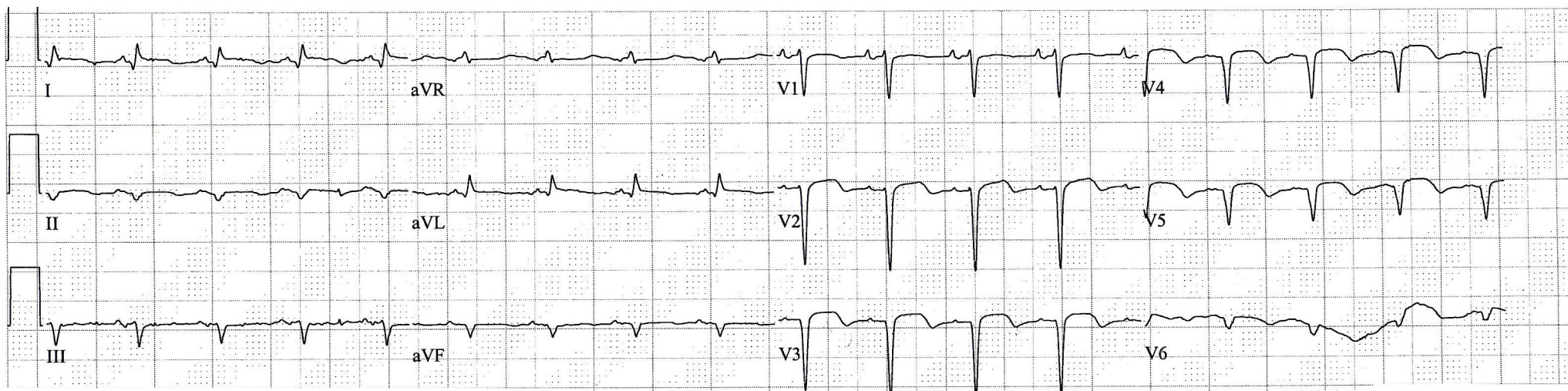
Coron .: Acute LAD occlusion stented.



No 25

F 89y. Myocardial infarction.

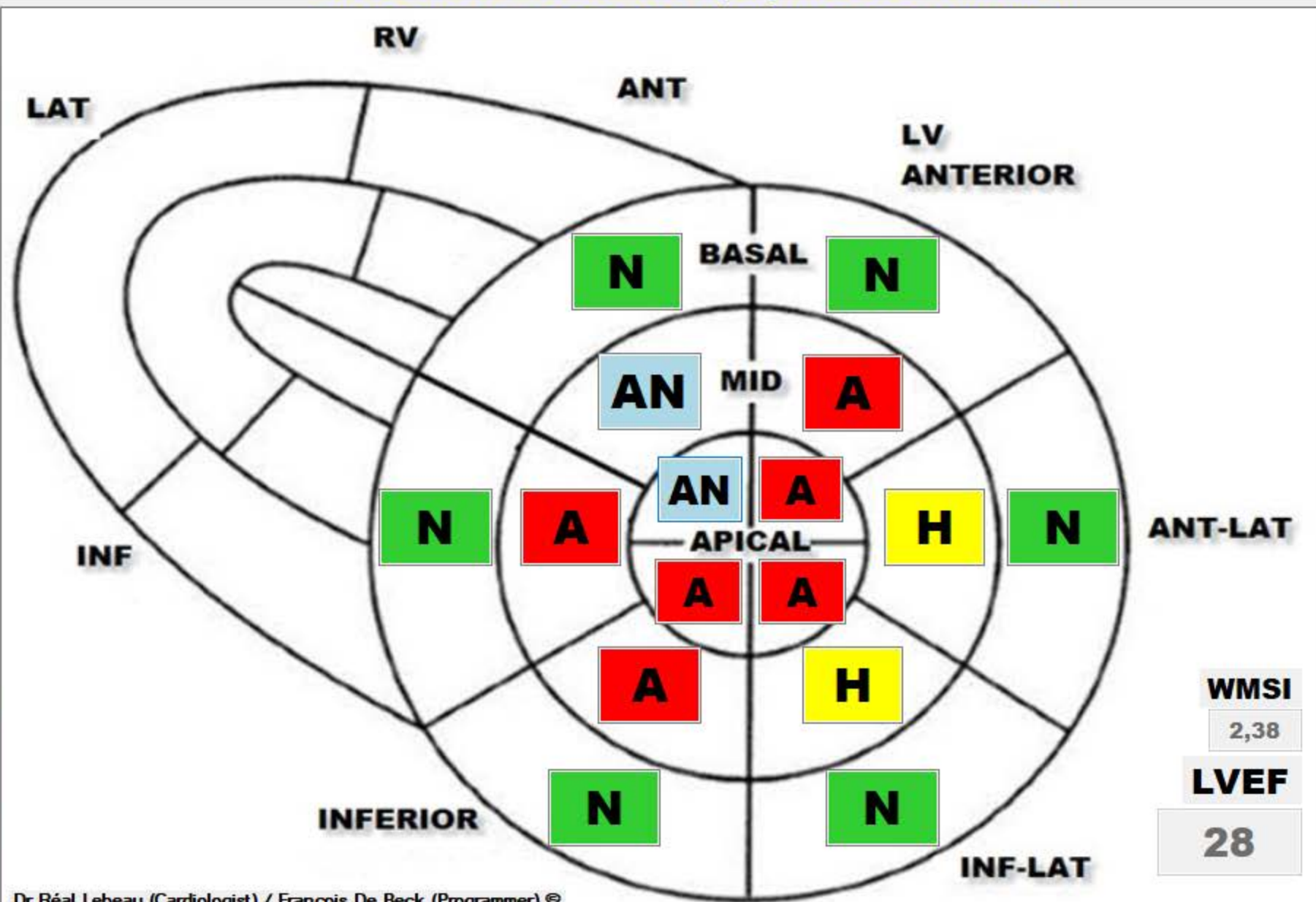
ECG.: your conclusion...



ECG.: Acute anterolateral infarction

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-03
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-03

Left Ventricle

Basal #1	1
Basal #2	1
Basal #3	1
Basal #4	1
Basal #5	1
Basal #6	1
Mid #7	3
Mid #8	2
Mid #9	2
Mid #10	3
Mid #11	3
Mid #12	5
Apical #13	3
Apical #14	3
Apical #15	3
Apical #16	5

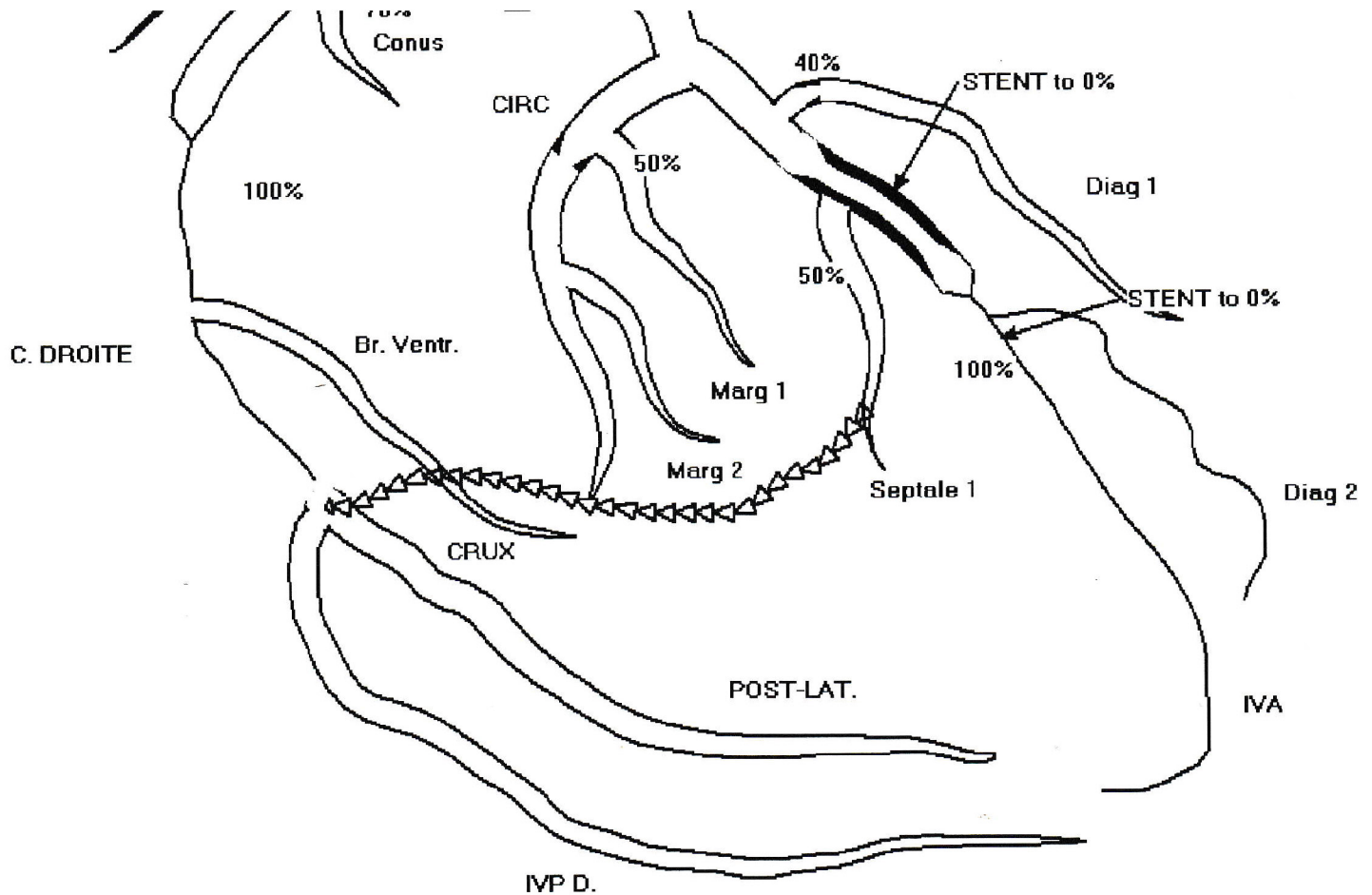
WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98
 Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

WMSI
2,38

LVEF
28

No 25

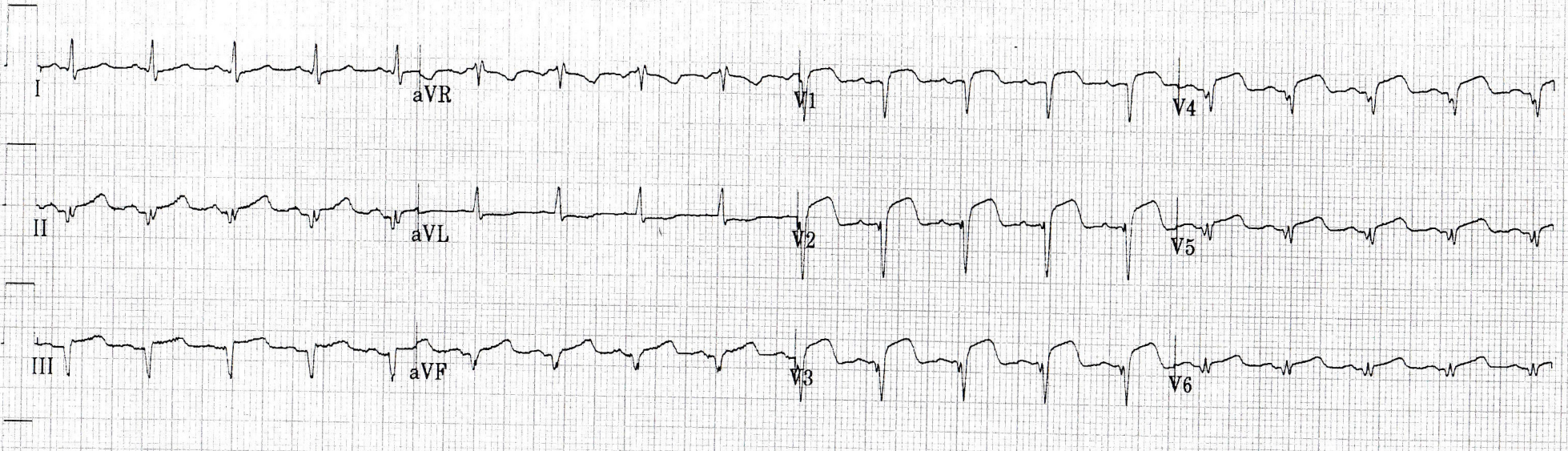
Coron.: Occlusion of LAD mid portion



No 26

F 52y . STEMI

ECG.: your conclusion...



ECG.: Acute anterior and inferior infarction.

EJECTION FRACTION (EF) MEASUREMENT

Classical Wall Motion

EXAM DATE: 2020-11-03

NAME:

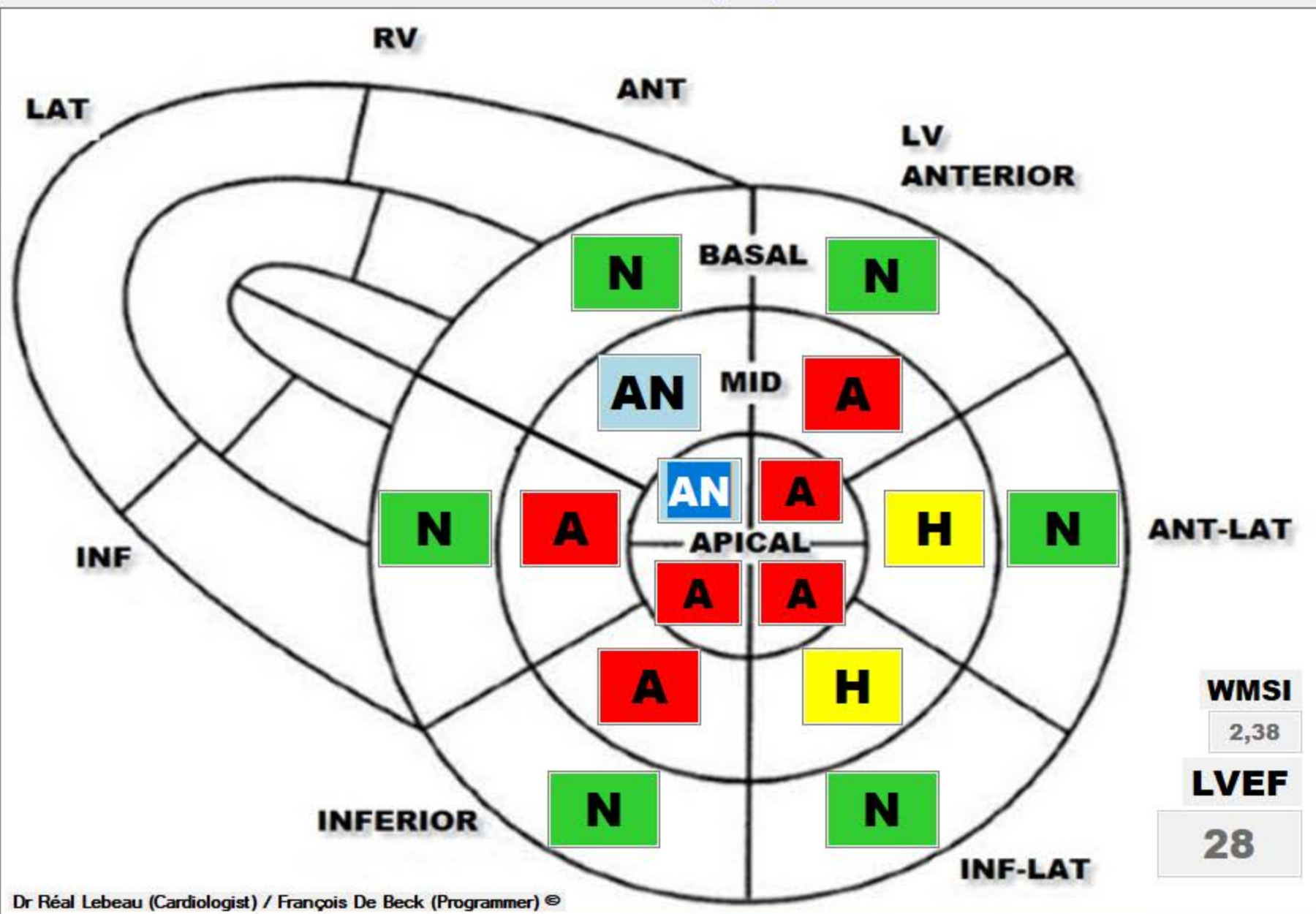
SURNAME:

BIRTH DATE: 2020-11-03

Left Ventricle

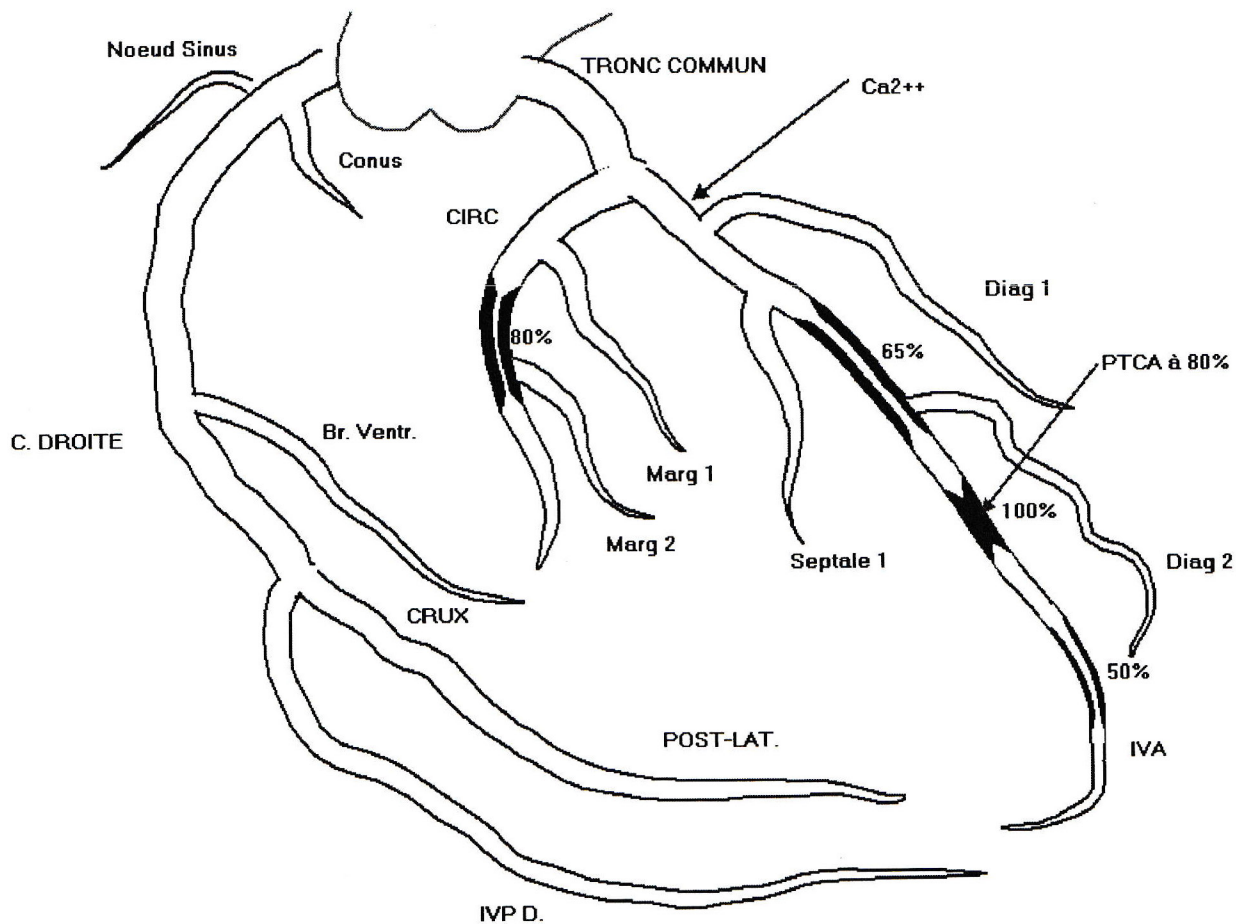
Basal #1	1
Basal #2	1
Basal #3	1
Basal #4	1
Basal #5	1
Basal #6	1
Mid #7	3
Mid #8	2
Mid #9	2
Mid #10	3
Mid #11	3
Mid #12	5
Apical #13	3
Apical #14	3
Apical #15	3
Apical #16	5

WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98
 Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176



No 26

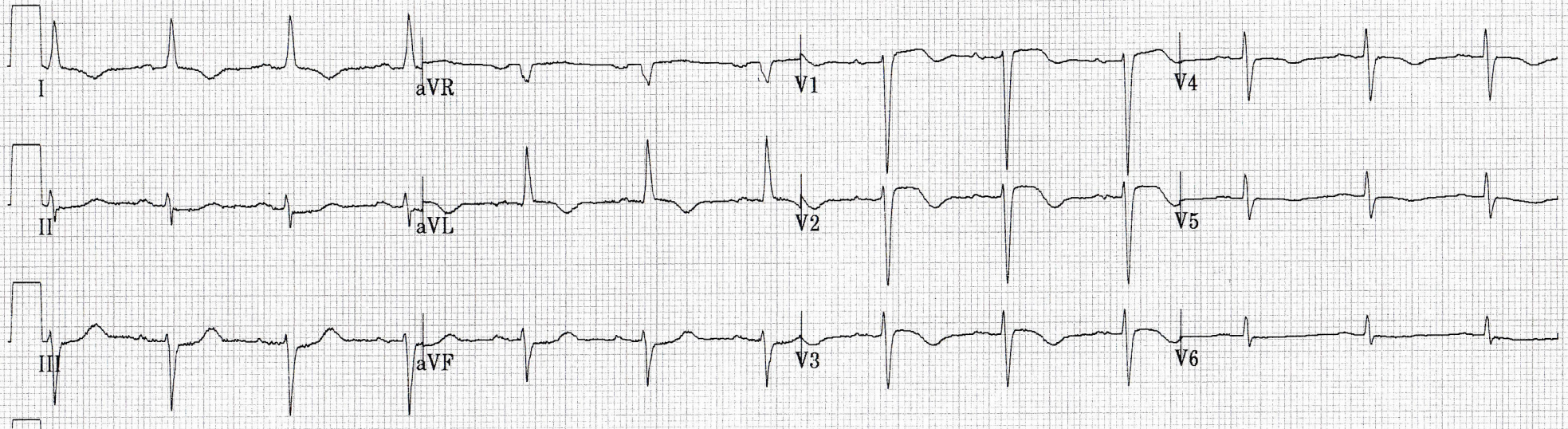
Coron.: Occlusion of the distal LAD.



No 27

F 78y. NSTEMI.

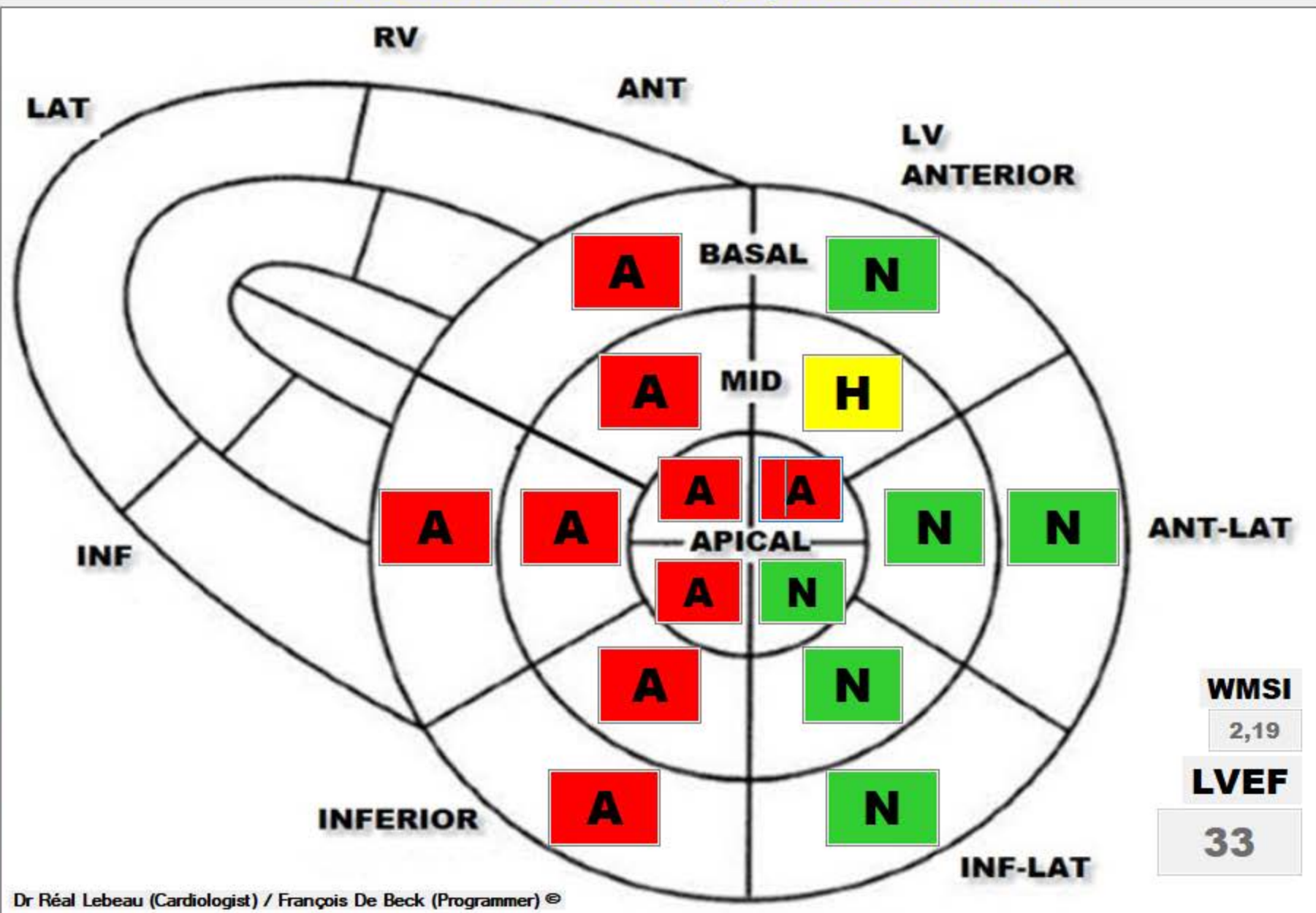
ECG.: your conclusion...



ECG.: Anterior injury and lateral ischemia

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-03
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-03

Left Ventricle

Basal #1	1
Basal #2	1
Basal #3	1
Basal #4	3
Basal #5	3
Basal #6	3
Mid #7	2
Mid #8	1
Mid #9	1
Mid #10	3
Mid #11	3
Mid #12	3
Apical #13	3
Apical #14	1
Apical #15	3
Apical #16	3

WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

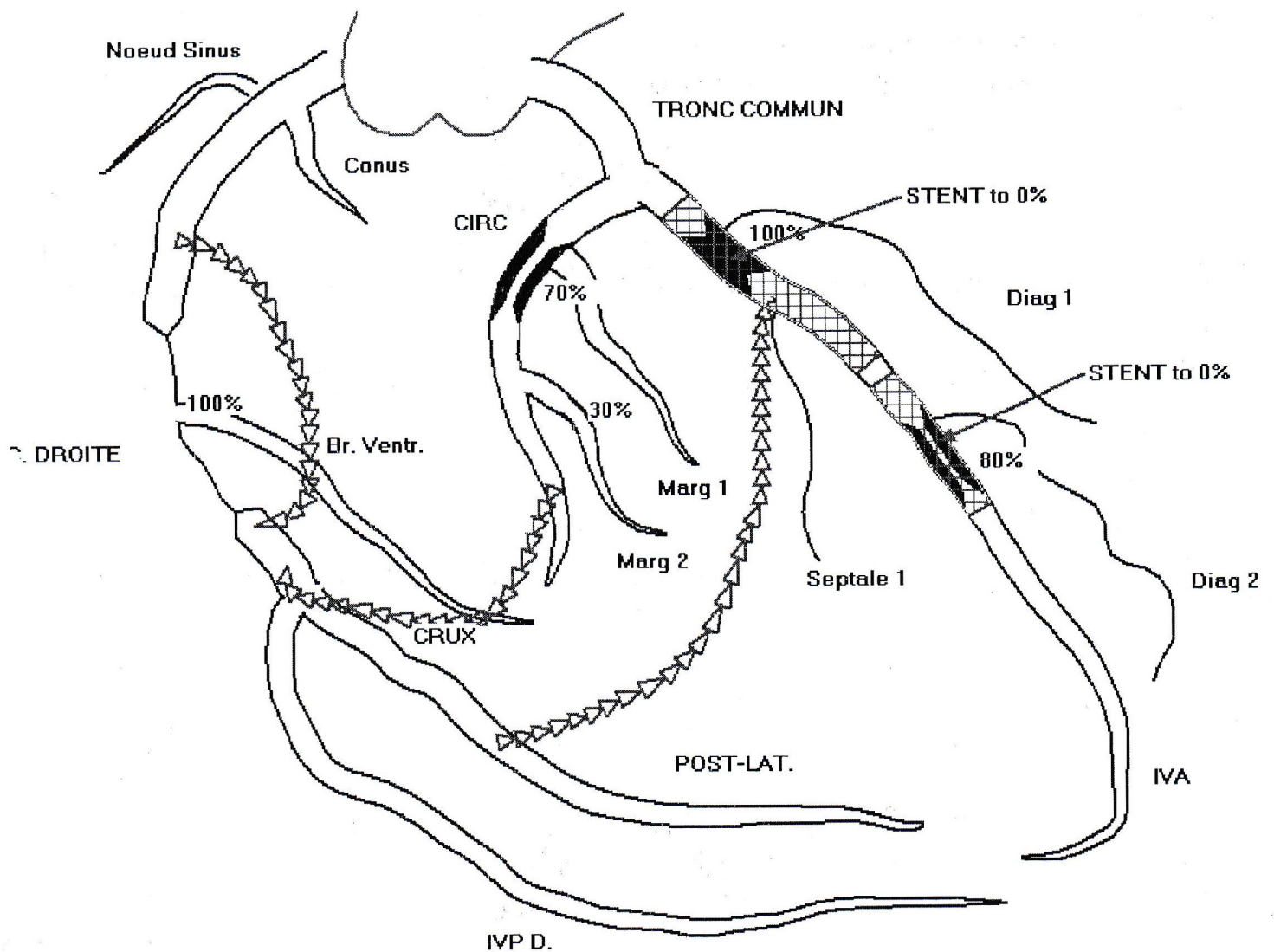
WMSI
2,19

LVEF
33

No 27

Coron.: Acute occlusion of LAD.

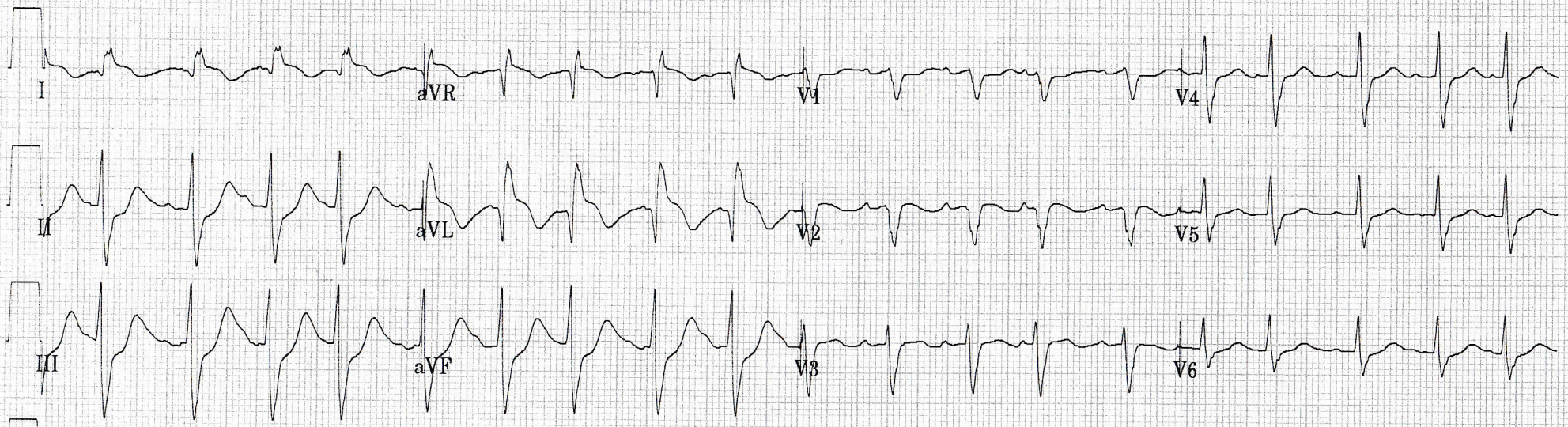
Probable old occlusion of RCA (collateral)



No 28

F 82y. NSTEMI

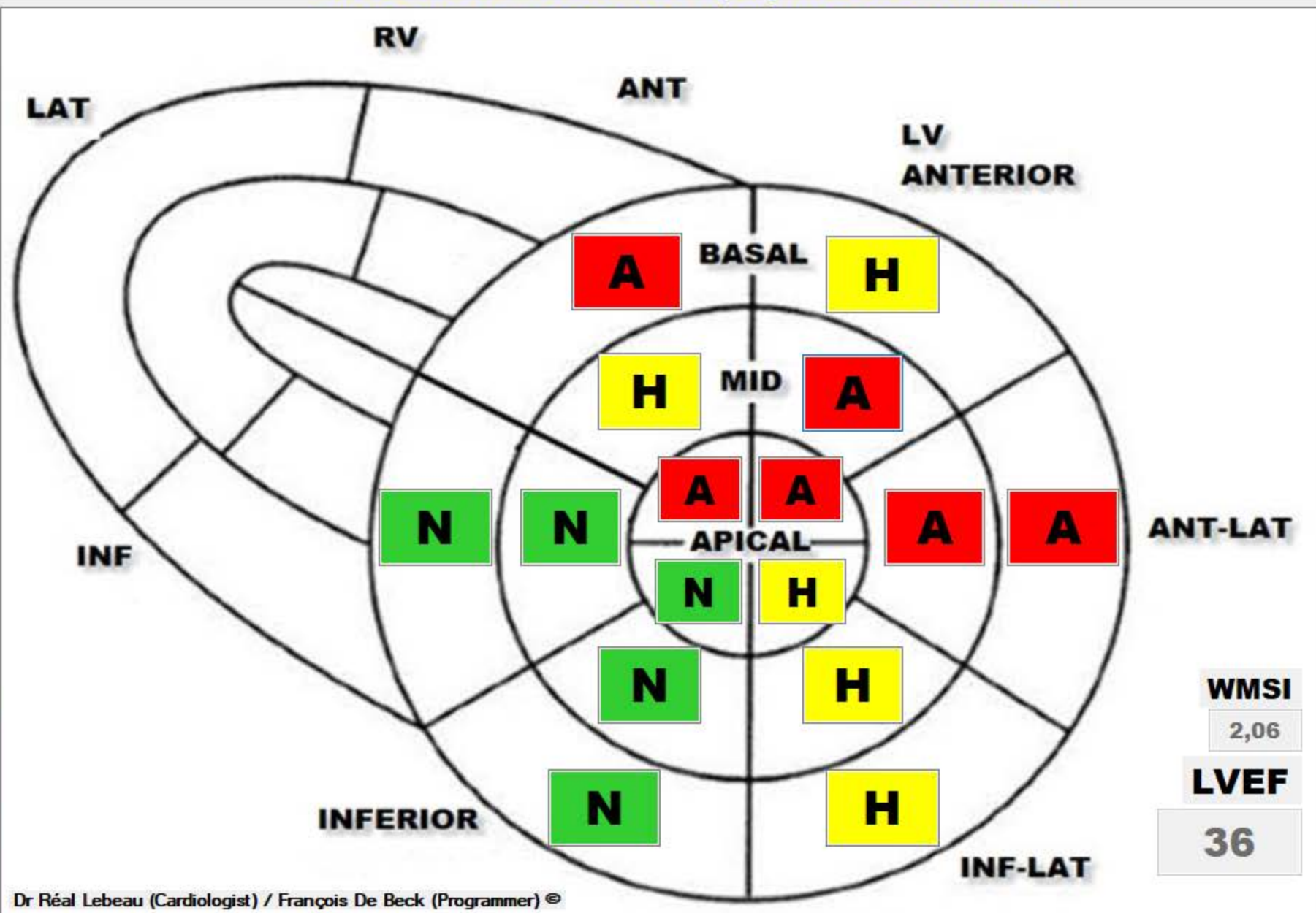
ECG.: your conclusion...



ECG.: Lateral injury and possible old anteroseptal infarction

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-03
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-03

Left Ventricle

Basal #1	2
Basal #2	3
Basal #3	2
Basal #4	1
Basal #5	1
Basal #6	3
Mid #7	3
Mid #8	3
Mid #9	2
Mid #10	1
Mid #11	1
Mid #12	2
Apical #13	3
Apical #14	2
Apical #15	1
Apical #16	3

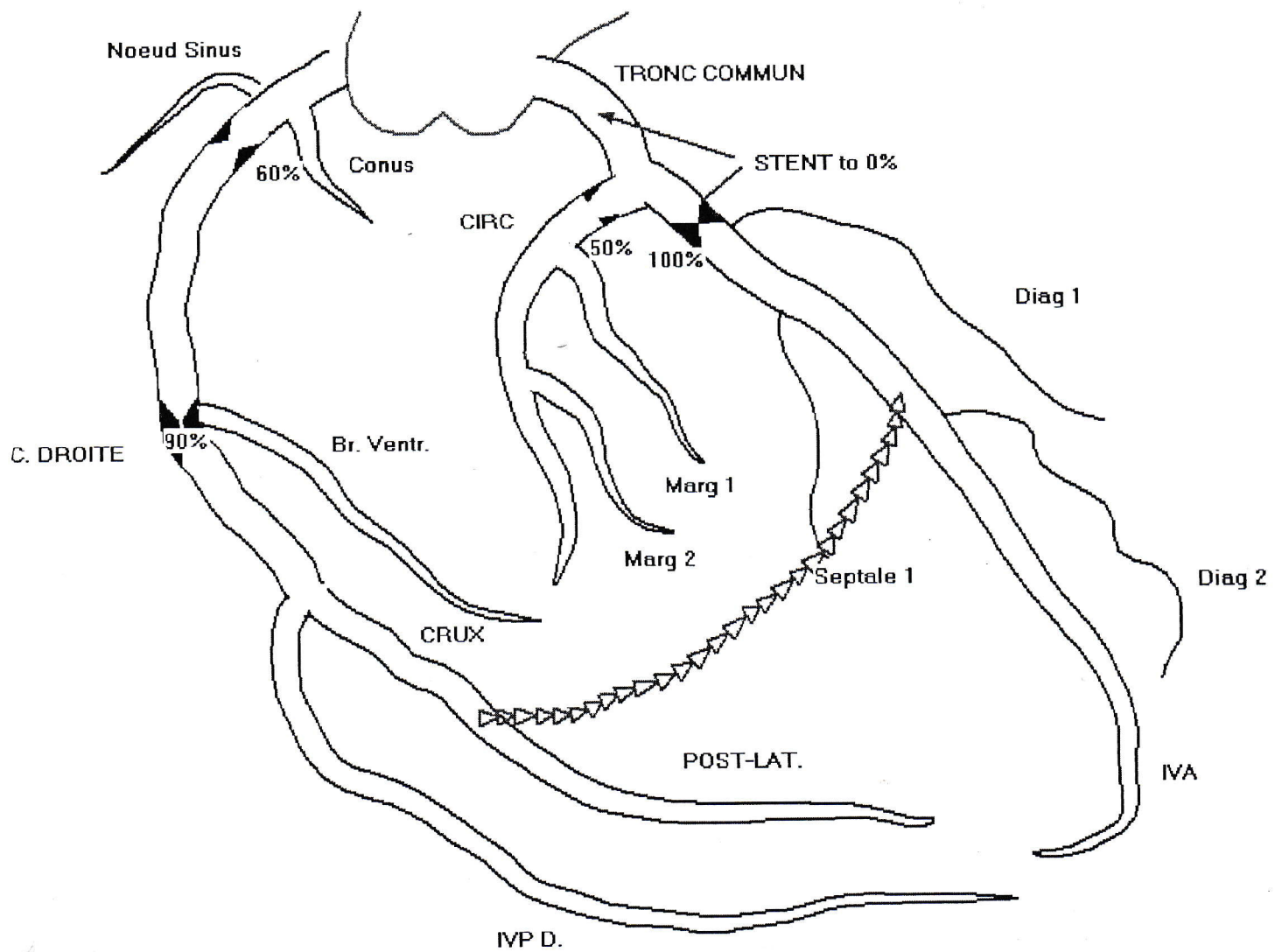
WMSI
2,06

LVEF
36

WMSI=(Score 16 segments)/16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98
 Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

No 28

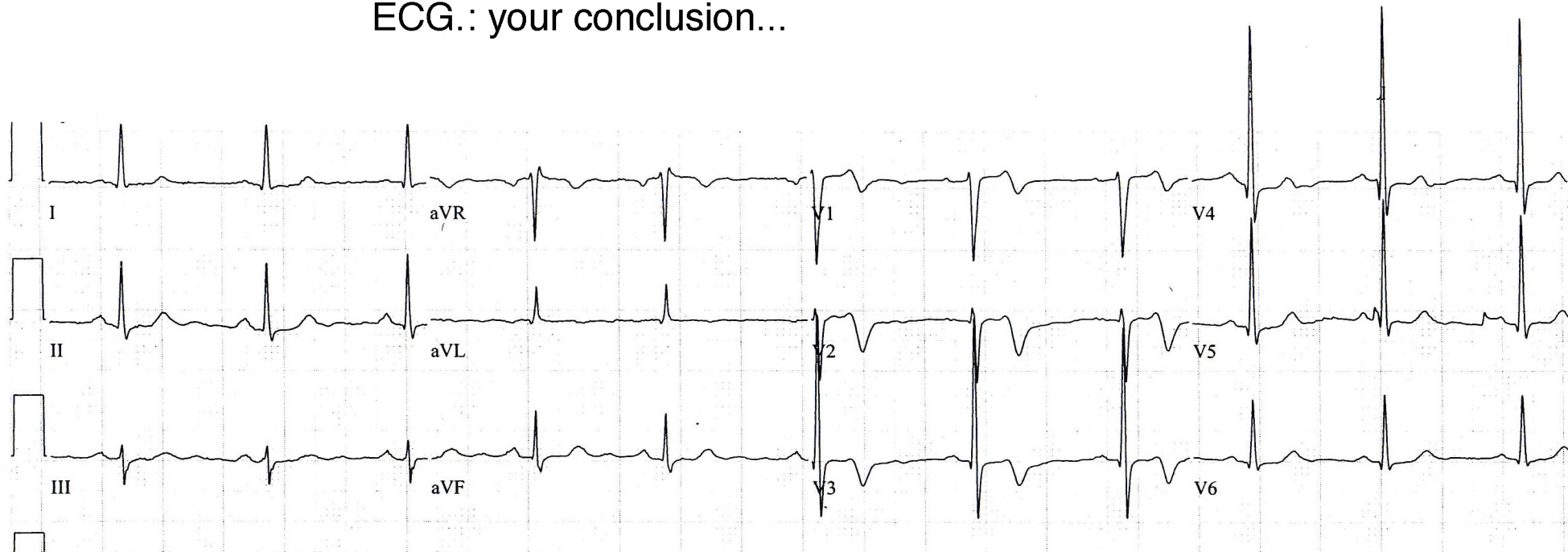
Coron.: Acute occlusion of LAD stented.



No 29

M 58y . Myocardial infarction

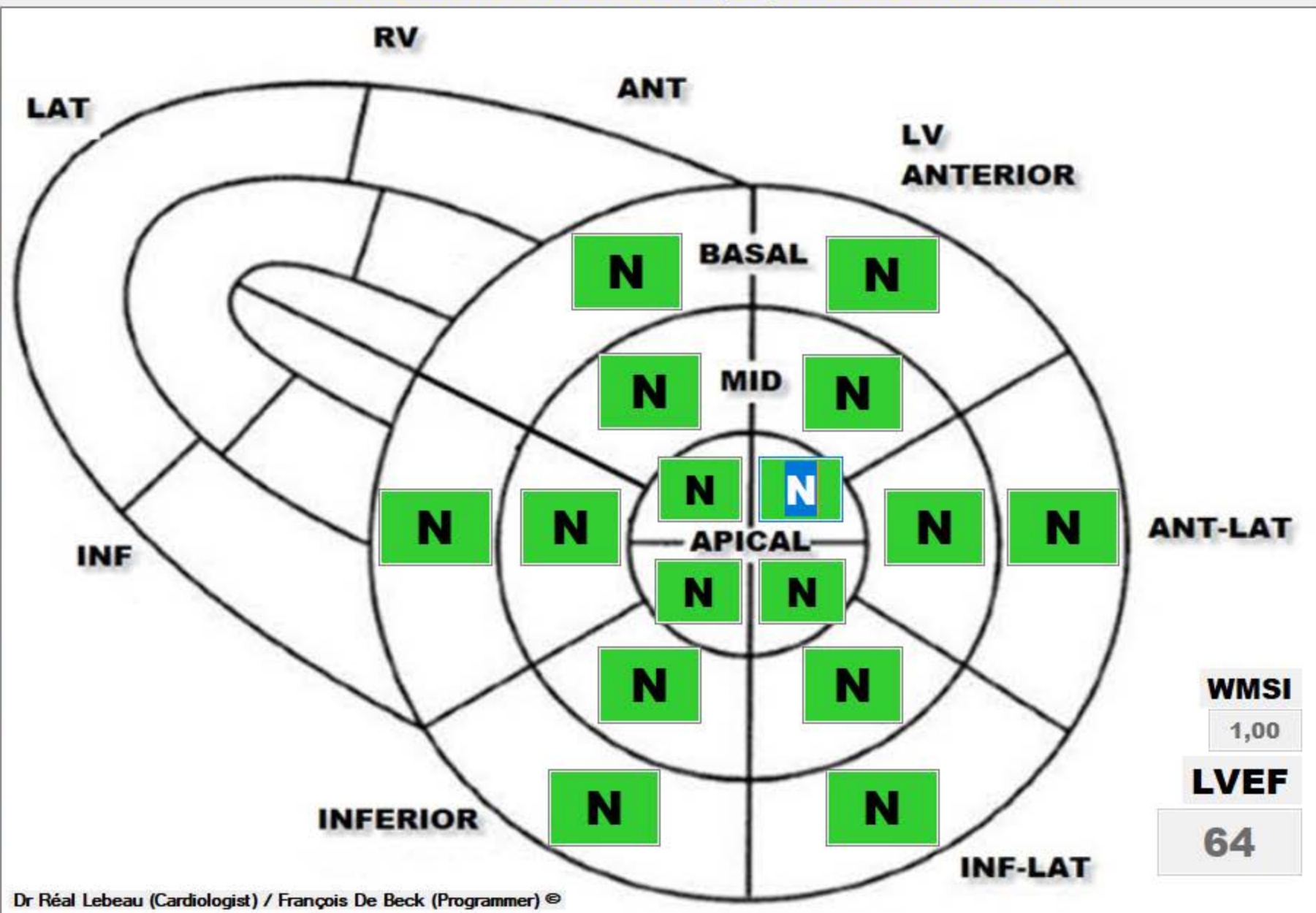
ECG.: your conclusion...



ECG.: anterior ischemia

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-03
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-03

Left Ventricle

Basal #1	1
Basal #2	1
Basal #3	1
Basal #4	1
Basal #5	1
Basal #6	1
Mid #7	1
Mid #8	1
Mid #9	1
Mid #10	1
Mid #11	1
Mid #12	1
Apical #13	1
Apical #14	1
Apical #15	1
Apical #16	1

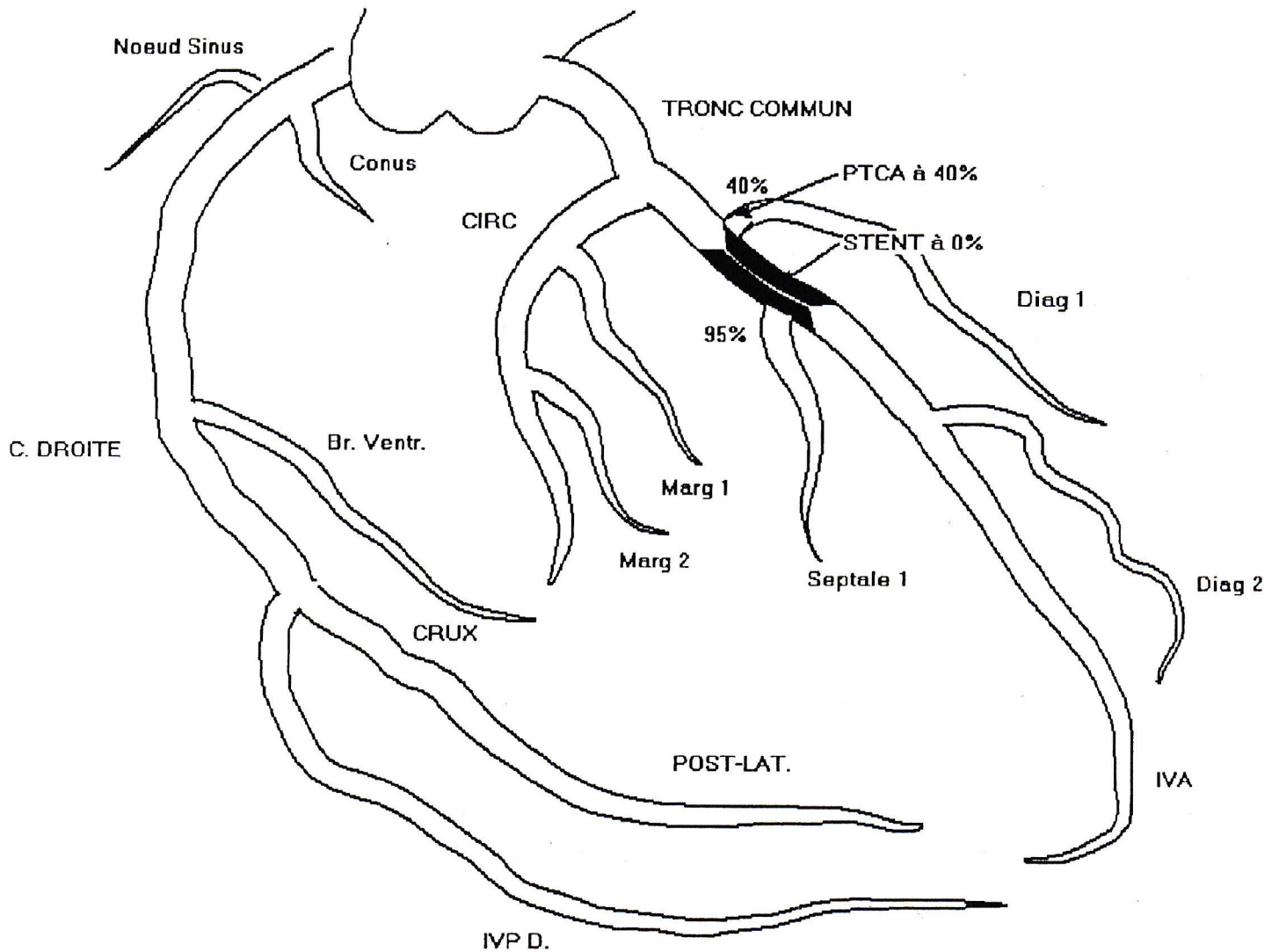
WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98
 Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

WMSI
1,00

LVEF
64

No 29

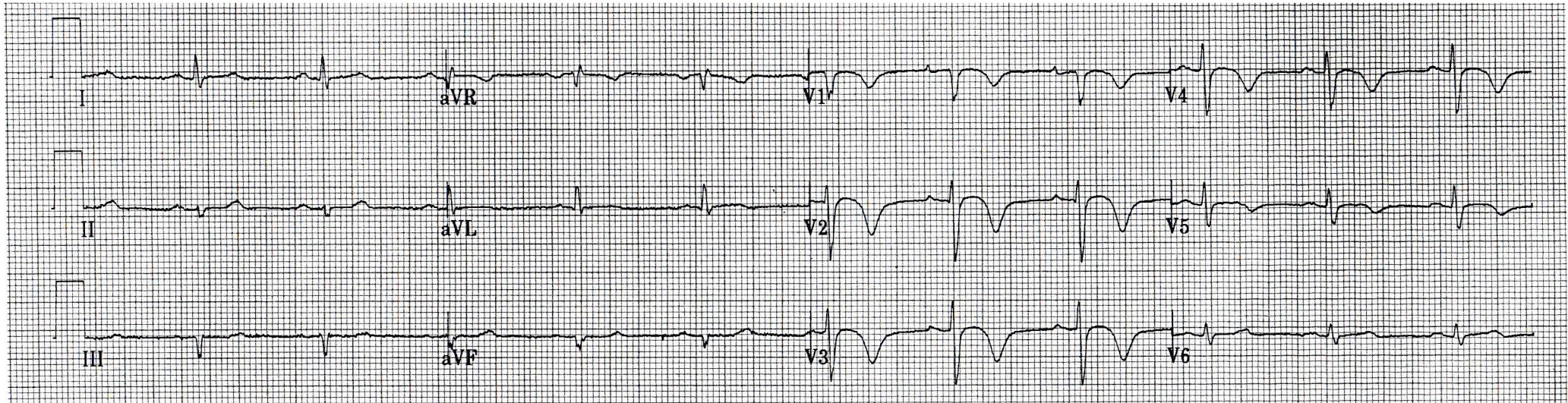
Coron.: Subtotal LAD stenosis stented.



No 30

M 72y. Myocardial infarction

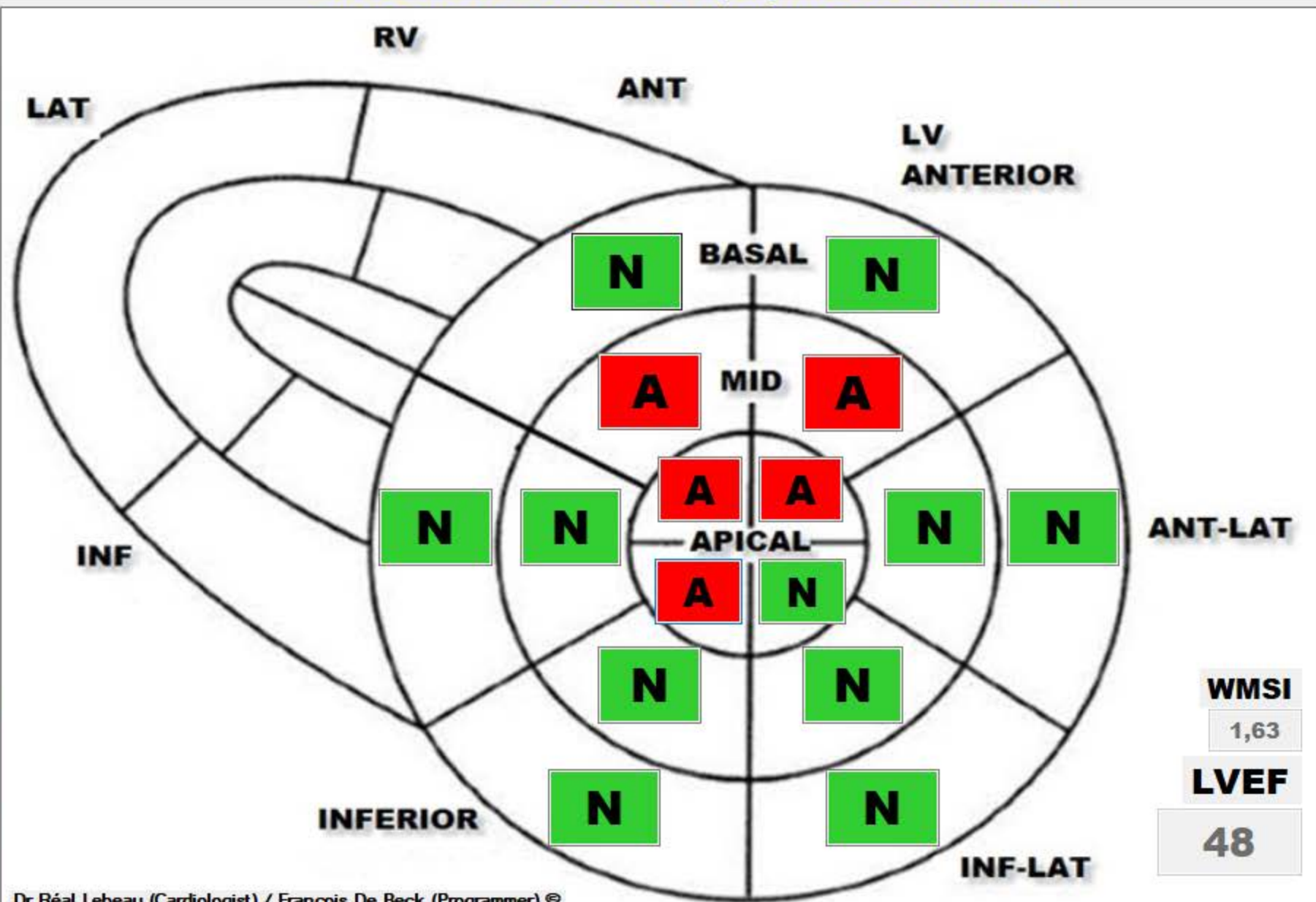
ECG.: your conclusion...



ECG.: anterior ischemia

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-03
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-03

Left Ventricle

Basal #1	1
Basal #2	1
Basal #3	1
Basal #4	1
Basal #5	1
Basal #6	1
Mid #7	3
Mid #8	1
Mid #9	1
Mid #10	1
Mid #11	1
Mid #12	3
Apical #13	3
Apical #14	1
Apical #15	3
Apical #16	3

WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

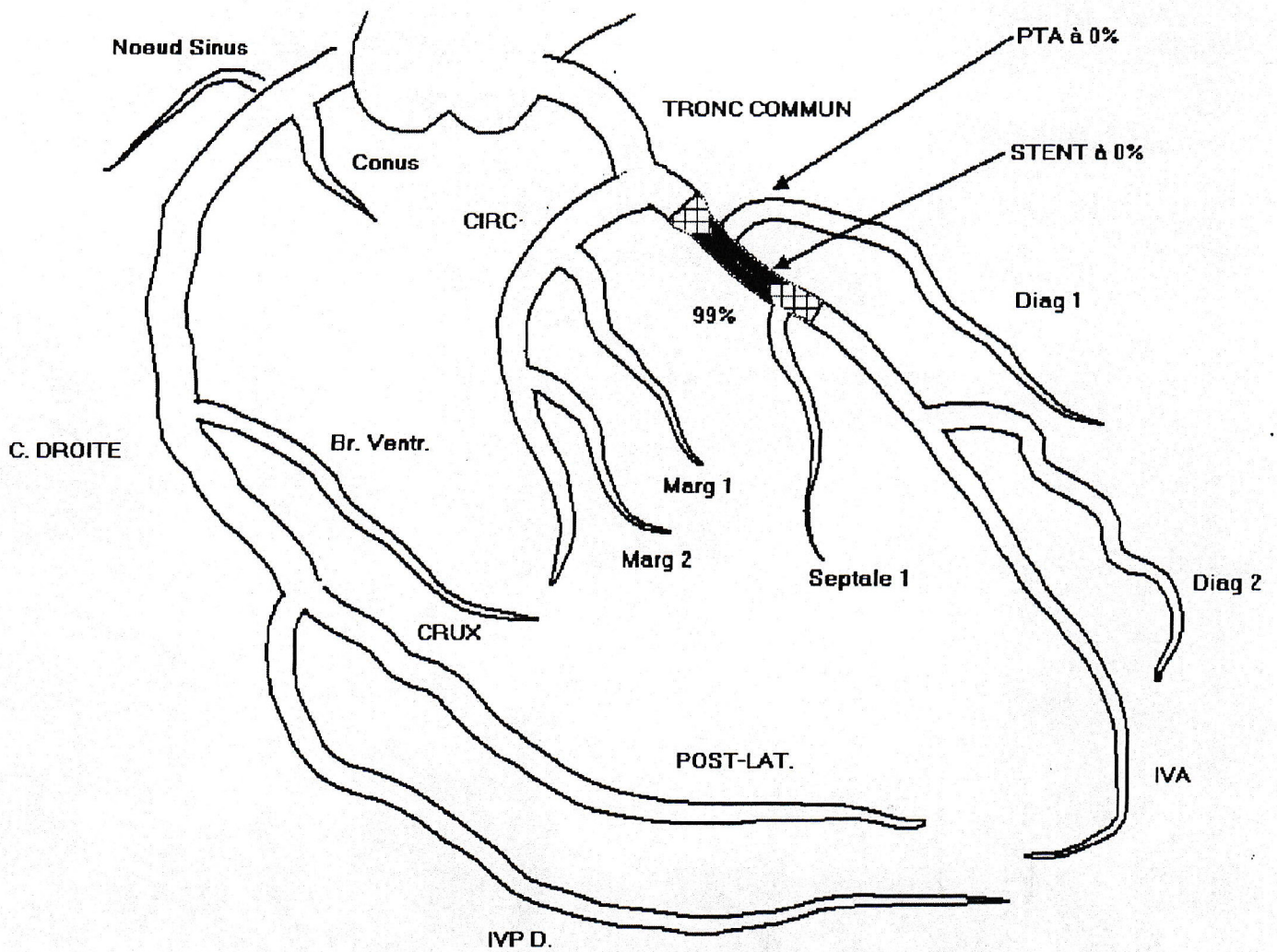
Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

WMSI
1,63

LVEF
48

No 30

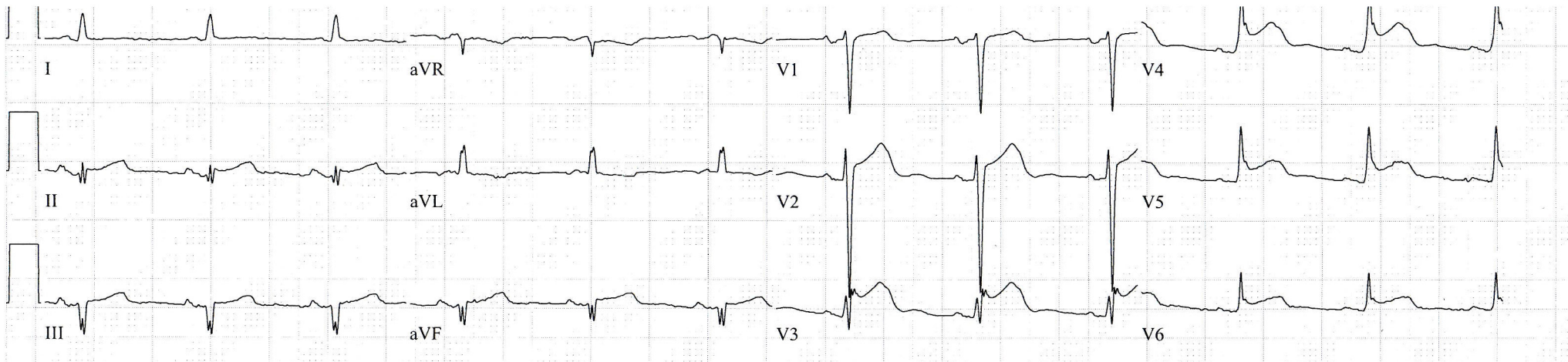
Coron.: subtotal occlusion of LAD stented.



No 31

F 71y. Stress Cardiomyopathy

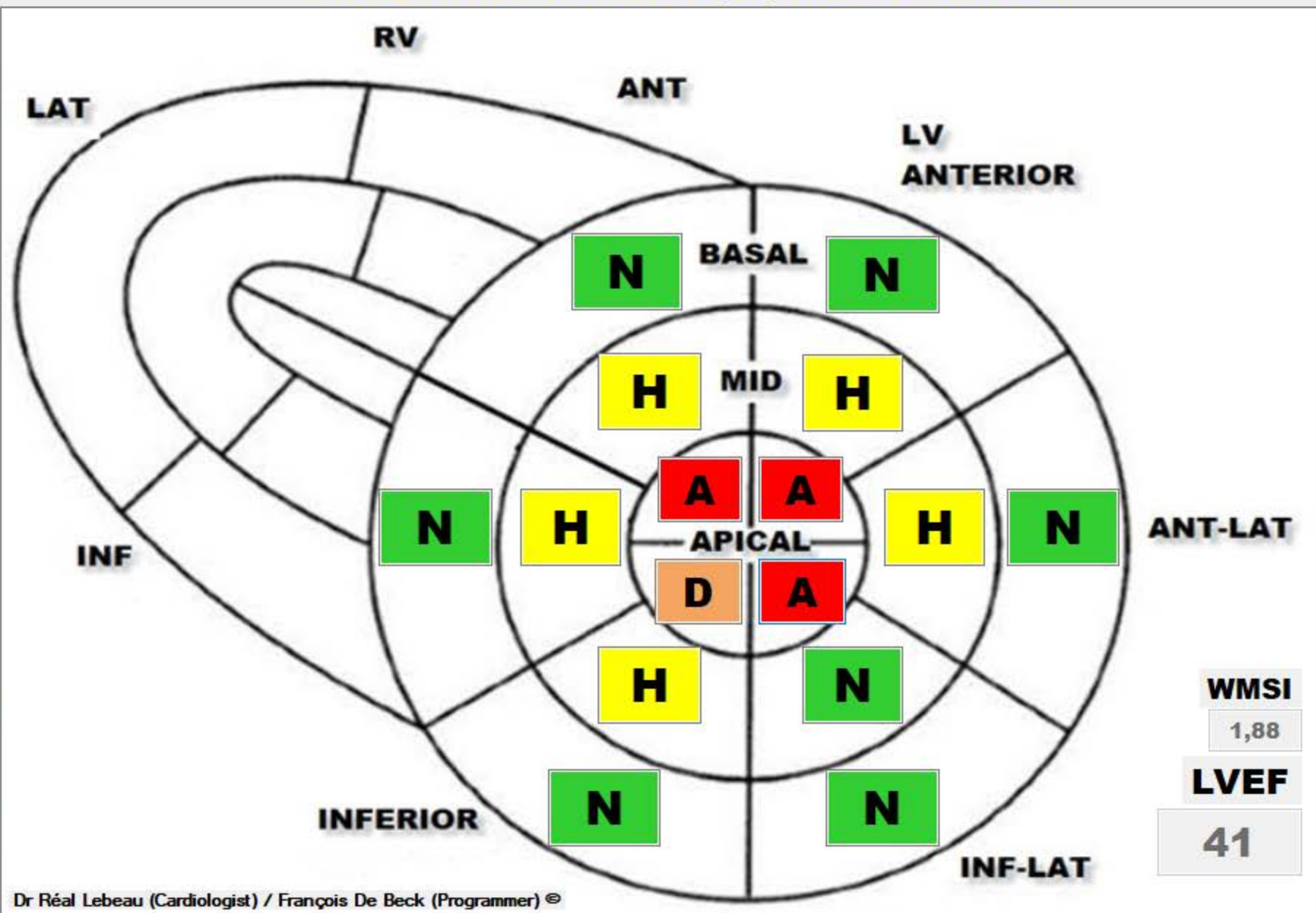
ECG.: your conclusion...



ECG .: Anterior and inferior injury

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-03
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-03

Left Ventricle

Basal #1	1
Basal #2	1
Basal #3	1
Basal #4	1
Basal #5	1
Basal #6	1
Mid #7	2
Mid #8	2
Mid #9	1
Mid #10	2
Mid #11	2
Mid #12	2
Apical #13	3
Apical #14	3
Apical #15	4
Apical #16	3

WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

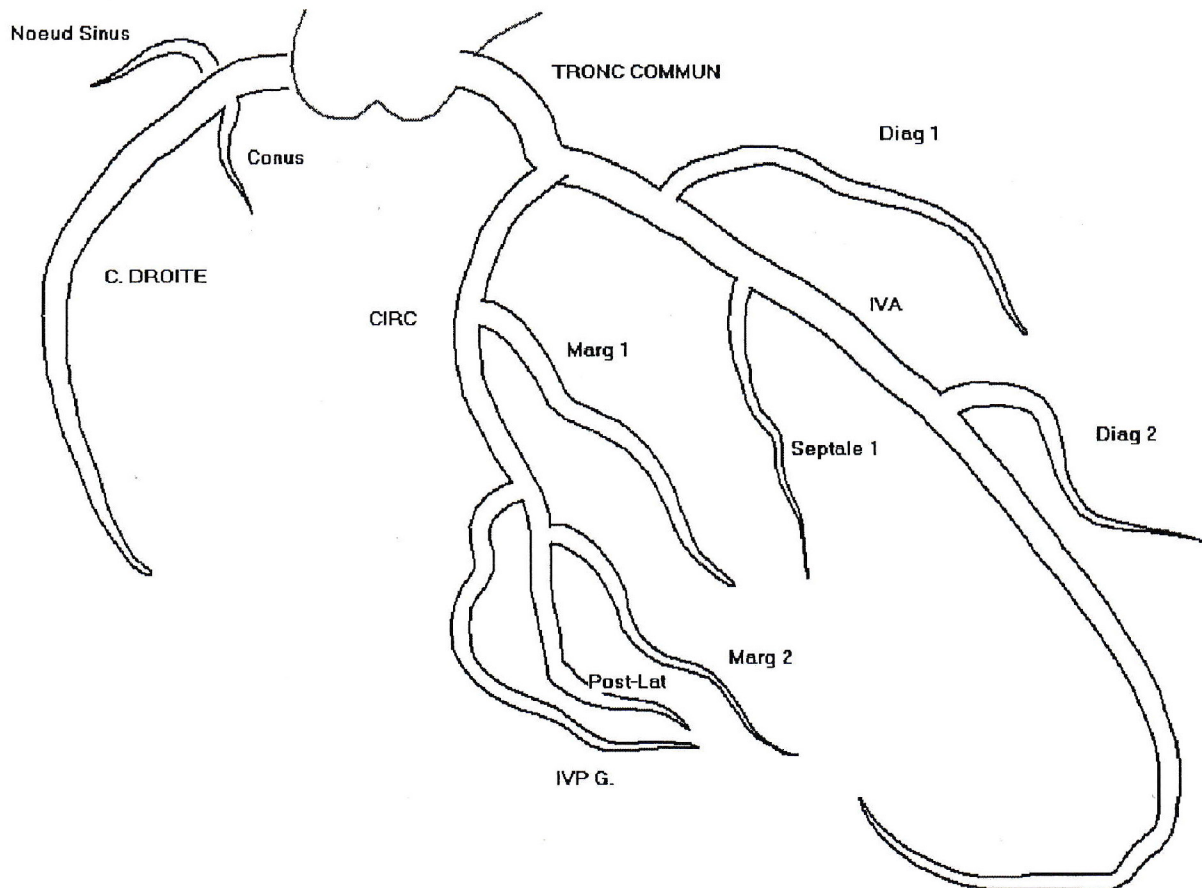
WMSI
1,88

LVEF
41

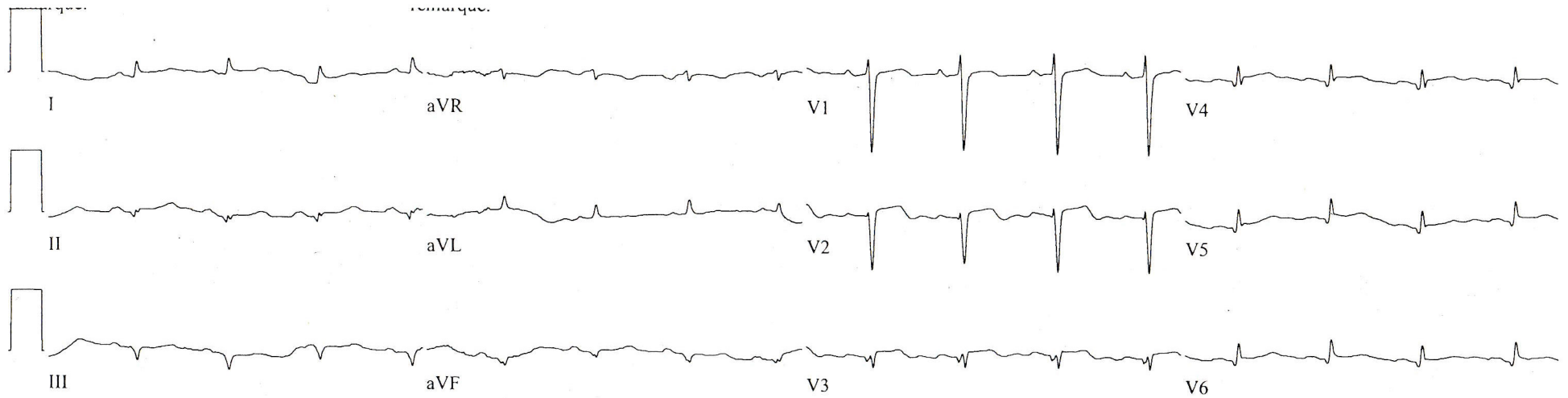
NO 31

Coron.: Normal

(Stress cardiomyopathy (Takotsubo))



No 32
F 67y. Myocardial infarction
ECG.: your conclusion...



ECG.: possible recent inferior and anterior infarction

Close

LVEF by Classical Wall Motion Score

LVEF by 16 EF Score

Right Ventricle

Colors

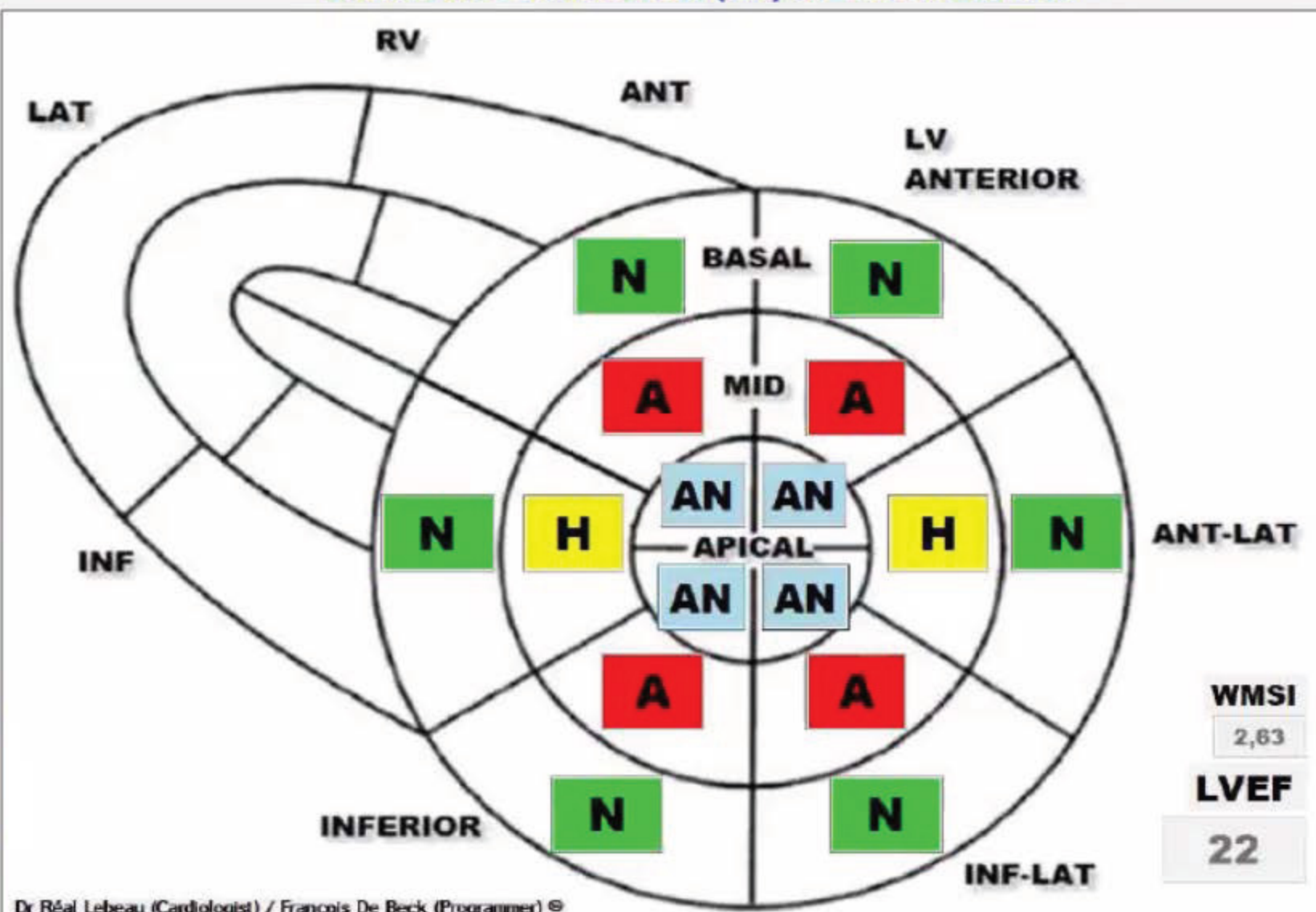
Numeric Scores

Medical Report

About

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE:

NAME:

SURNAME:

BIRTH DATE:

Left Ventricle

Basal #1	1
Basal #2	1
Basal #3	1
Basal #4	1
Basal #5	1
Basal #6	1
Mid #7	3
Mid #8	2
Mid #9	3
Mid #10	3
Mid #11	2
Mid #12	3
Apical #13	5
Apical #14	5
Apical #15	5
Apical #16	5

Dx.:
Mid anterior infarction
and apical aneurism

WMSI
2,83

LVEF
22

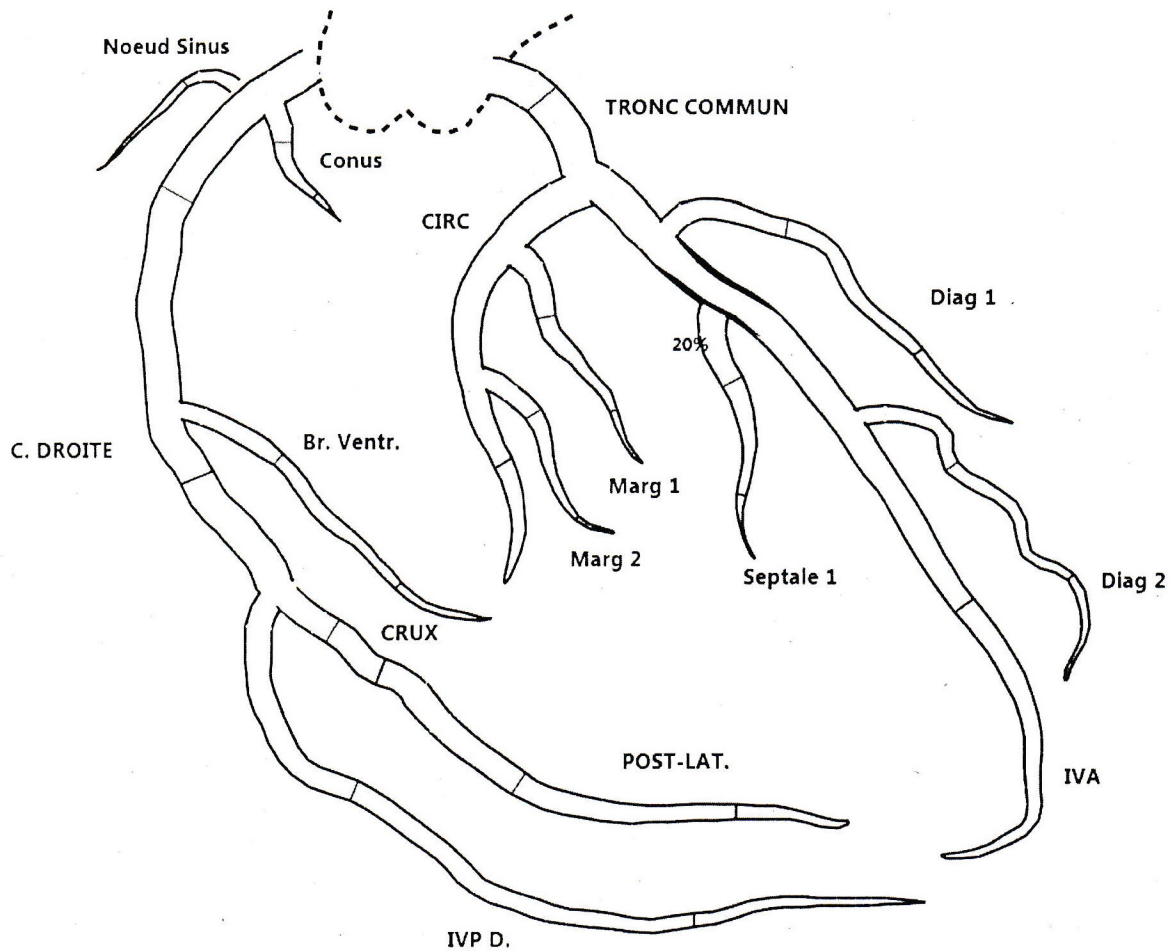
WMSI = (Score 16 segments) / 16
LVEF = 90 - (20 * WMSI)
Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2):91-98

Right WMSI = (Score right 8 segments) / 8
RVEF = 73.07 - (20.7 * WMSI)
Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

No 32

Coron.: Normal

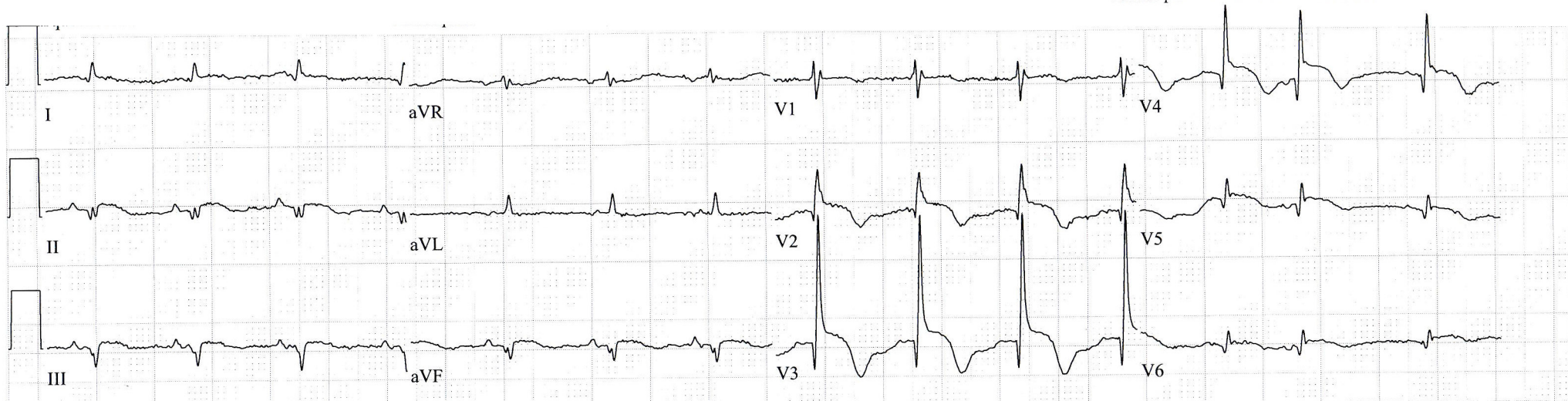
(Stress cardiomyopathy (Takotsubo))



No 33

F 89y. Myocardial infarction

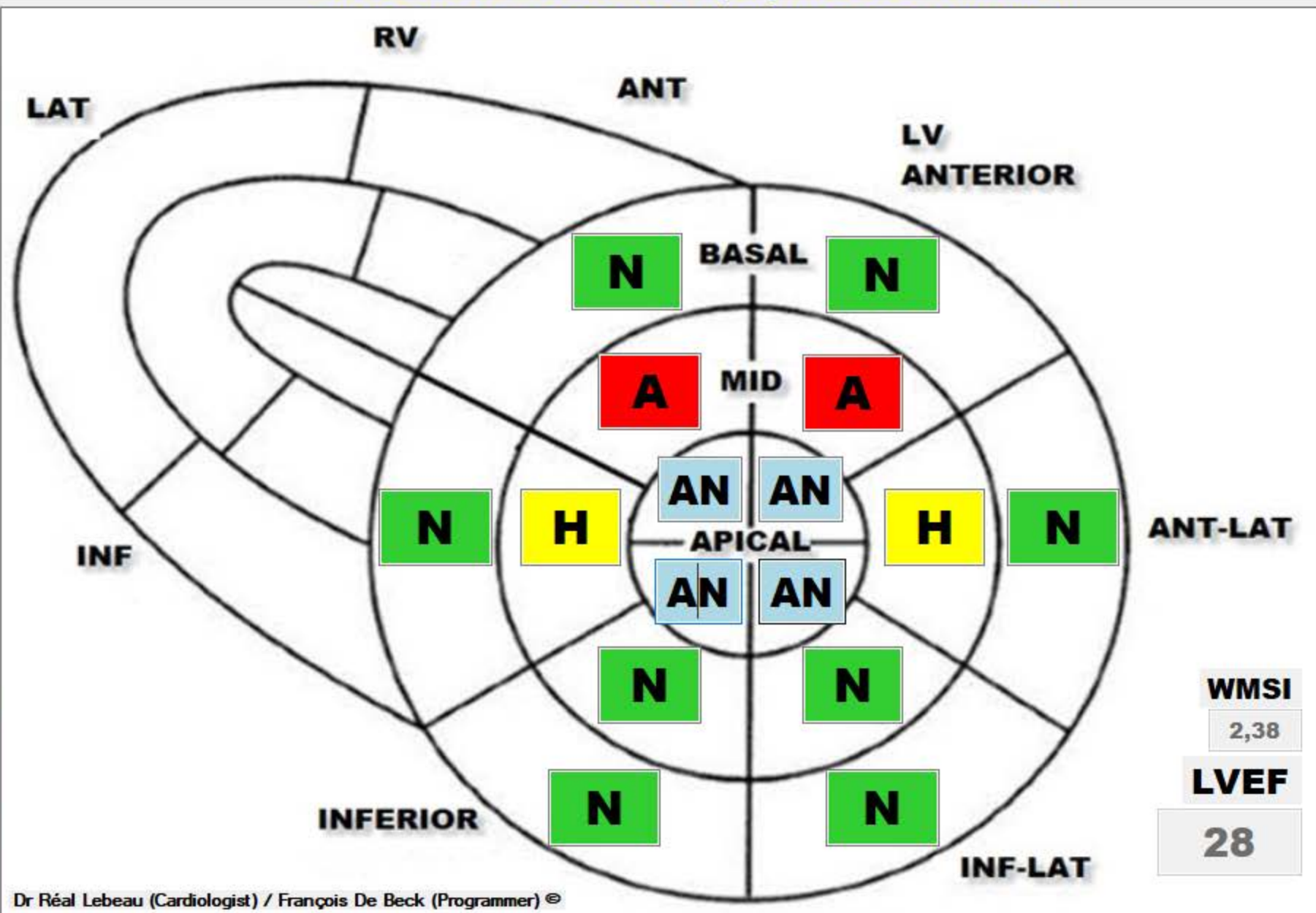
ECG.: your conclusion...



ECG.: Acute anterior and indeterminate age inferior infarction

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-03
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-03

Left Ventricle

Basal #1	1
Basal #2	1
Basal #3	1
Basal #4	1
Basal #5	1
Basal #6	1
Mid #7	3
Mid #8	2
Mid #9	1
Mid #10	1
Mid #11	2
Mid #12	3
Apical #13	5
Apical #14	5
Apical #15	5
Apical #16	5

WMSI
2,38

LVEF
28

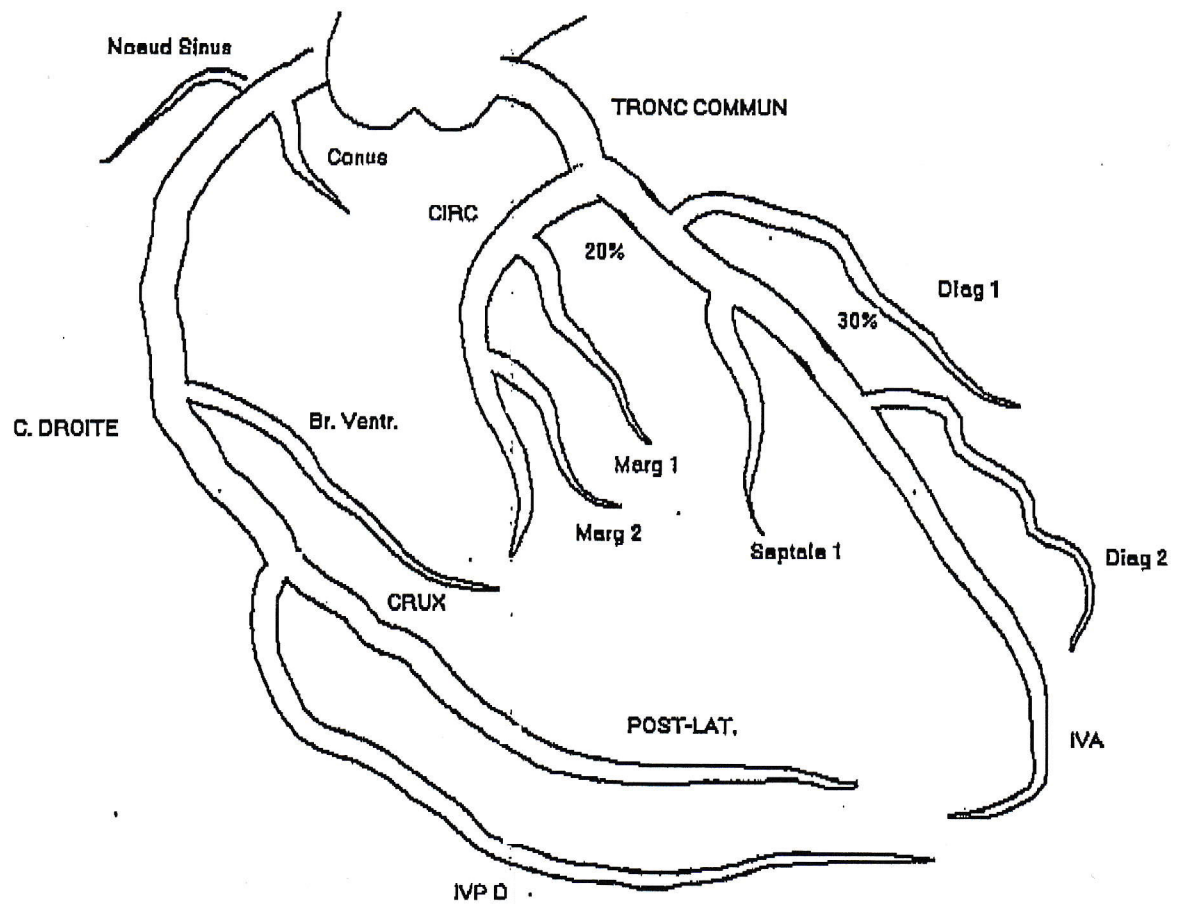
WMSI=(Score 16 segments)/16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

No 33

Coron.:Normal

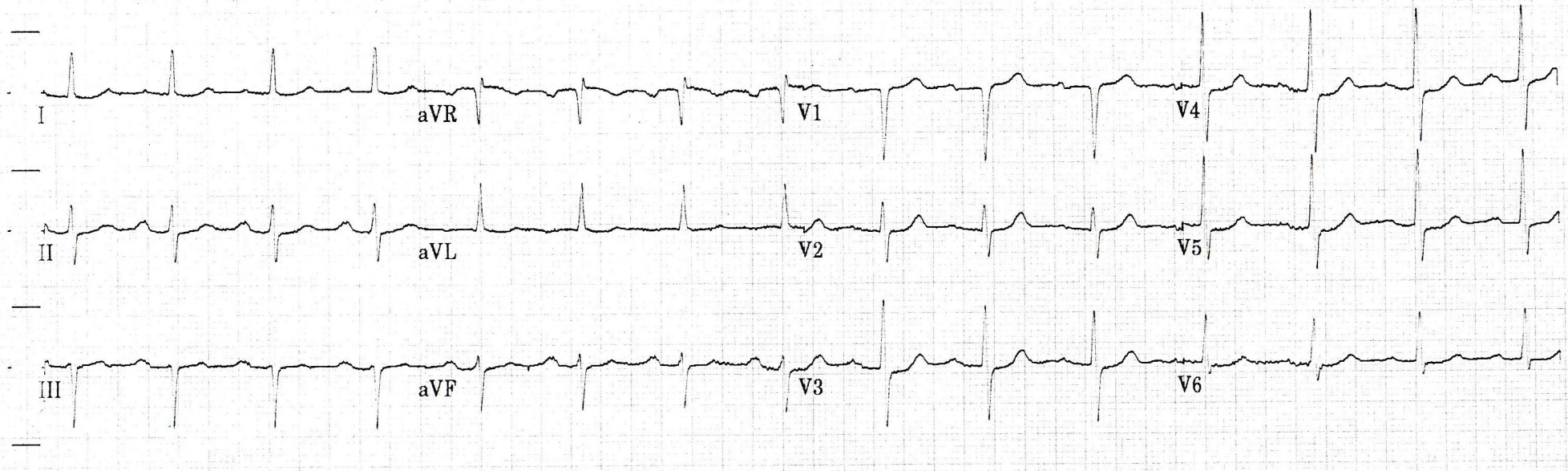
(Stress cardiomyopathy (Takotsubo))



No 34

M 72y . NSTEMI.

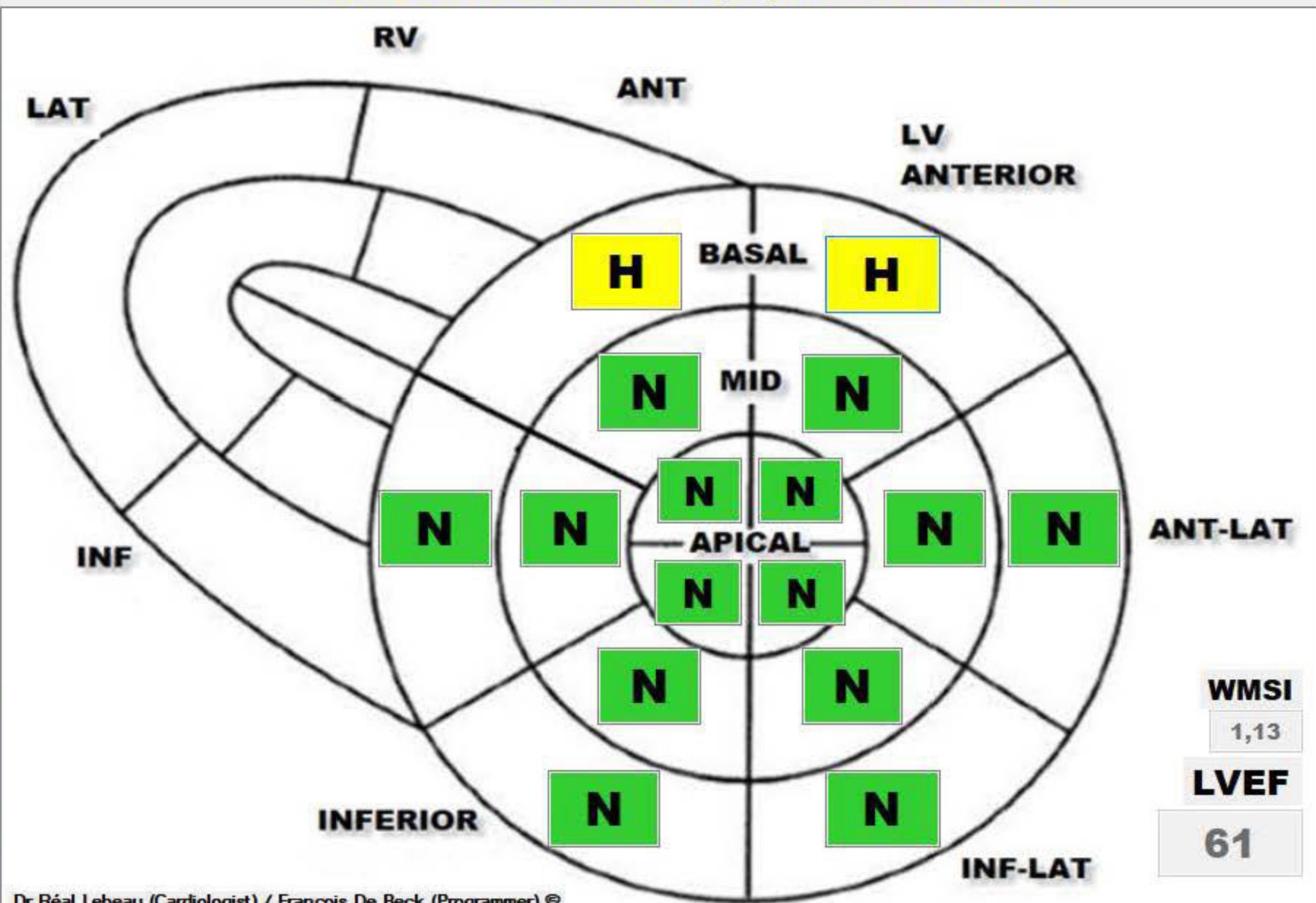
ECG.: your conclusion...



ECG.: Normal

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE:

NAME:

SURNAME:

BIRTH DATE:

Left Ventricle

Basal #1	2
Basal #2	1
Basal #3	1
Basal #4	1
Basal #5	1
Basal #6	2
Mid #7	1
Mid #8	1
Mid #9	1
Mid #10	1
Mid #11	1
Mid #12	1
Apical #13	1
Apical #14	1
Apical #15	1
Apical #16	1

Dx.:
Non specific basal anterior hypokinesia

WMSI

1,13

LVEF

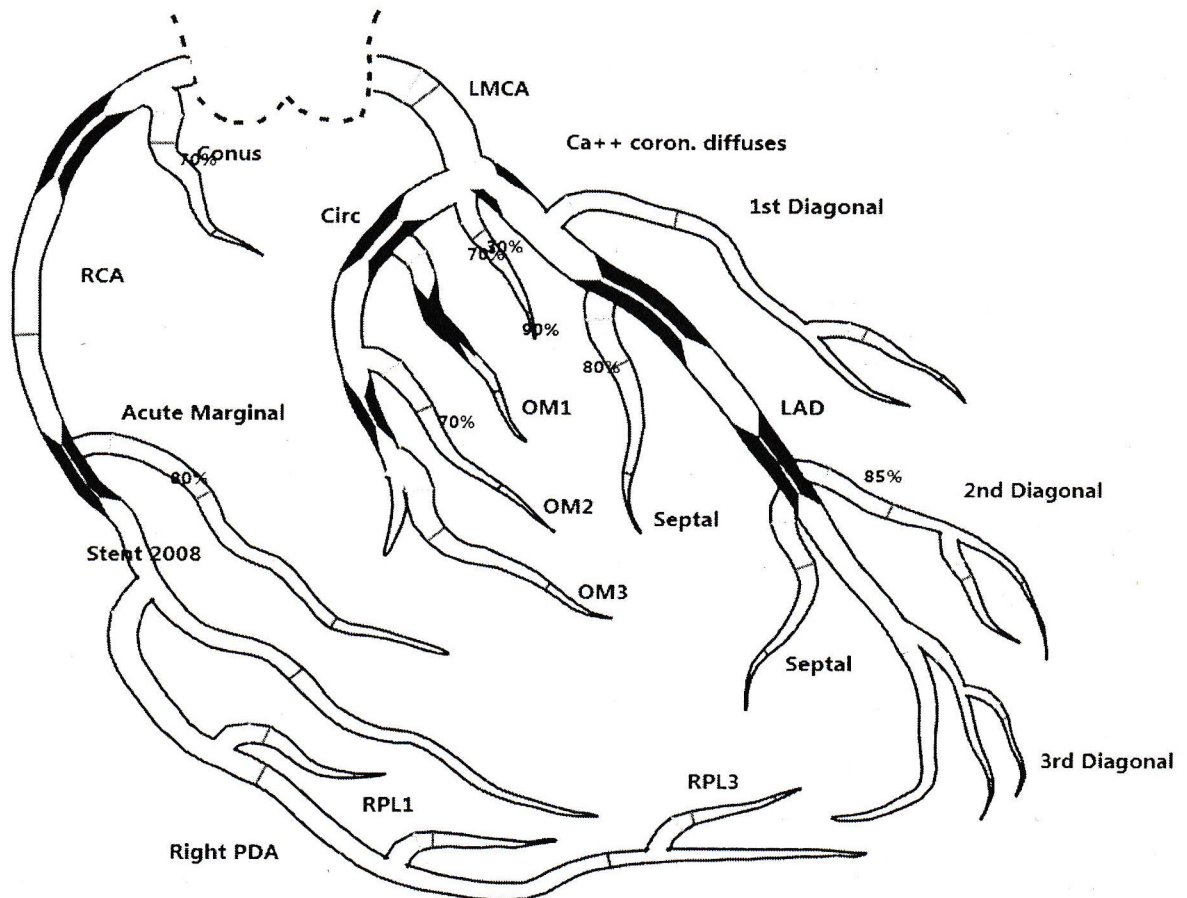
61

WMSI=(Score 16 segments)/16
LVEF = 90 - (26 * WMSI)
Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

Right WMSI = (Score right 8 segments) / 8
RVEF = 73.07 - (20.7 * WMSI)
Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

No 34

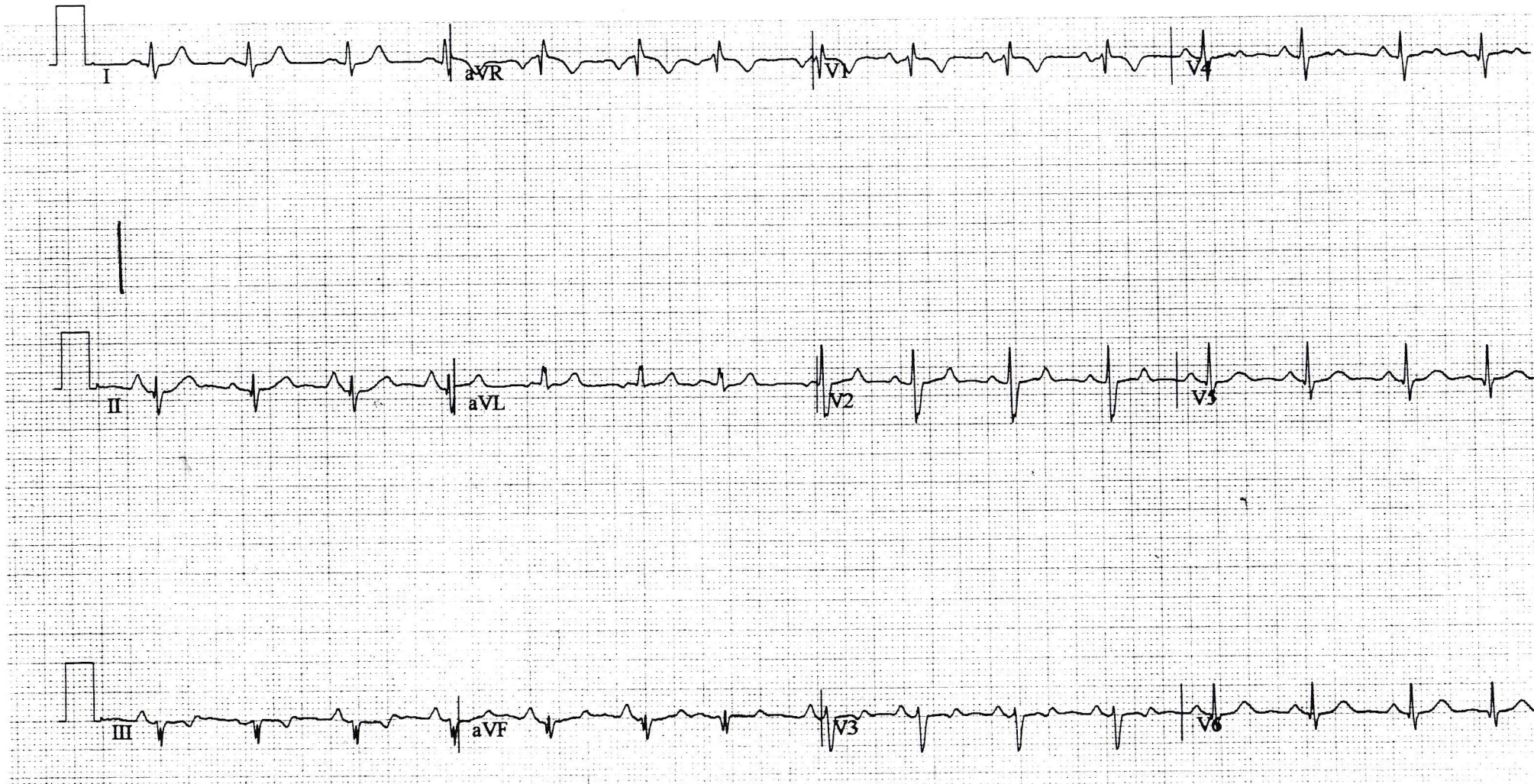
Coron.: 3 vessels disease with ecg and echo normal



No 35

M 56y. Atypical chest pain . Stress test positive

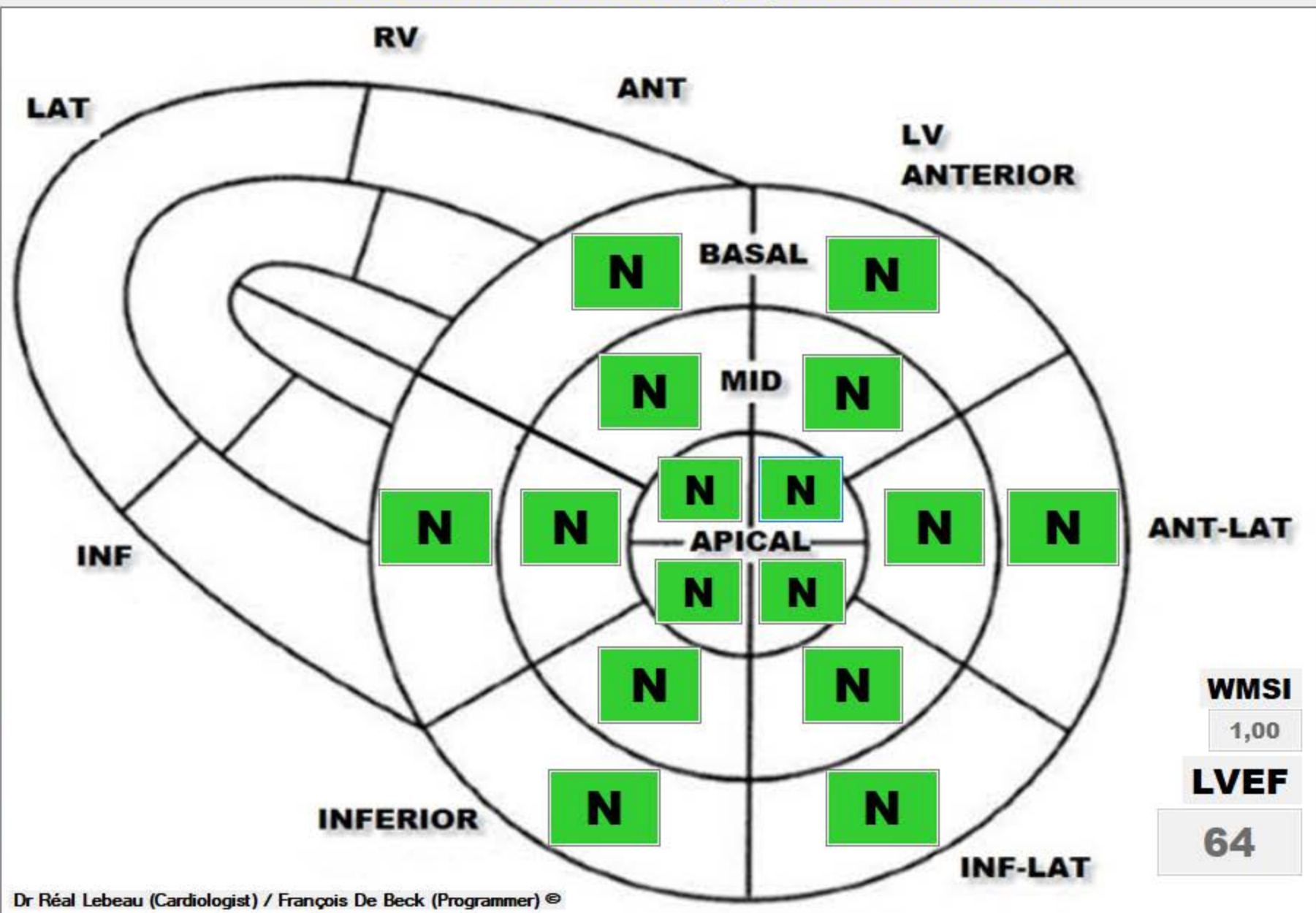
ECG.: your conclusion...



ECG.: Incomplete RBBB limit of the normal

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-04
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-04

Left Ventricle

Basal #1	1
Basal #2	1
Basal #3	1
Basal #4	1
Basal #5	1
Basal #6	1
Mid #7	1
Mid #8	1
Mid #9	1
Mid #10	1
Mid #11	1
Mid #12	1
Apical #13	1
Apical #14	1
Apical #15	1
Apical #16	1

WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

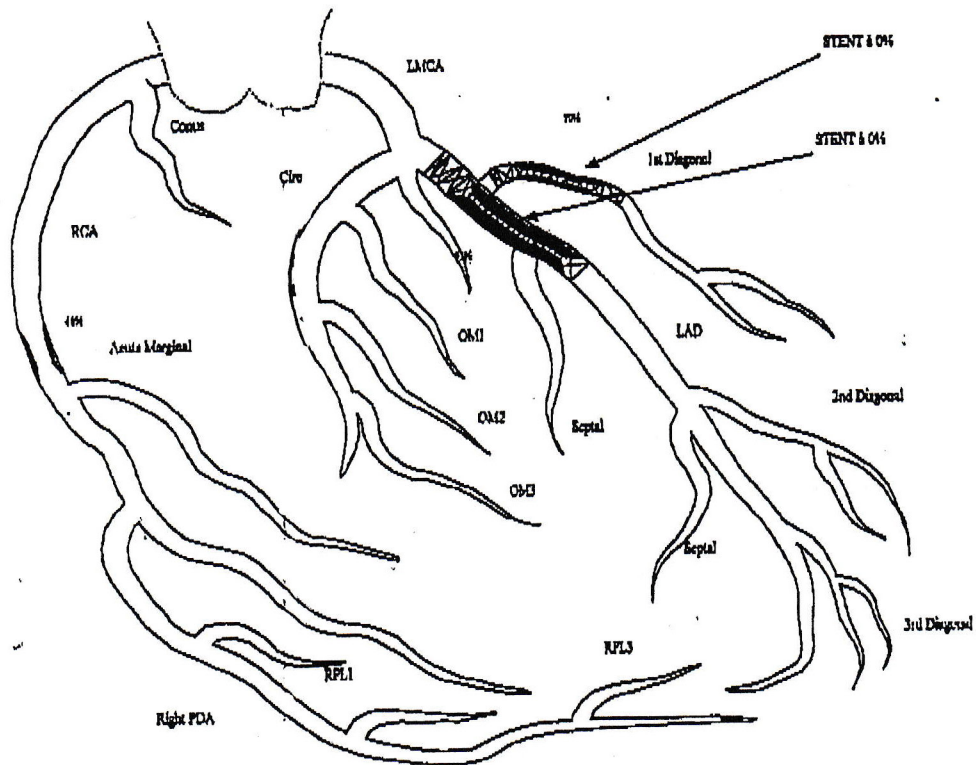
Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

WMSI
1,00

LVEF
64

No 35

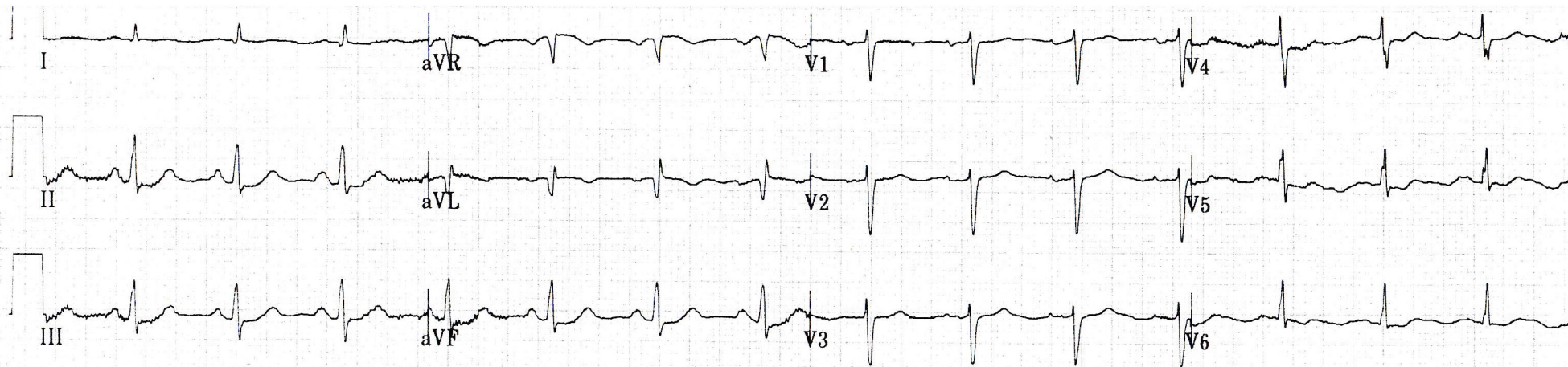
Coron.: Significant proximal LAD stenosis



No 36

F 68y. Myocardial infarction.

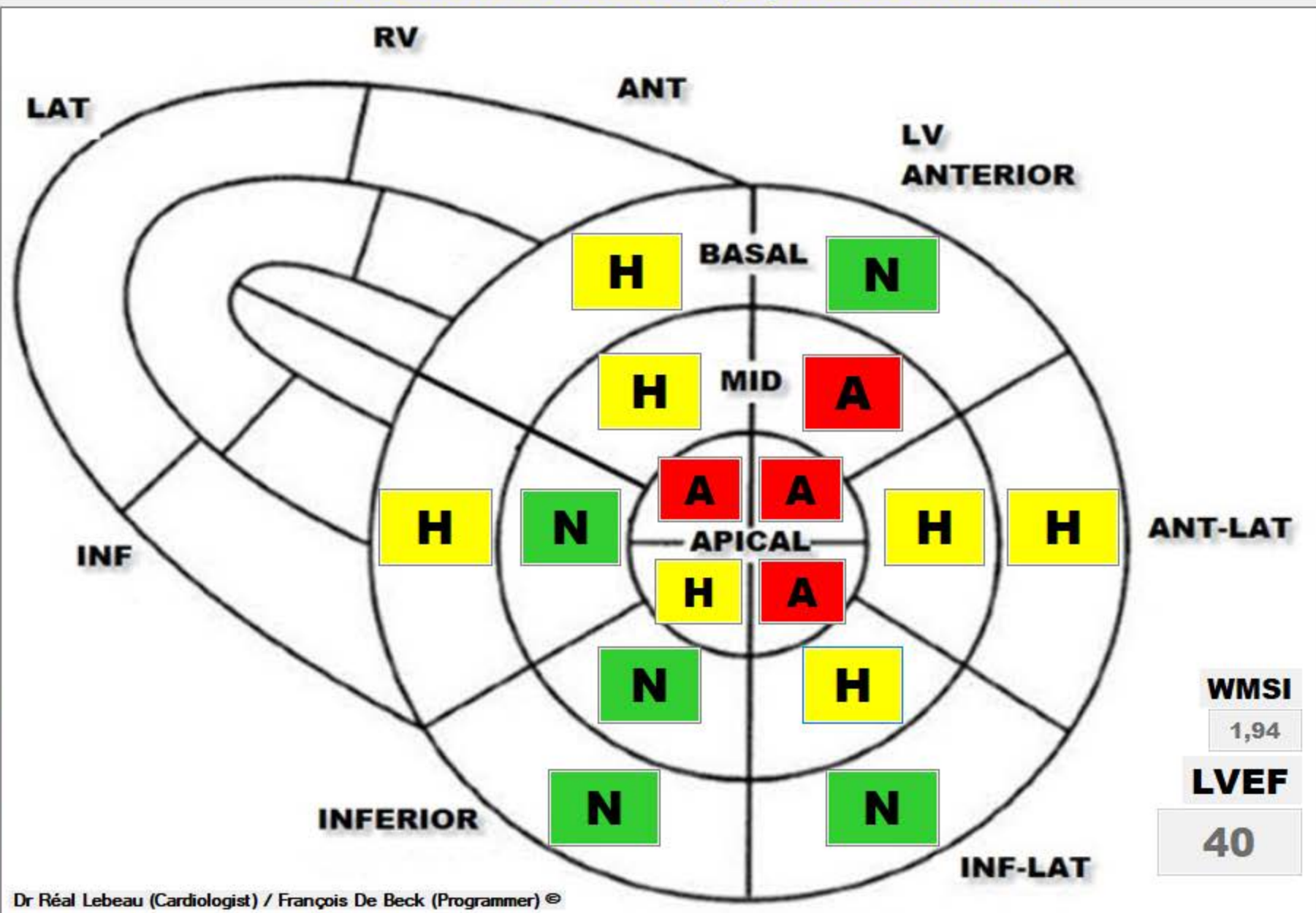
ECG.: your conclusion...



ECG.: Non specific ST change

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-04
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-04

Left Ventricle

Basal #1	1
Basal #2	2
Basal #3	1
Basal #4	1
Basal #5	2
Basal #6	2
Mid #7	3
Mid #8	2
Mid #9	2
Mid #10	1
Mid #11	1
Mid #12	2
Apical #13	3
Apical #14	3
Apical #15	2
Apical #16	3

WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

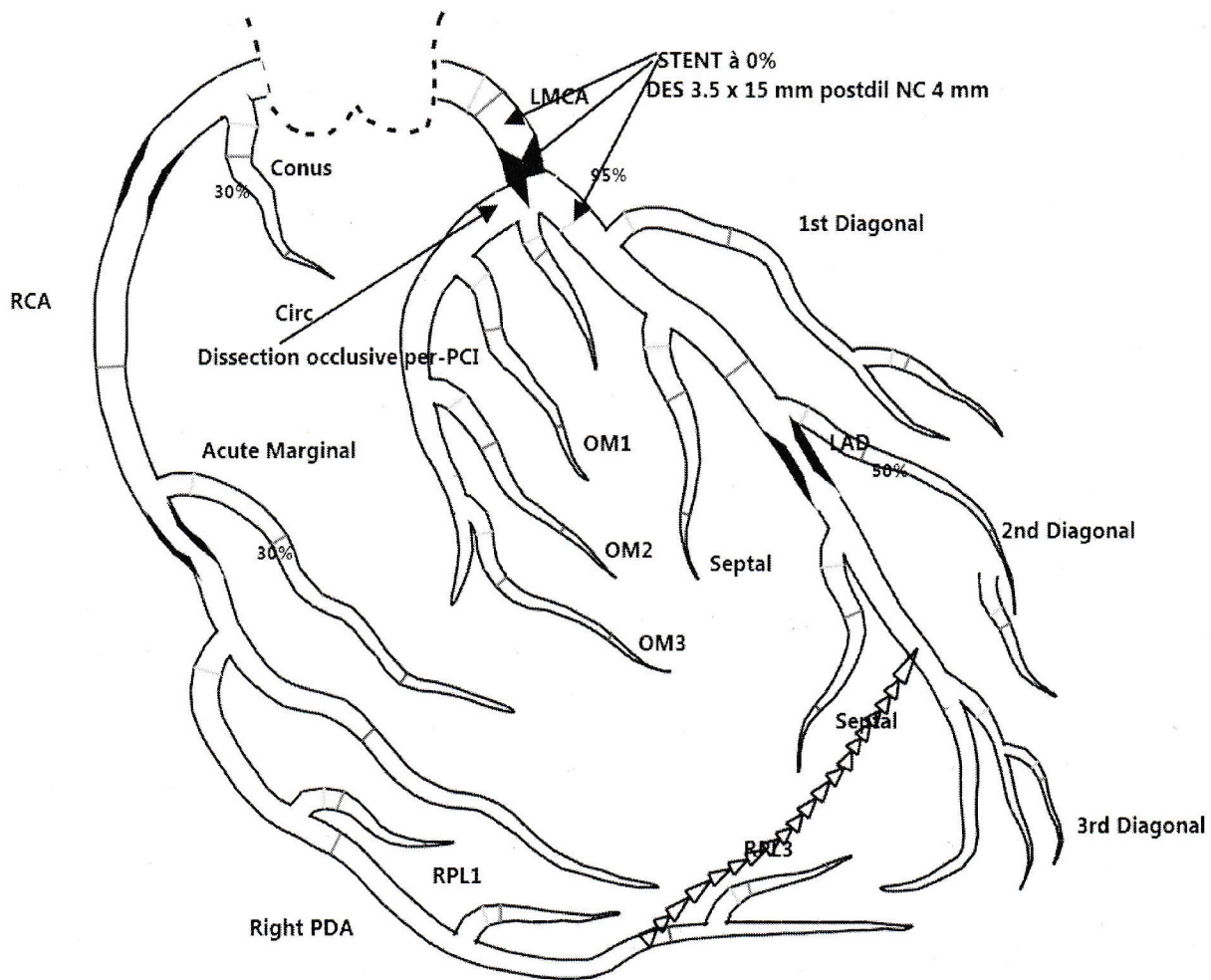
Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

WMSI
1,94

LVEF
40

No 36

Coron.: Subtotal stenosis of left main coronary artery.



LATERAL INFARCTION (Cx)

37	Acute post-lat-infarction
38	Acute infero-post-infarction
39	Acute post-lat-infarction
40	Acute infero-postero-lat infarction
41	Acute infero-postero-lat infarction
42	Acute infero-postero-lat infarction
43	Acute posterior infarction
44	Atypical acute infero-lateral infarction
45	Atypical acute infero-lateral infarction
46	ECG normal
47	ECG normal
48	Inferior Ischemia
49	Posterior Ischemia
50	Lateral Ischemia
51	Anterior Ischemia

UNUSUAL CASES

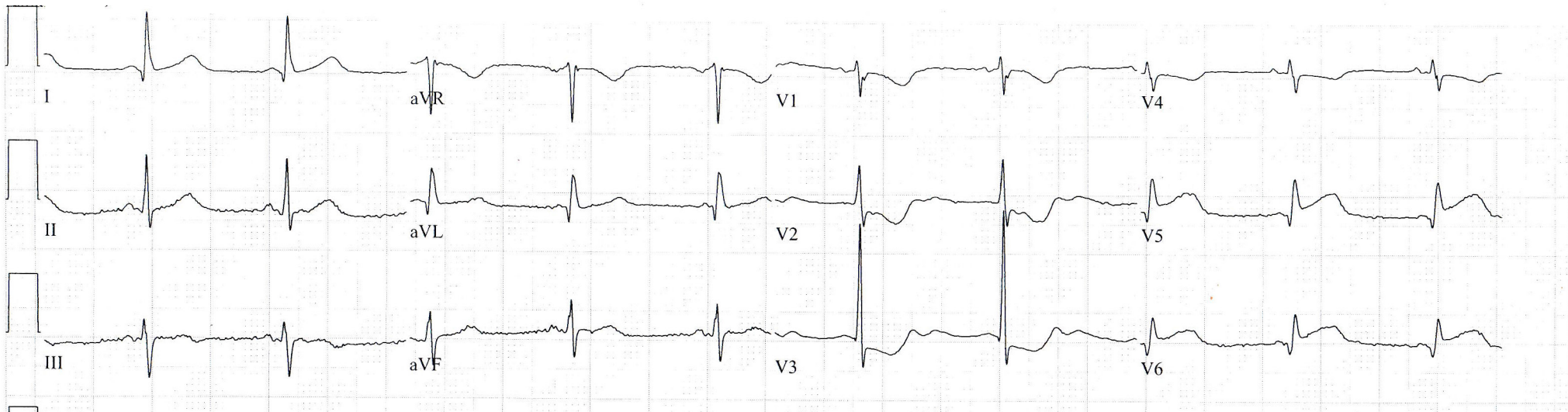
52	ECG normal
53	ECG normal
54	Left main coronary artery
55	Left main coronary artery
56	Left main coronary artery
57	CMP (cardiomyopathy)
58	CMP (cardiomyopathy)
59	Stress echo
60	Stress echo

N. B.: More quiz cases to come work in progress.

No37

F 82y. STEMI.

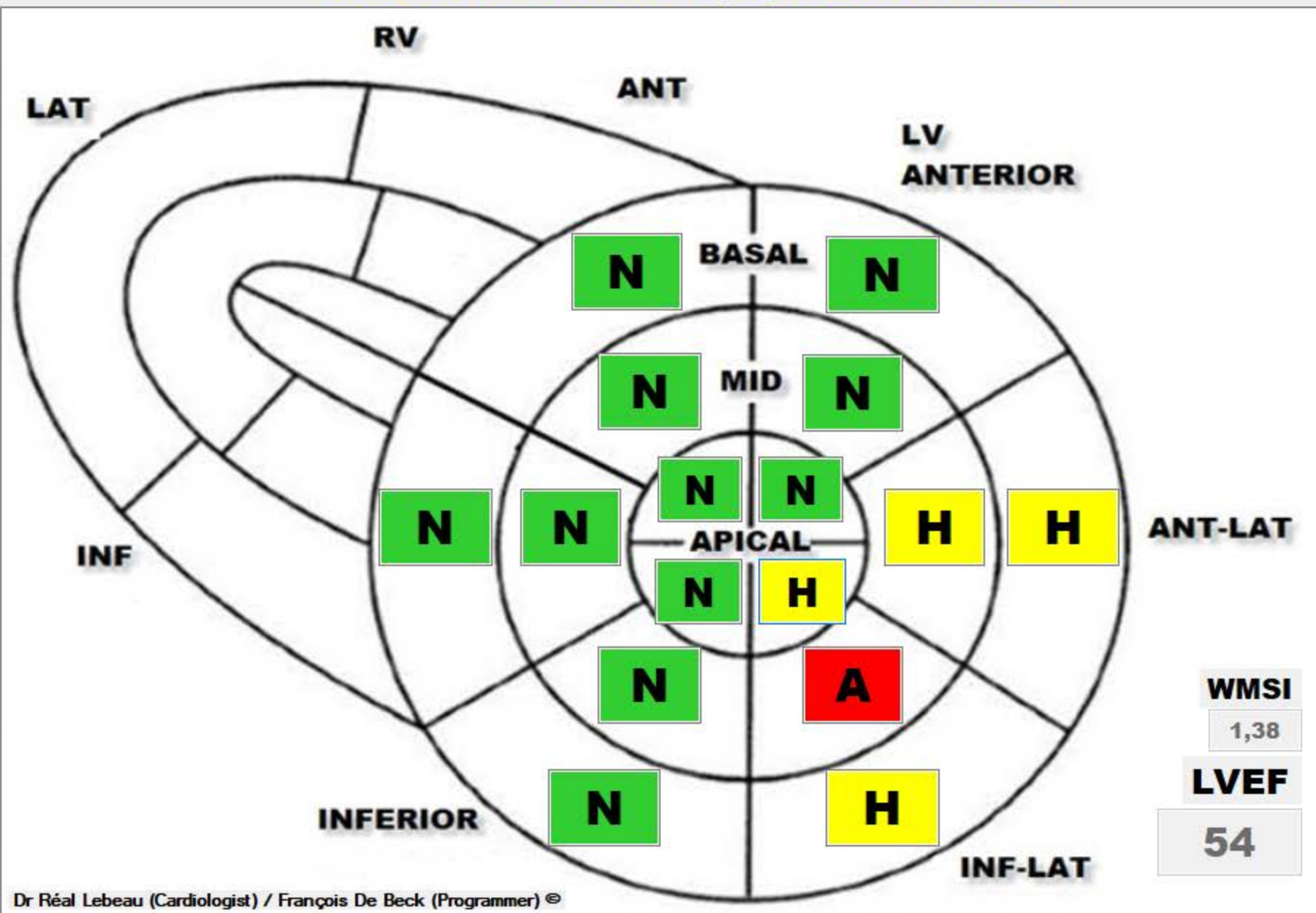
ECG.: your conclusion...



ECG.: Acute postero-lateral infarction

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-04

NAME:

SURNAME:

BIRTH DATE: 2020-11-04

Left Ventricle

Basal #1	1
Basal #2	2
Basal #3	2
Basal #4	1
Basal #5	1
Basal #6	1
Mid #7	1
Mid #8	2
Mid #9	3
Mid #10	1
Mid #11	1
Mid #12	1
Apical #13	1
Apical #14	2
Apical #15	1
Apical #16	1

WMSI
1,38

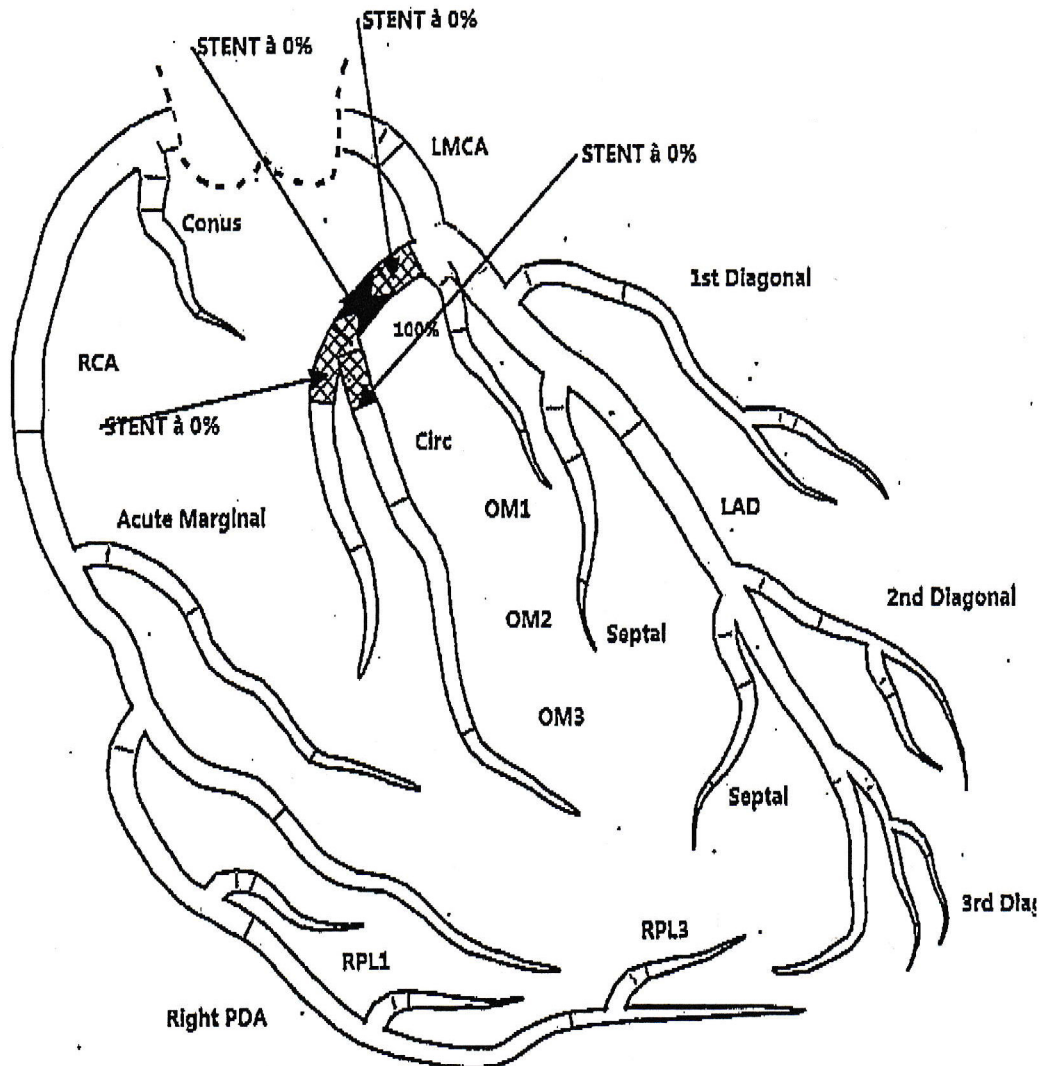
LVEF
54

WMSI=(Score 16 segments)/16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

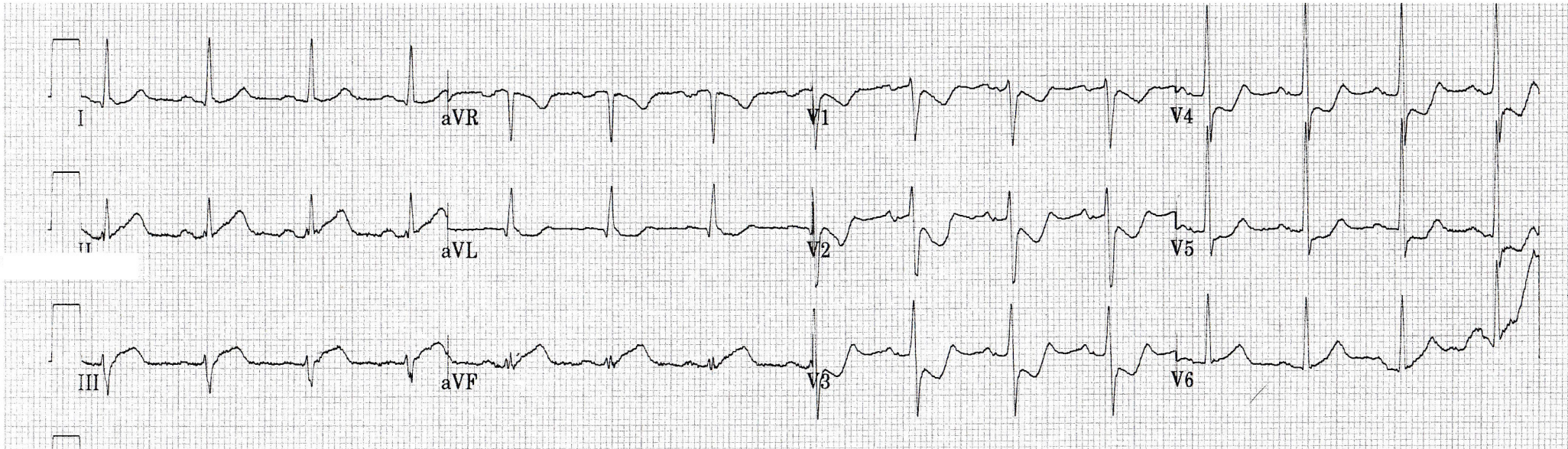
Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

No 37

Coron.: Acute occlusion of Cx stented



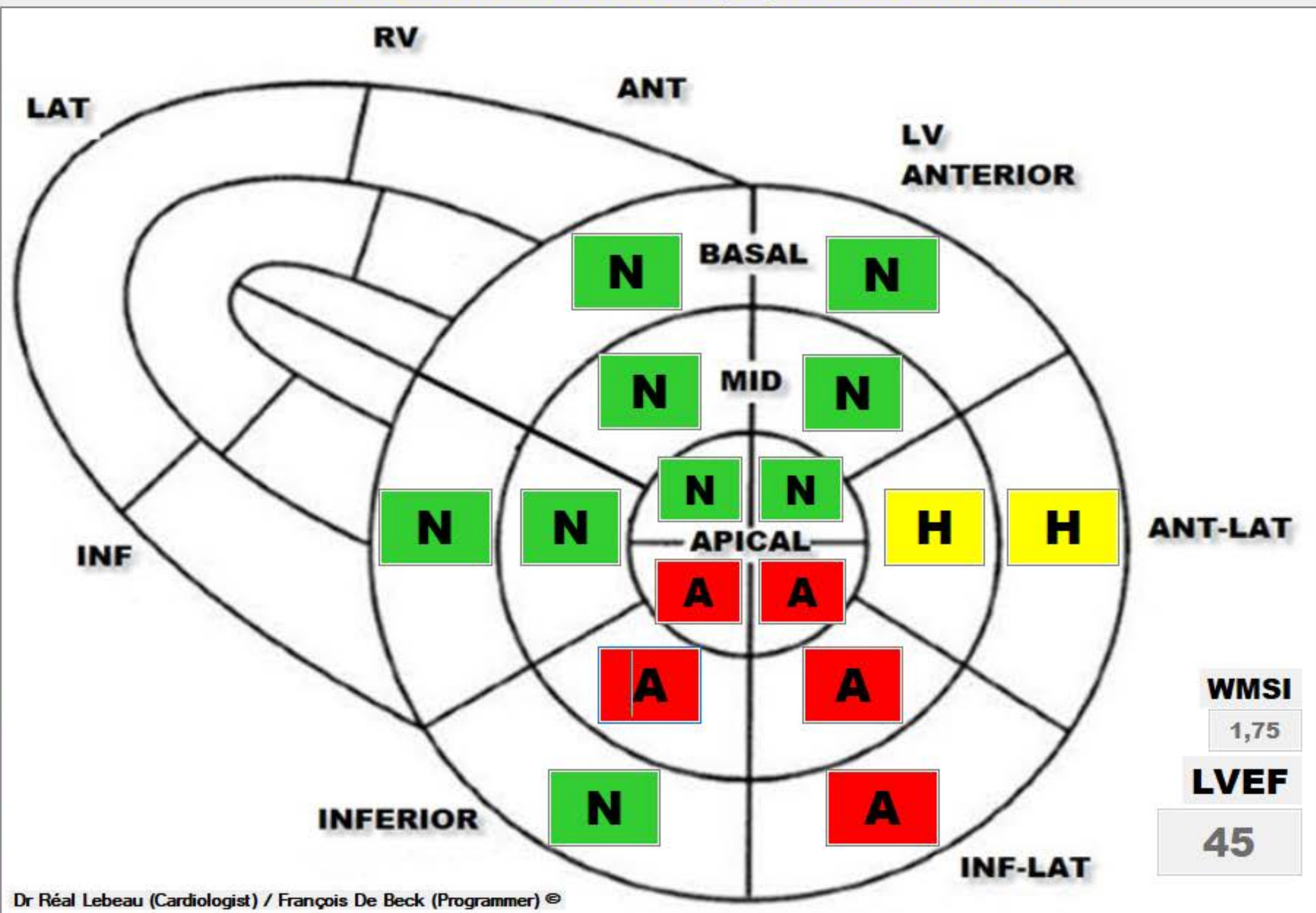
No 38
M 50y. Myocardial infarction.
ECG.: your conclusion...



ECG.: Acute infero-posterior infarction

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-04
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-04

Left Ventricle

Basal #1	1
Basal #2	2
Basal #3	3
Basal #4	1
Basal #5	1
Basal #6	1
Mid #7	1
Mid #8	2
Mid #9	3
Mid #10	3
Mid #11	1
Mid #12	1
Apical #13	1
Apical #14	3
Apical #15	3
Apical #16	1

WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

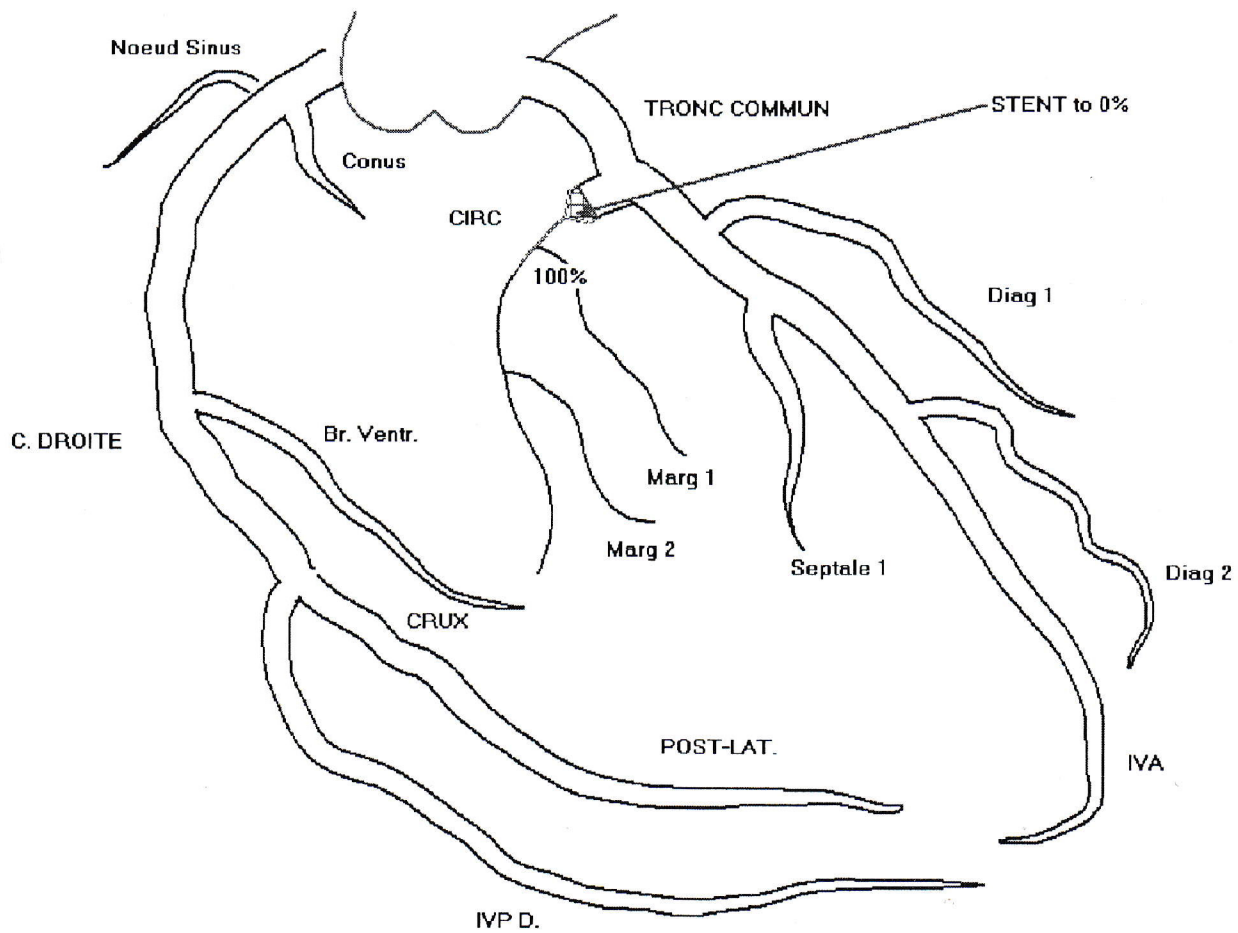
Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

WMSI
1,75

LVEF
45

No 38

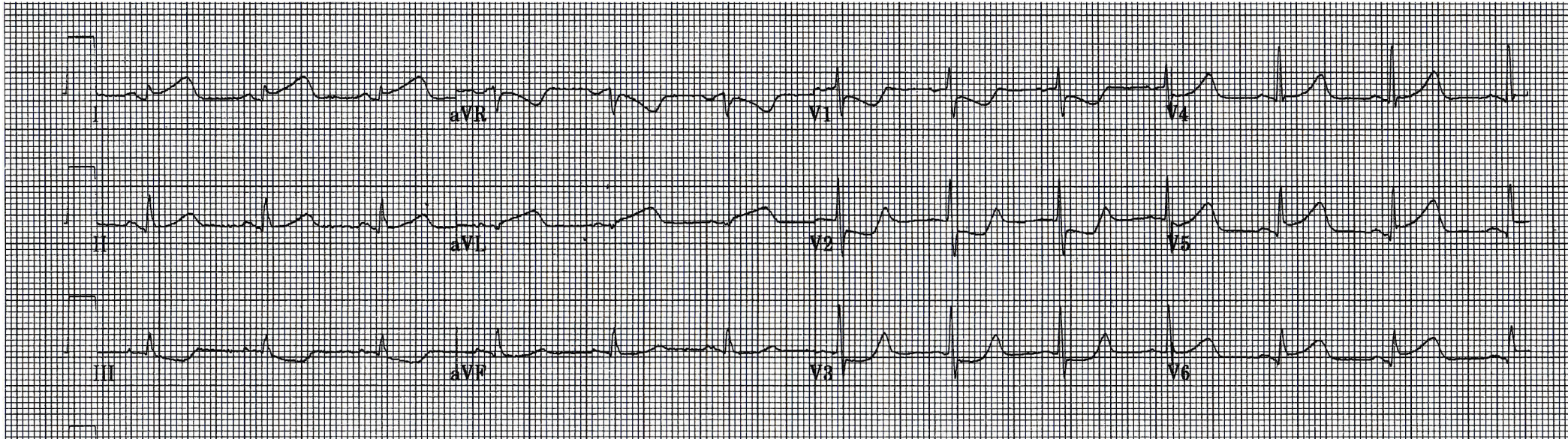
Coro.: Acute occlusion of the Cx stented.



No 39

F 67y. Myocardial Infarction

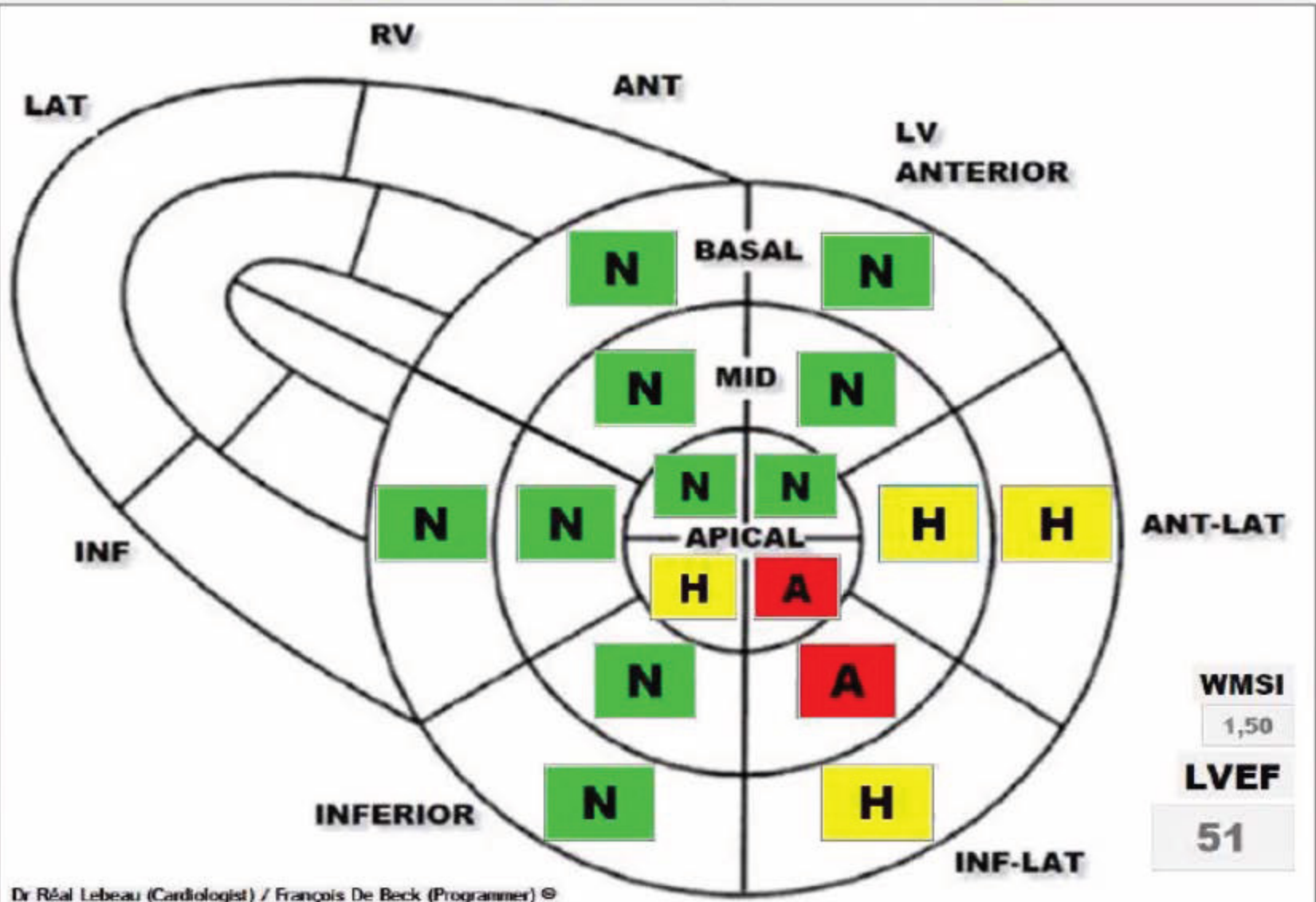
ECG.: your conclusion...



ECG.: Acute postero-lateral infarction.

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE:

NAME:

SURNAME:

BIRTH DATE:

Left Ventricle

Basal #1	1	Dx.: Lateral infarction (Cx)
Basal #2	2	
Basal #3	2	
Basal #4	1	
Basal #5	1	
Basal #6	1	
Mid #7	1	
Mid #8	2	
Mid #9	3	
Mid #10	1	
Mid #11	1	
Mid #12	1	
Apical #13	1	
Apical #14	3	
Apical #15	2	
Apical #16	1	

WMSI

1,50

LVEF

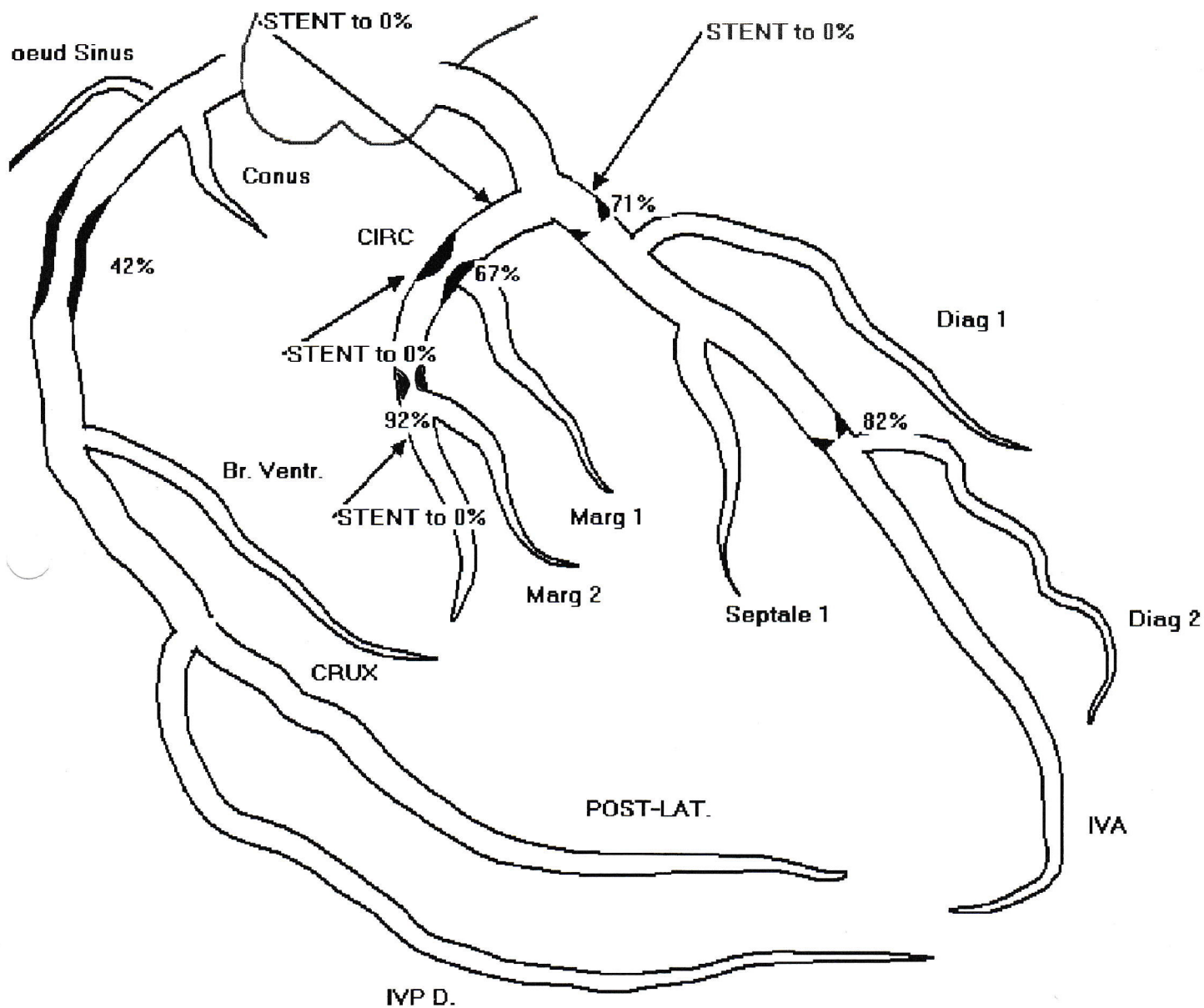
51

WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2):91-98

Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-175

No 39

Coron.: Severe stenosis of Cx



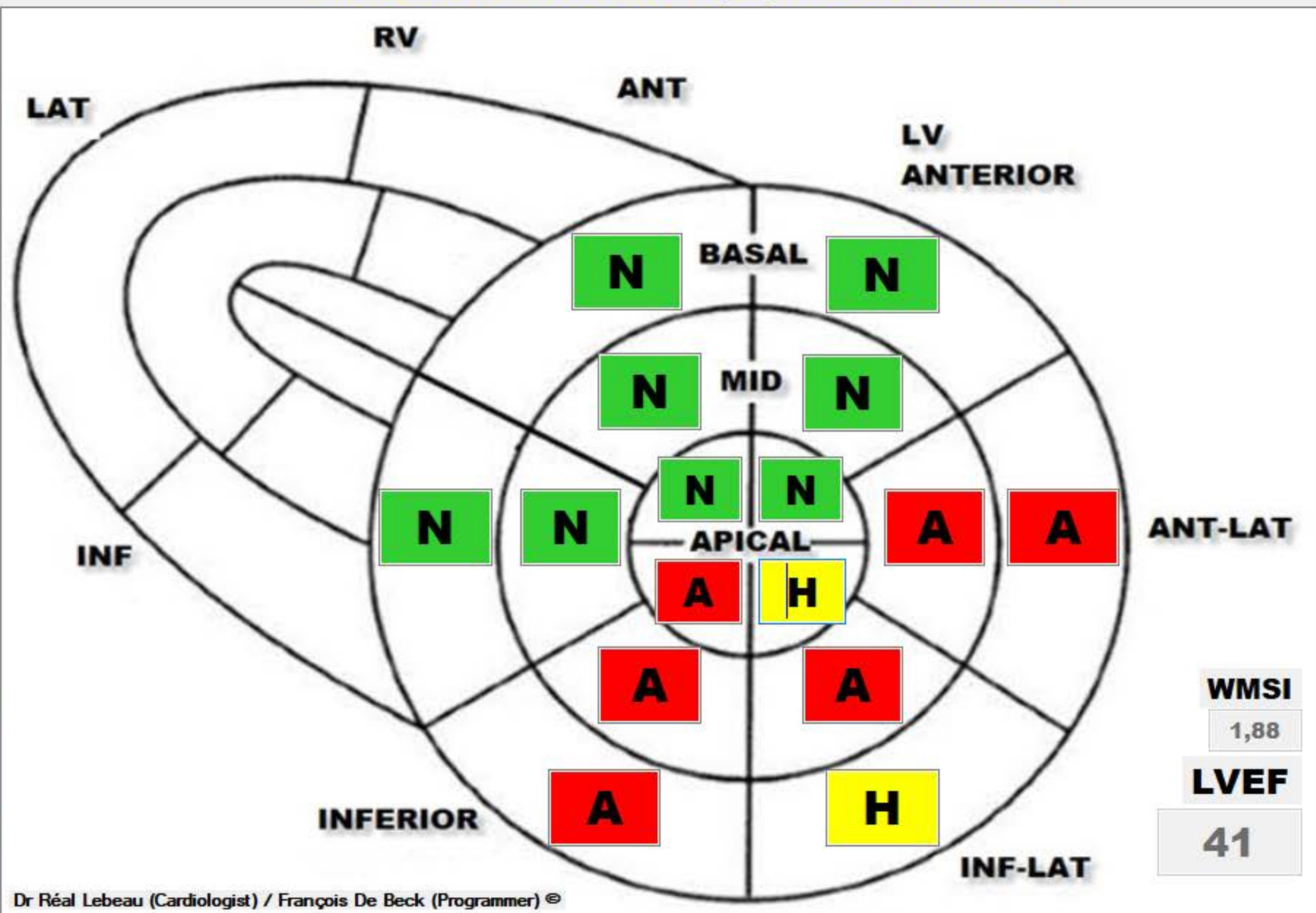
No 40
M 51y. STEMI
ECG.: your conclusion...



ECG.: Acute infero-postero-lateral infarction.

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-04
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-04

Left Ventricle

Basal #1	1
Basal #2	3
Basal #3	2
Basal #4	3
Basal #5	1
Basal #6	1
Mid #7	1
Mid #8	3
Mid #9	3
Mid #10	3
Mid #11	1
Mid #12	1
Apical #13	1
Apical #14	2
Apical #15	3
Apical #16	1

WMSI=(Score 16 segments)/16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

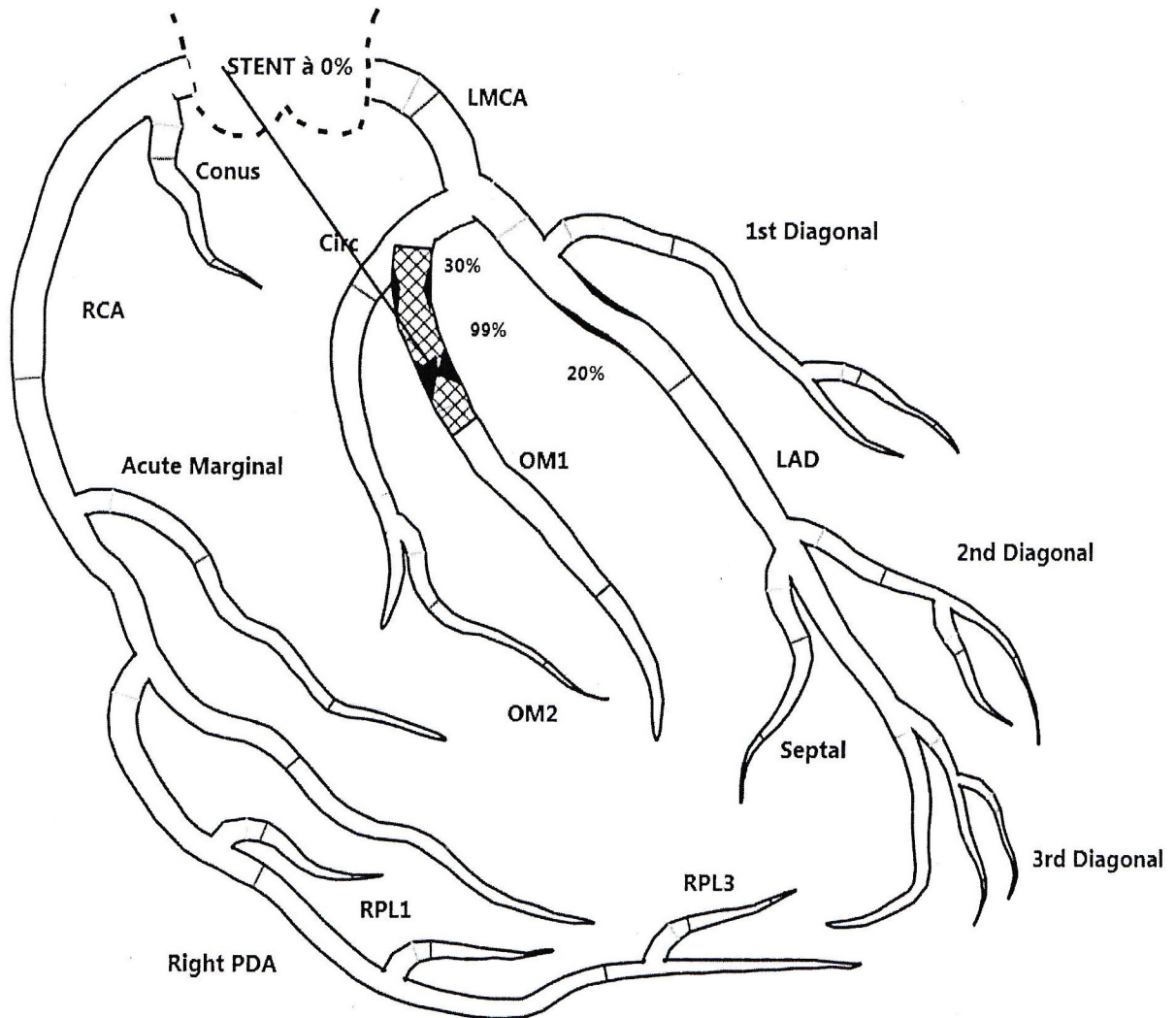
Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

WMSI
1,88

LVEF
41

No 40

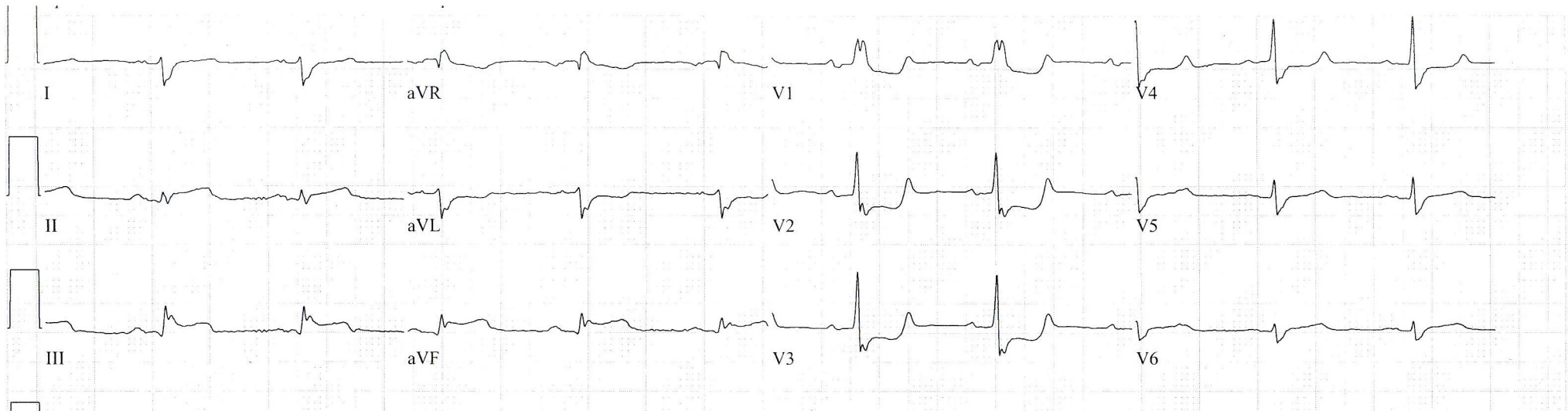
Coron.: Acute occlusion of Cx stented.



No 41

M 66y. Myocardial infarction.

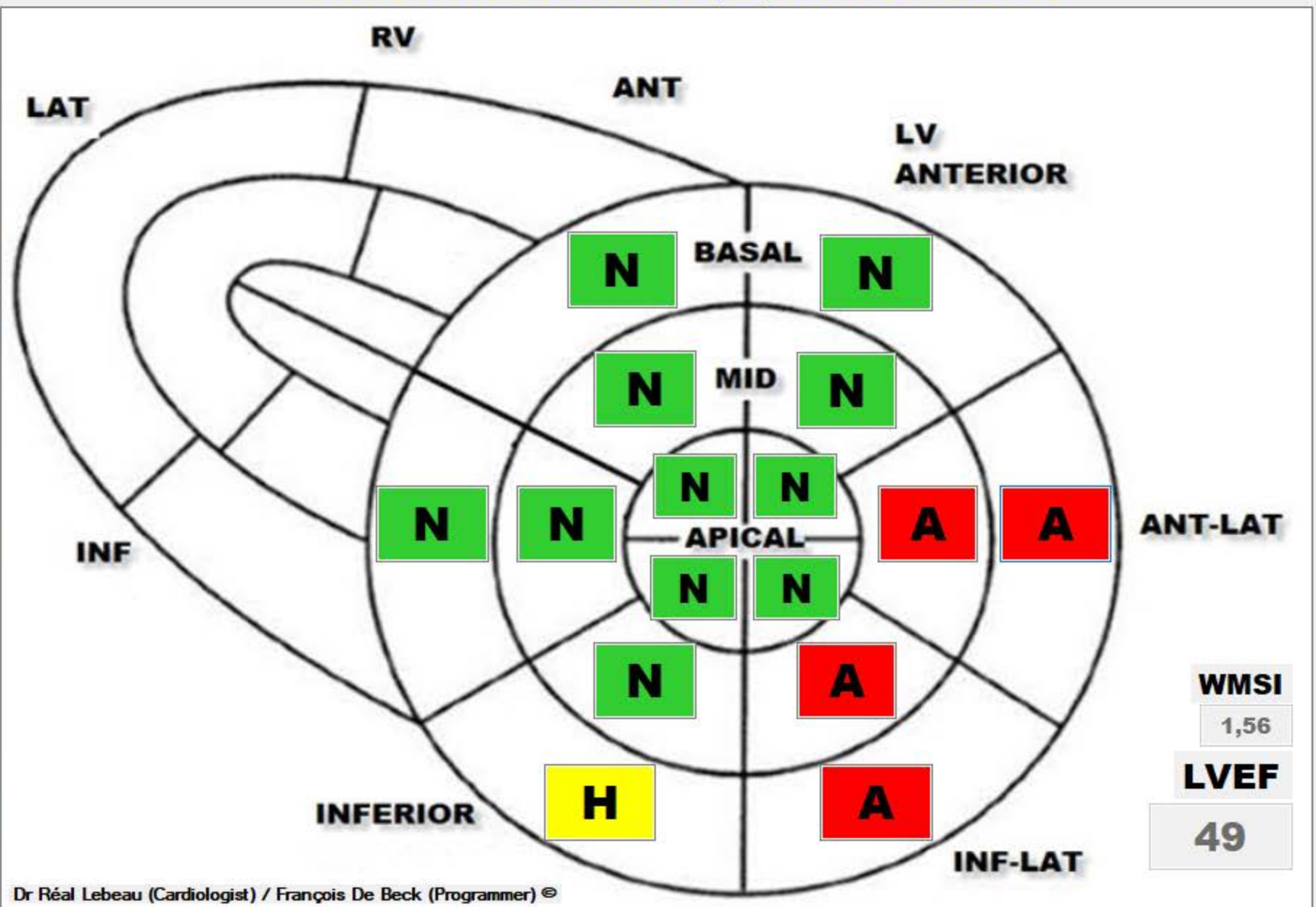
ECG.: your conclusion...



ECG.: Acute infero-posterior infarction . RBBB

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-12

NAME:

SURNAME:

BIRTH DATE: 2020-11-12

Left Ventricle

Basal #1	1
Basal #2	3
Basal #3	3
Basal #4	2
Basal #5	1
Basal #6	1
Mid #7	1
Mid #8	3
Mid #9	3
Mid #10	1
Mid #11	1
Mid #12	1
Apical #13	1
Apical #14	1
Apical #15	1
Apical #16	1

WMSI
1,56

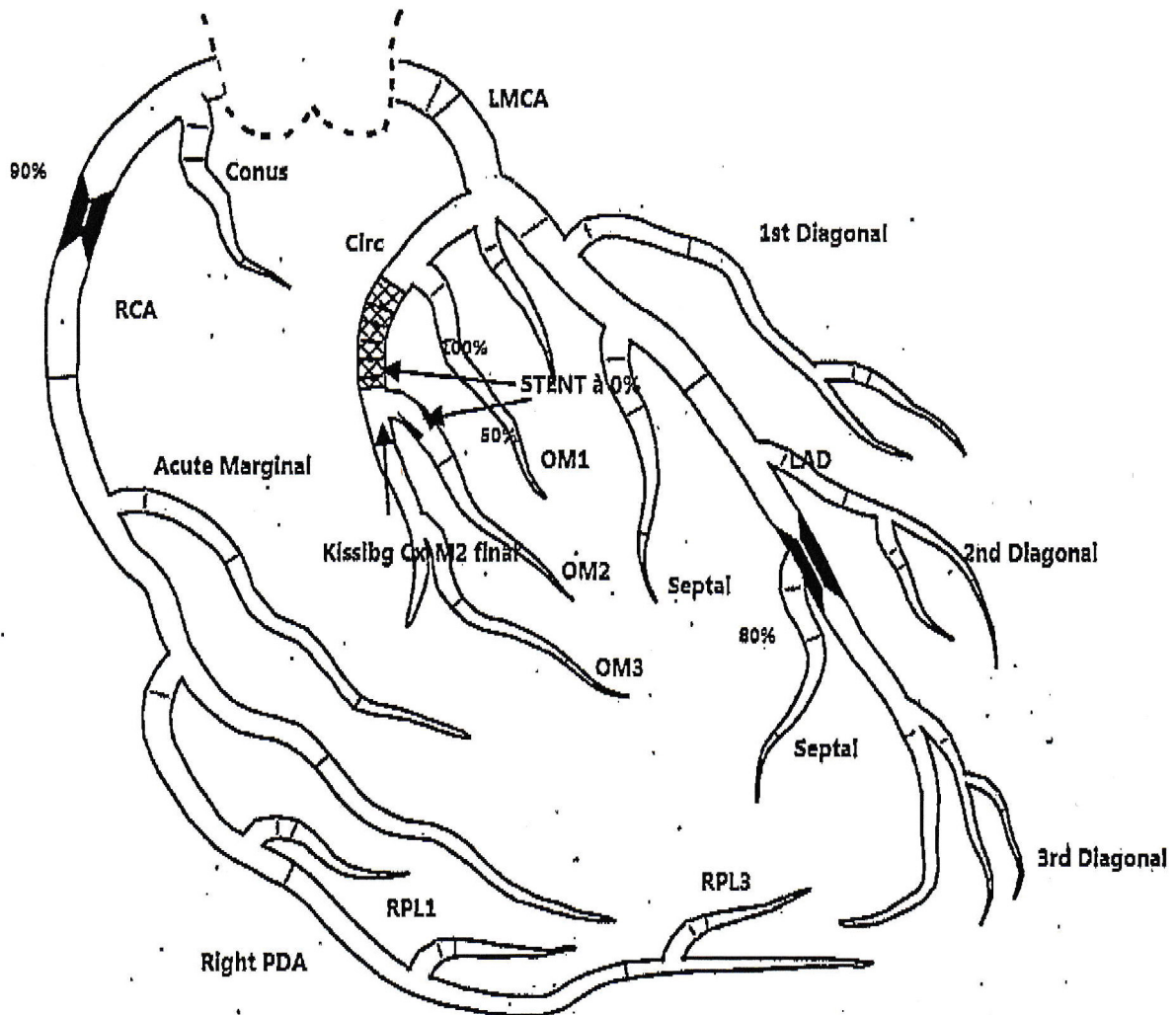
LVEF
49

WMSI=(Score 16 segments)/16
LVEF = 90 - (26 * WMSI)
Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

Right WMSI = (Score right 8 segments) / 8
RVEF = 73.07 - (20.7 * WMSI)
Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

No 41

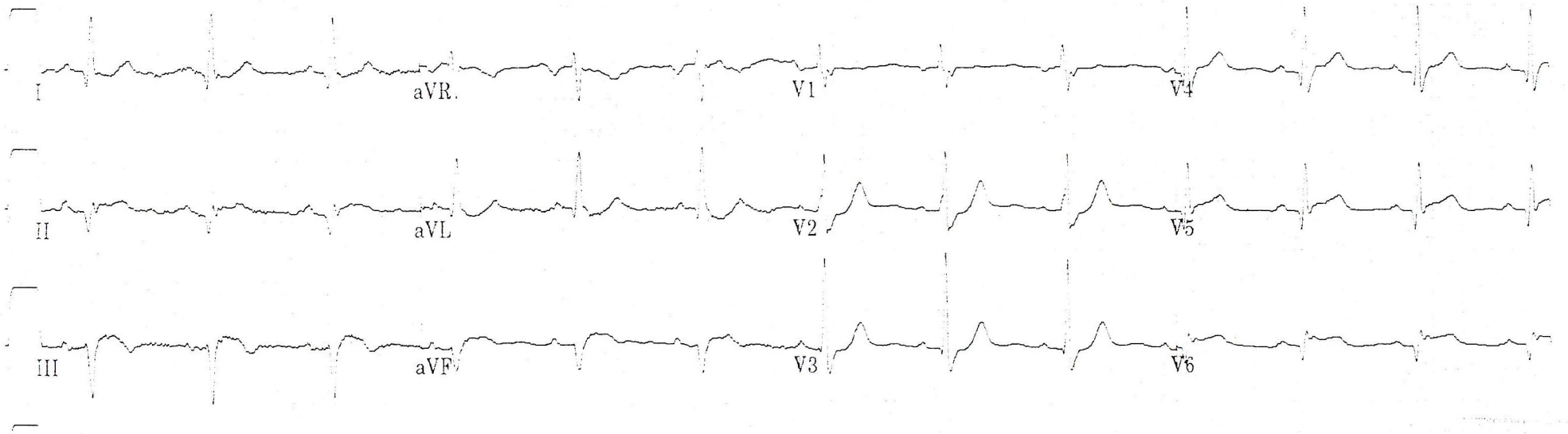
Coron.: Acute occlusion of Cx artery and severe stenosis of RCA



No 42

M 53y. Myocardial infarction.

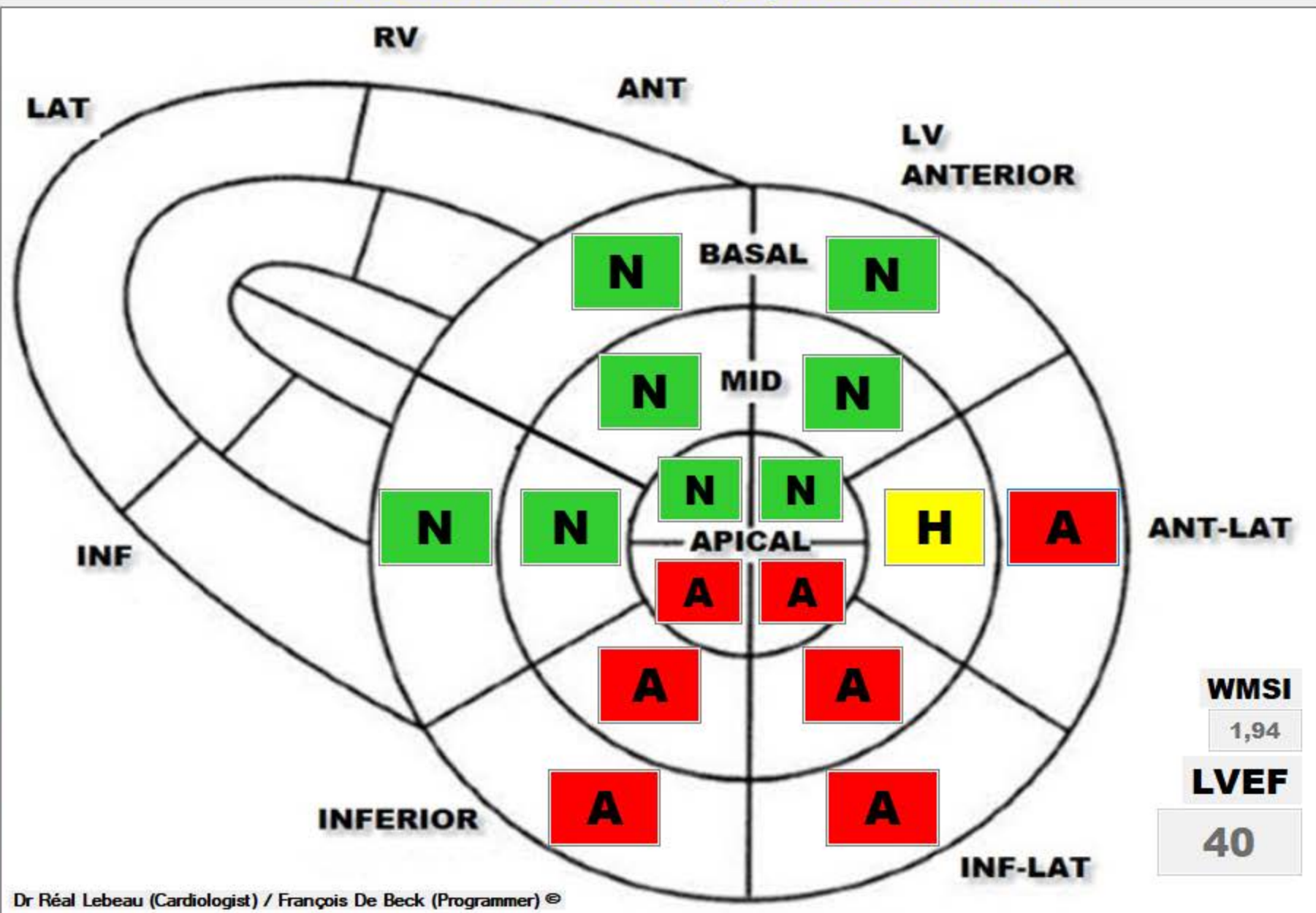
ECG.: your conclusion...



ECG.: Acute infero-postero-lateral infarction

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-04

NAME:

SURNAME:

BIRTH DATE: 2020-11-04

Left Ventricle

Basal #1	1
Basal #2	3
Basal #3	3
Basal #4	3
Basal #5	1
Basal #6	1
Mid #7	1
Mid #8	2
Mid #9	3
Mid #10	3
Mid #11	1
Mid #12	1
Apical #13	1
Apical #14	3
Apical #15	3
Apical #16	1

WMSI
1,94

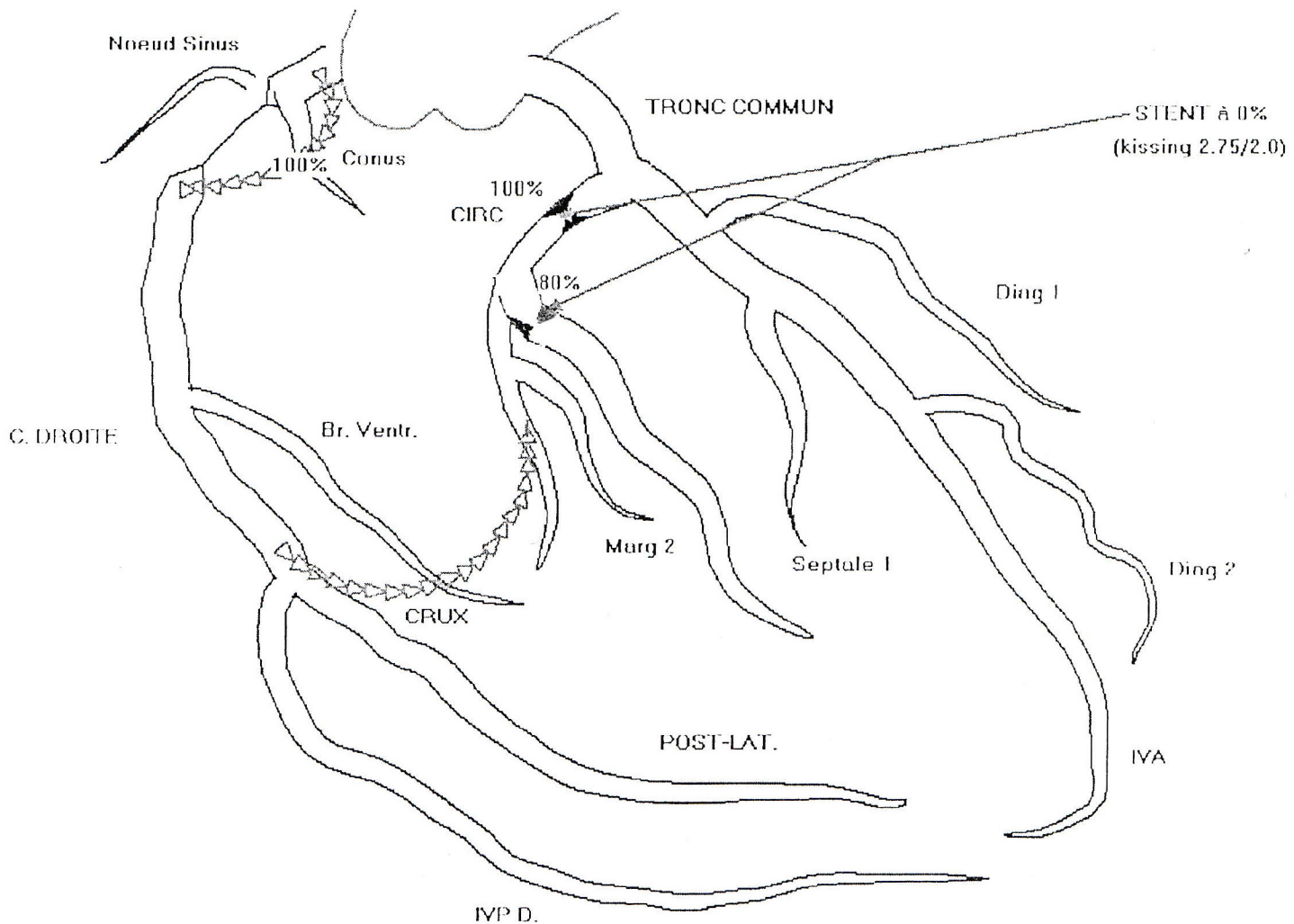
LVEF
40

WMSI=(Score 16 segments)/16
LVEF = 90 - (26 * WMSI)
Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

Right WMSI = (Score right 8 segments) / 8
RVEF = 73.07 - (20.7 * WMSI)
Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

No 42

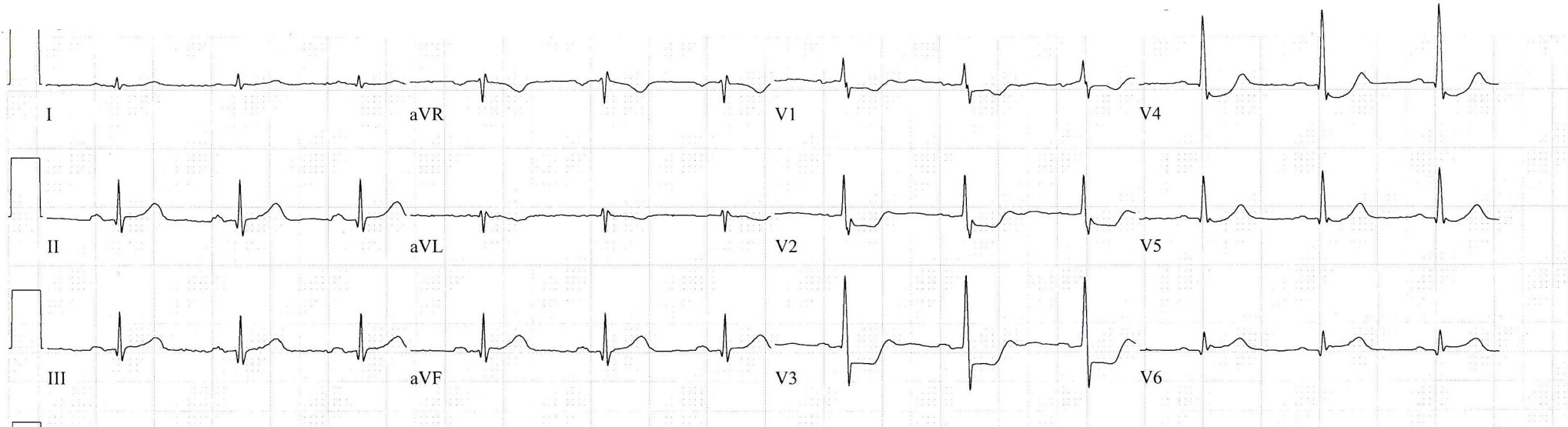
Coron.: Acute occlusion of the Cx artery stented
Old occlusion of RCA with collateral.



No 43

M 69y. Myocardial infarction.

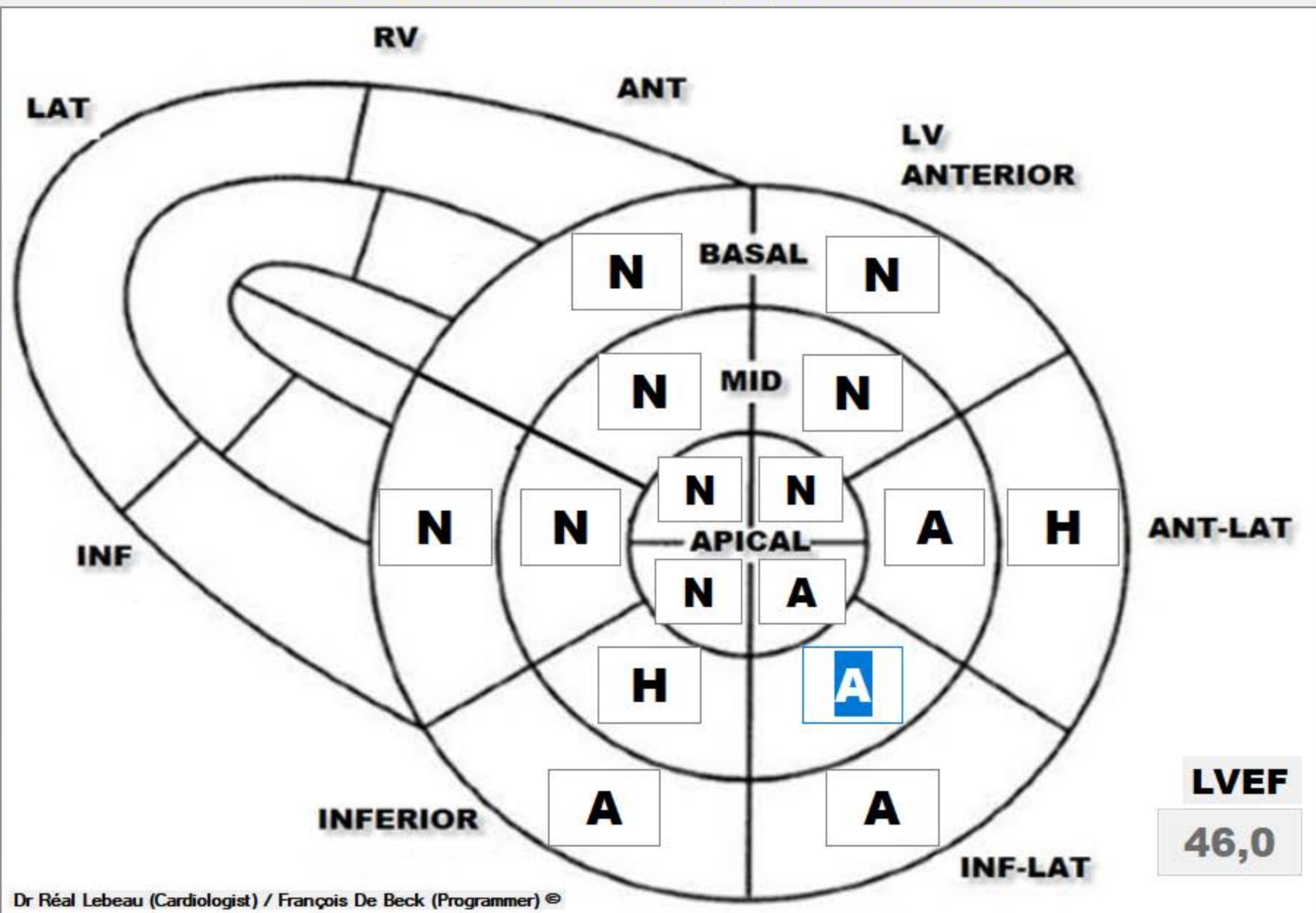
ECG.: your conclusion...



ECG.: Acute posterior infarction.

EJECTION FRACTION (EF) MEASUREMENT

Legend



16 EF Score Model

EXAM DATE: 2020-11-05
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-05

Left Ventricle

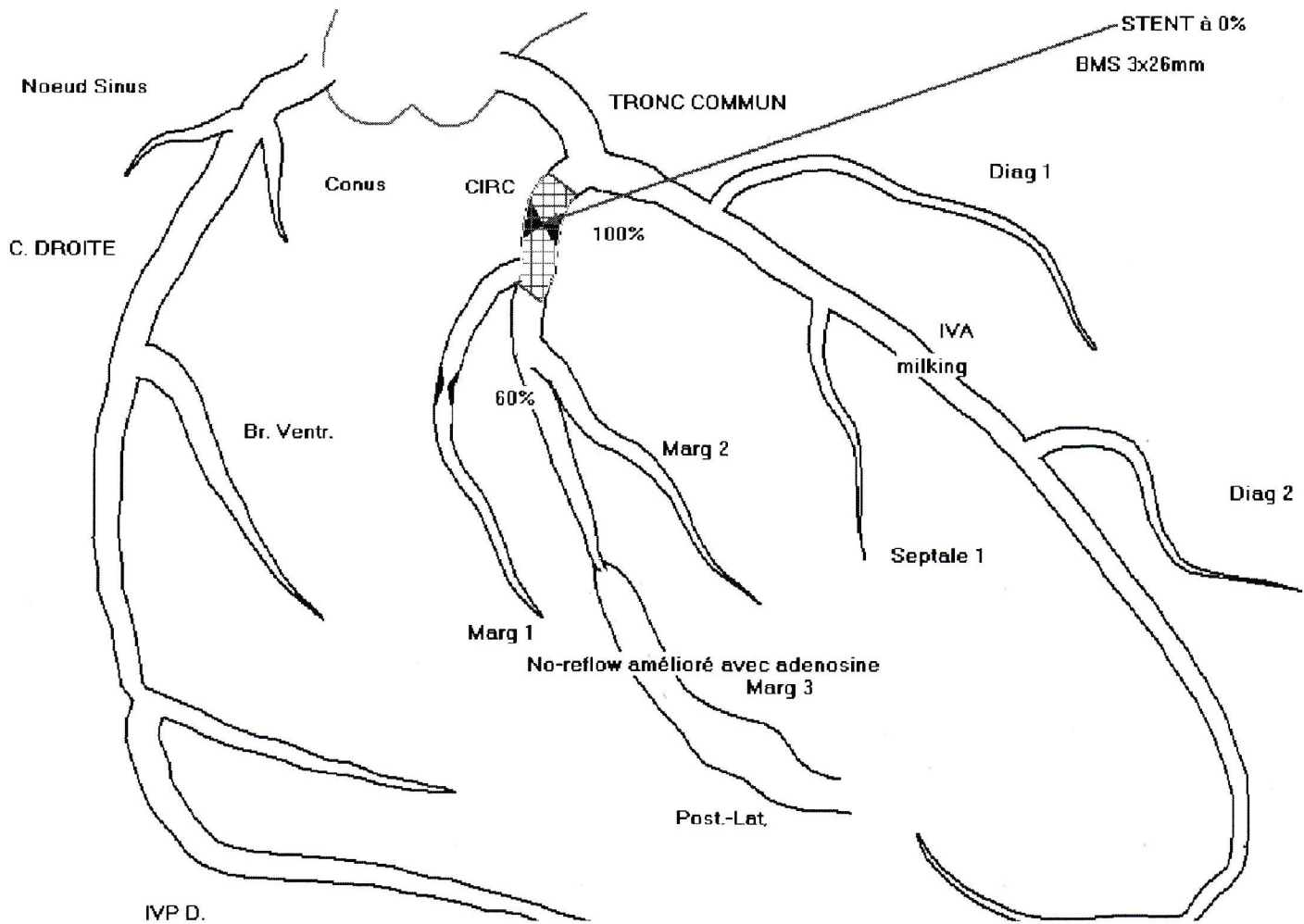
Basal #1	4 %
Basal #2	2,5 %
Basal #3	1 %
Basal #4	1 %
Basal #5	4 %
Basal #6	4 %
Mid #7	4 %
Mid #8	1 %
Mid #9	1 %
Mid #10	2,5 %
Mid #11	4 %
Mid #12	4 %
Apical #13	4 %
Apical #14	1 %
Apical #15	4 %
Apical #16	4 %

LVEF
46,0

Ref.: Echo Research And Practice June 2018 Vol. 5-2 p. 63-69

No 43

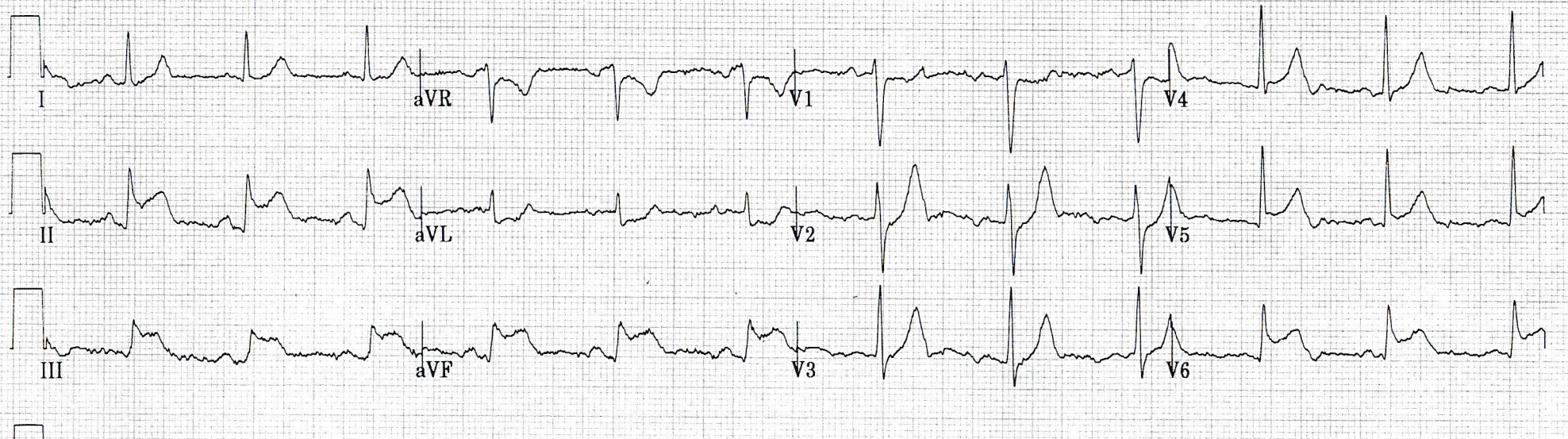
Coron.: Acute occlusion of proximal Cx



No 44

M 49y. STEMI.

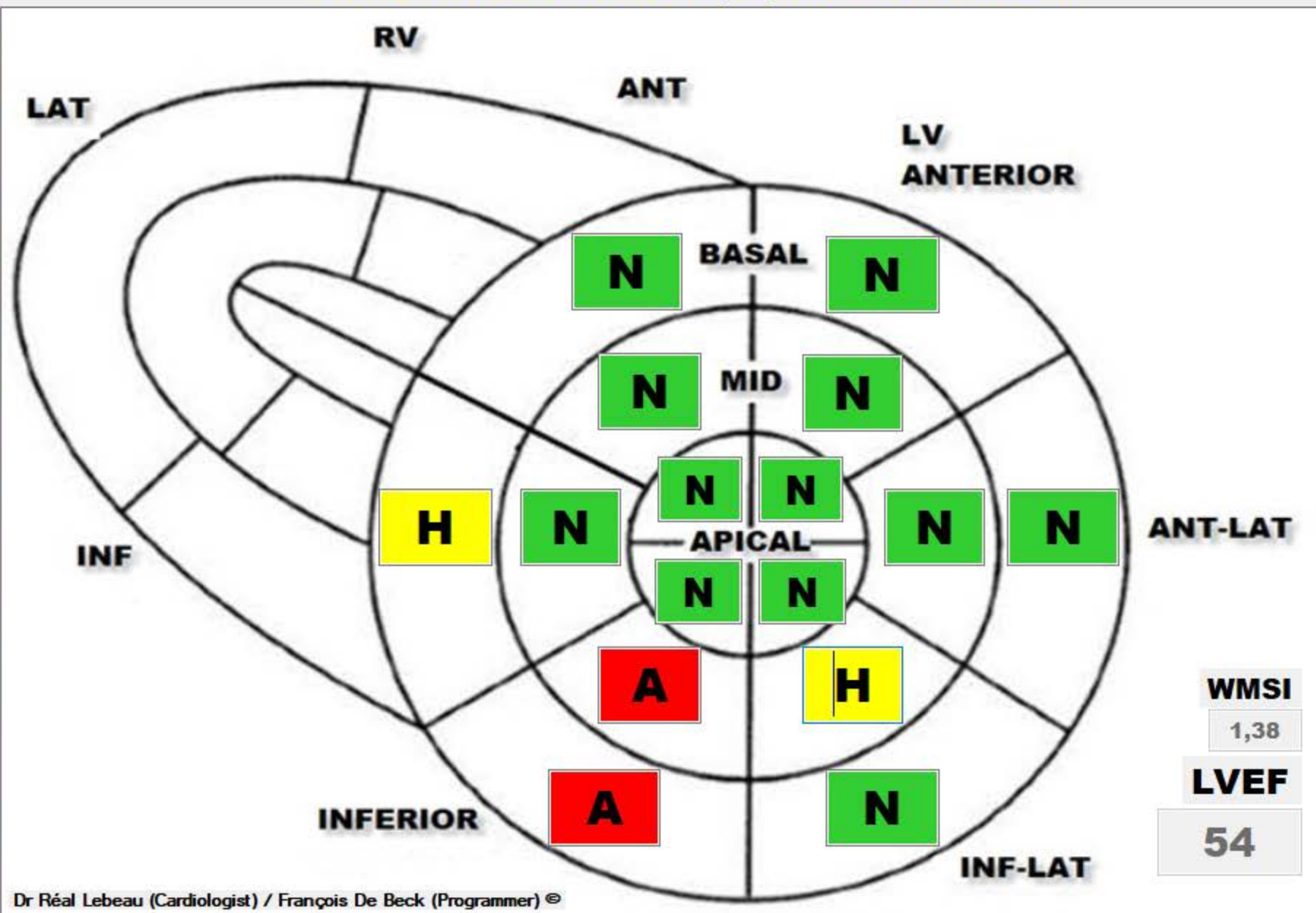
ECG.: your conclusion...



ECG.: Acute infero-lateral infarction.

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-05
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-05

Left Ventricle

Basal #1	1
Basal #2	1
Basal #3	1
Basal #4	3
Basal #5	2
Basal #6	1
Mid #7	1
Mid #8	1
Mid #9	2
Mid #10	3
Mid #11	1
Mid #12	1
Apical #13	1
Apical #14	1
Apical #15	1
Apical #16	1

WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

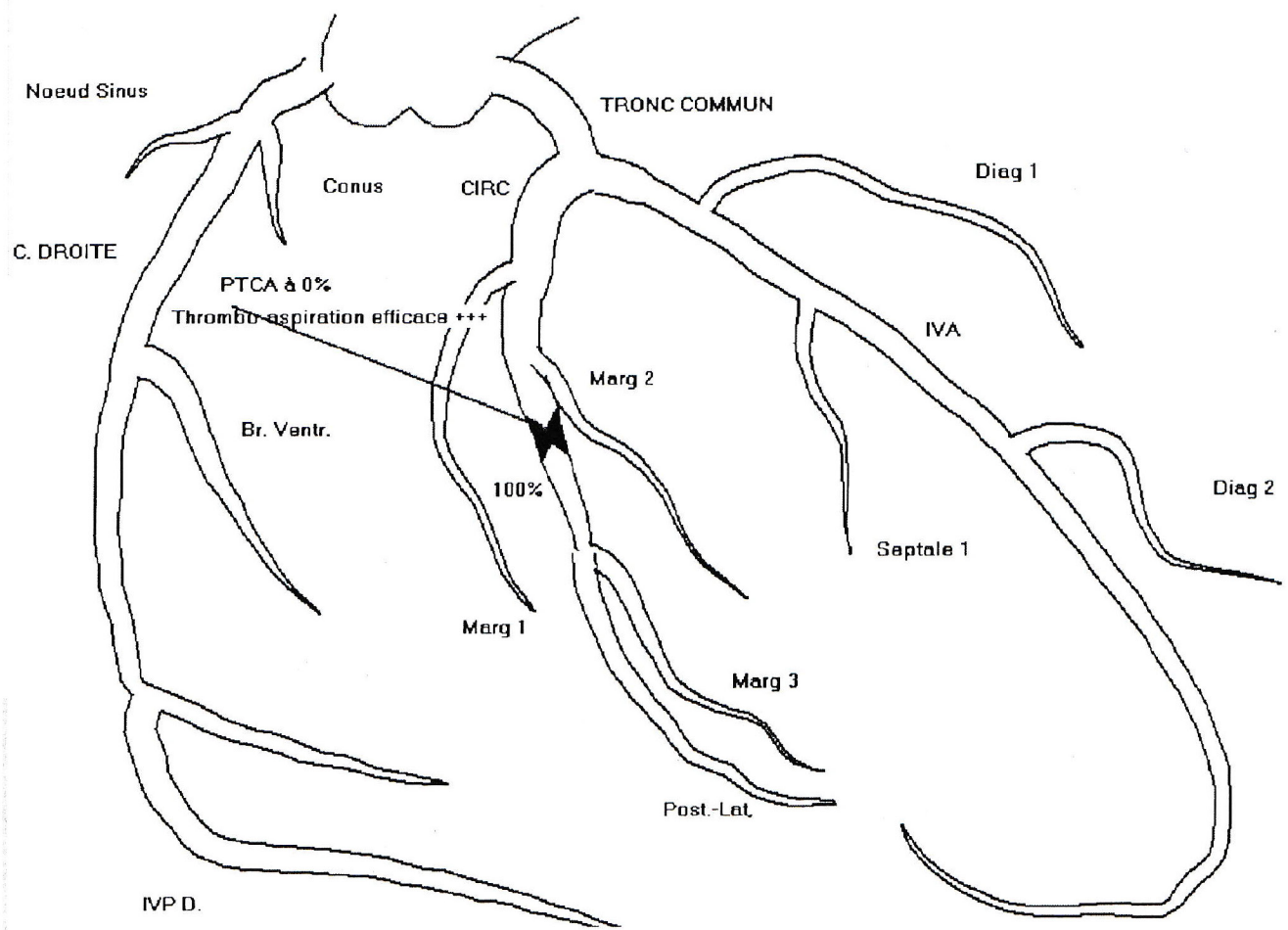
Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

WMSI
1,38

LVEF
54

No44

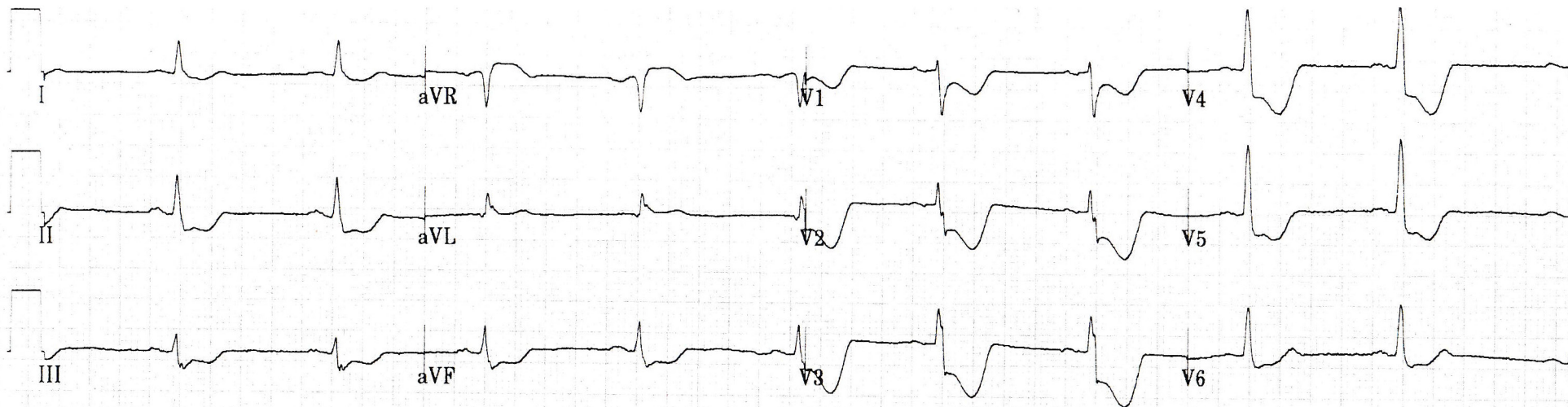
Coron.: Dilatation of Cx mid occlusion



No 45

M 73Y. Myocardial infarction.

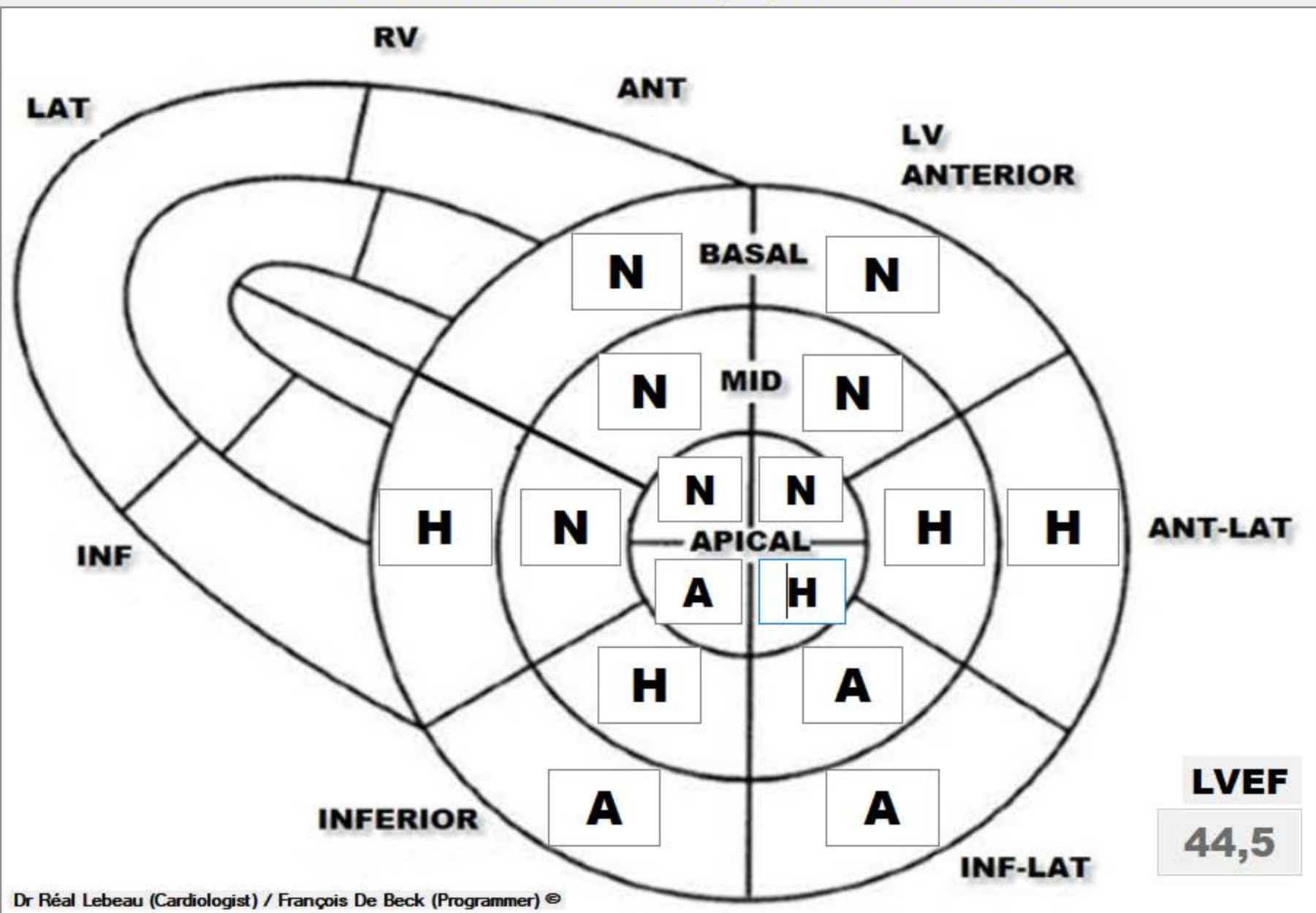
ECG.: your opinion...



ECG.: Inferior and postero-lateral injury

EJECTION FRACTION (EF) MEASUREMENT

Legend



16 EF Score Model

EXAM DATE: 2020-11-05
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-05

Left Ventricle

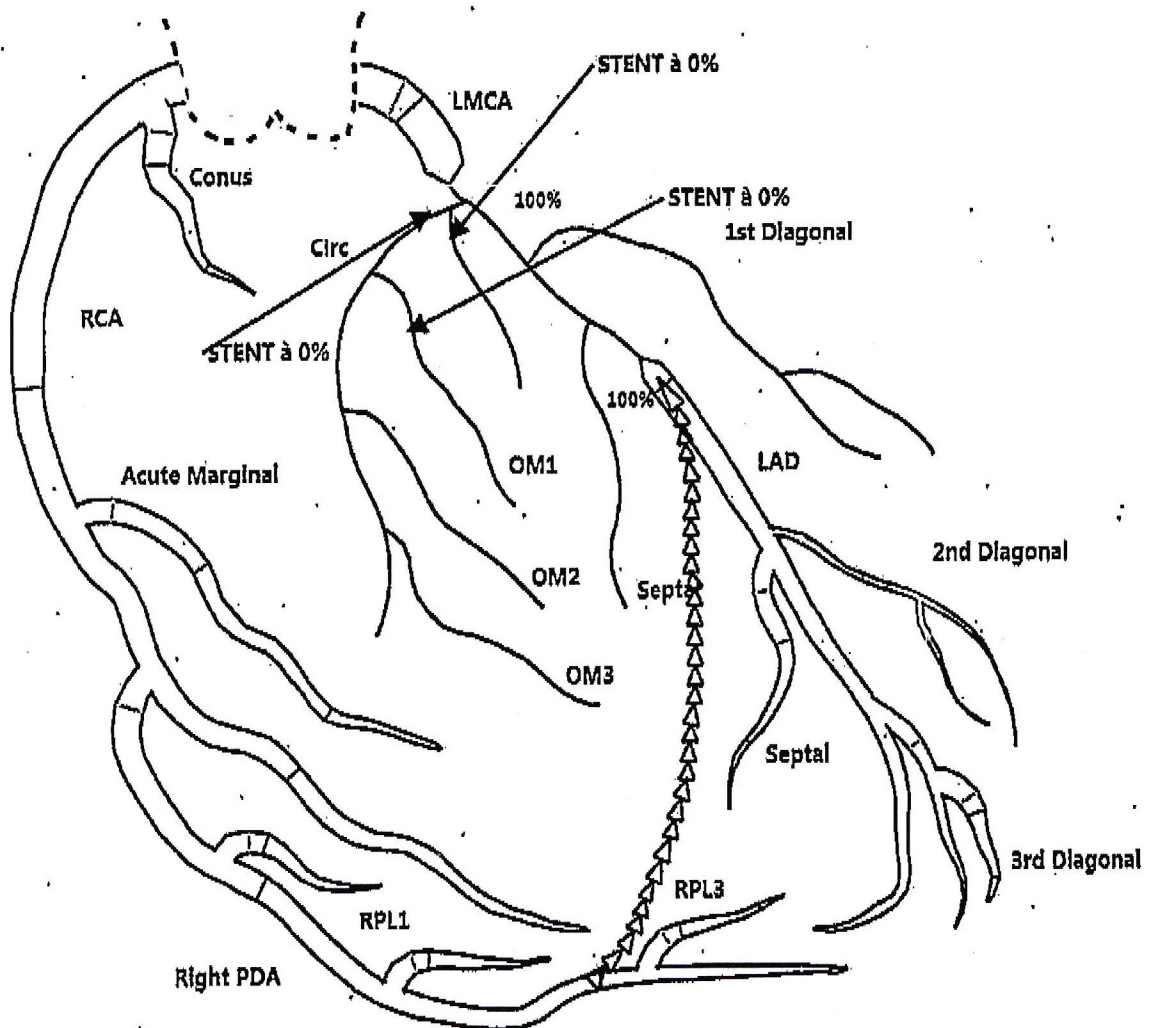
Basal #1	4 %
Basal #2	2,5 %
Basal #3	1 %
Basal #4	1 %
Basal #5	2,5 %
Basal #6	4 %
Mid #7	4 %
Mid #8	2,5 %
Mid #9	1 %
Mid #10	2,5 %
Mid #11	4 %
Mid #12	4 %
Apical #13	4 %
Apical #14	2,5 %
Apical #15	1 %
Apical #16	4 %

Ref.: Echo Research And Practice June 2018 Vol. 5-2 p. 63-69

No 45

Coron.: LAD chronic occlusion with collateral.

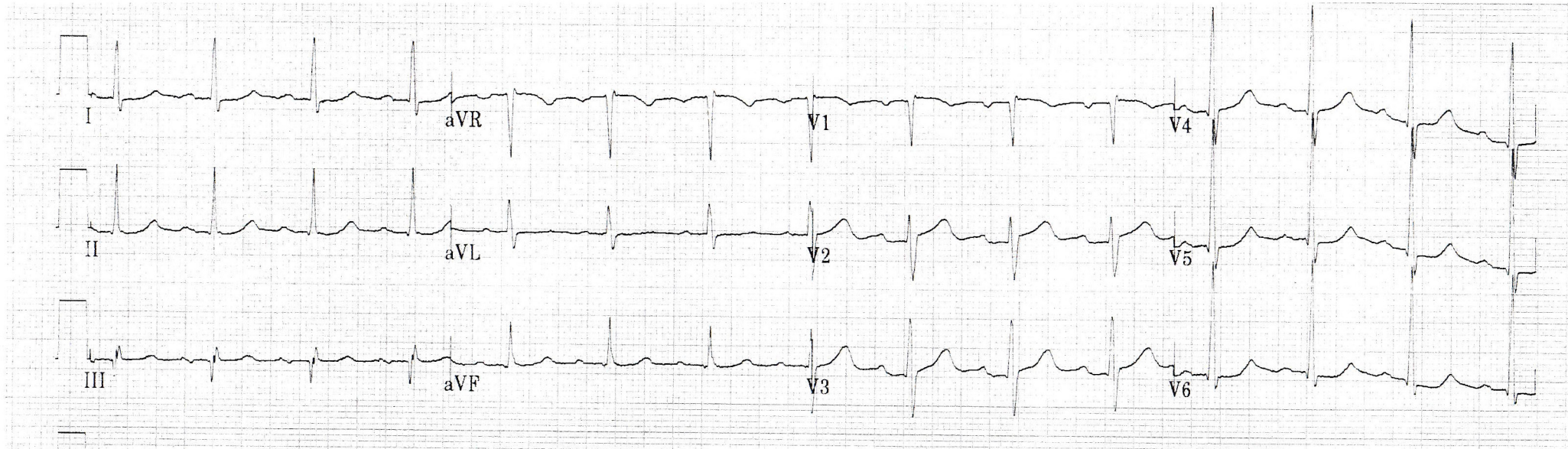
Acute occlusion of Cx stented...



No 46

M 75y. Ischemic heart disease.

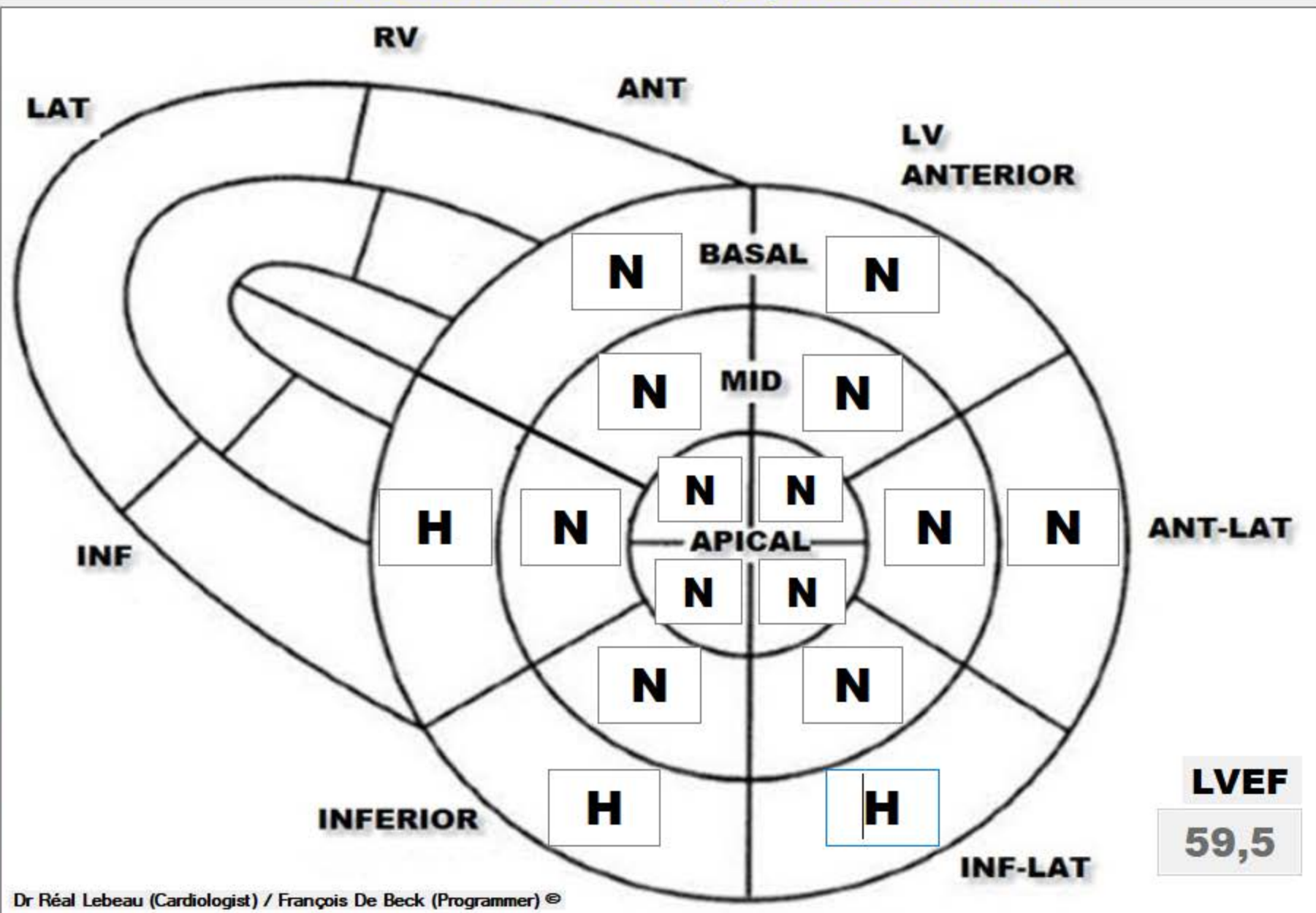
ECG, : your conclusion...



ECG.: Non specific ST (limit of normal)

EJECTION FRACTION (EF) MEASUREMENT

Legend



16 EF Score Model

EXAM DATE: 2020-11-05
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-05

Left Ventricle

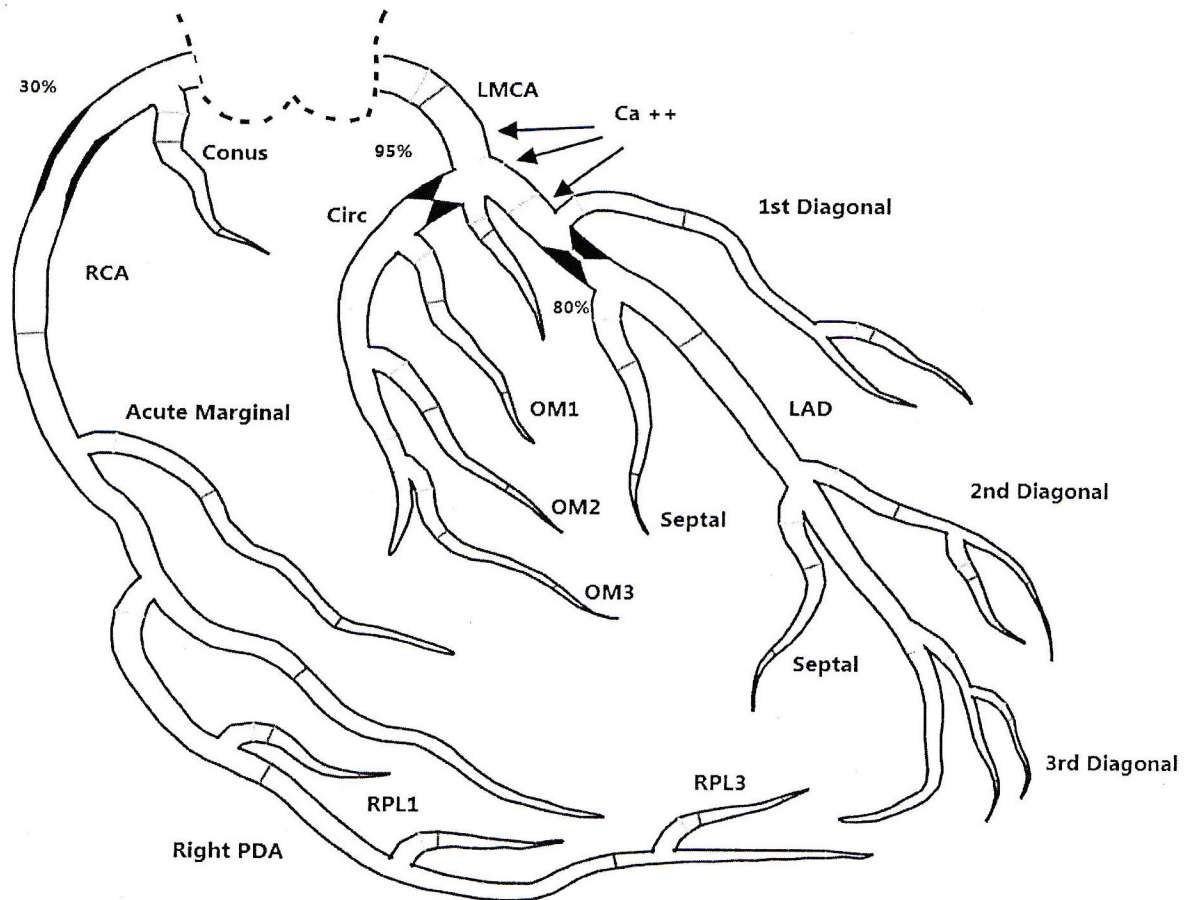
Basal #1	4 %
Basal #2	4 %
Basal #3	2,5 %
Basal #4	2,5 %
Basal #5	2,5 %
Basal #6	4 %
Mid #7	4 %
Mid #8	4 %
Mid #9	4 %
Mid #10	4 %
Mid #11	4 %
Mid #12	4 %
Apical #13	4 %
Apical #14	4 %
Apical #15	4 %
Apical #16	4 %

LVEF
59,5

Ref.: Echo Research And Practice June 2018 Vol. 5-2 p. 63-69

No 46

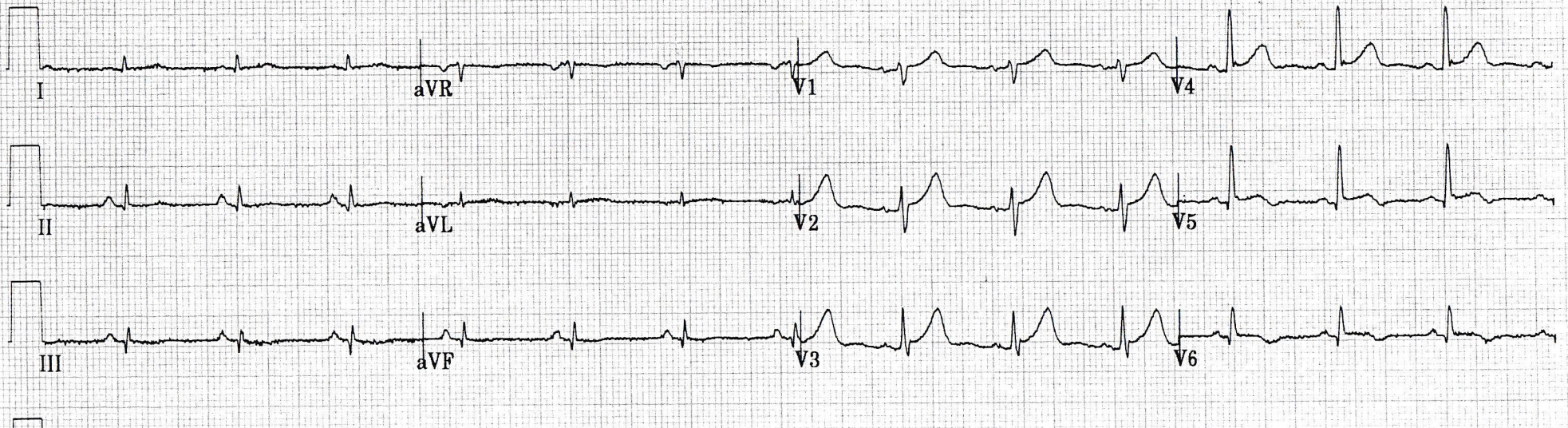
Coron.: Severe stenosis of Cx and LAD.
Consultation in cardiac surgery



No 46

M 59y. Angina.

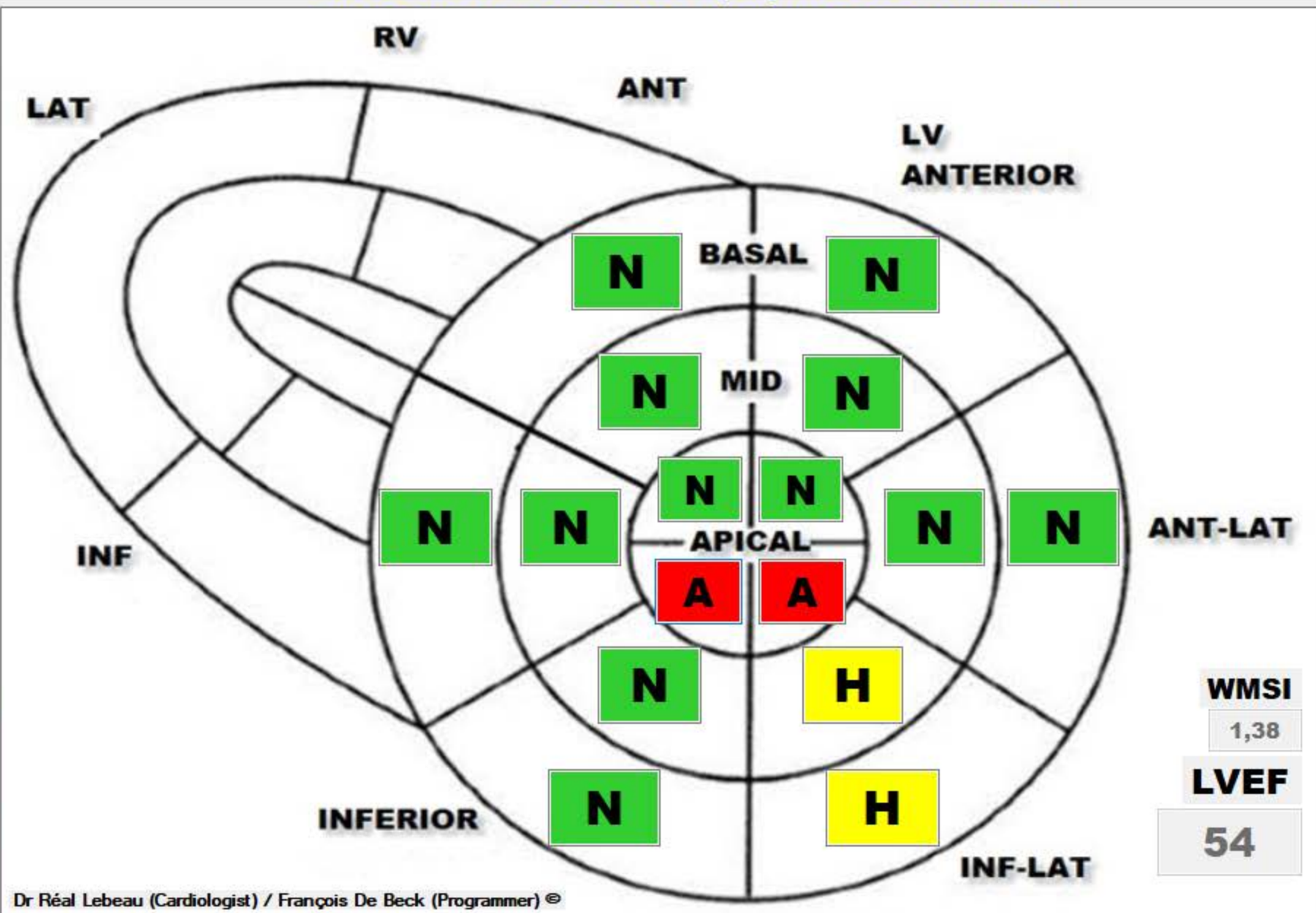
ECG .: your conclusion...



ECG.: Lateral injury

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-05
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-05

Left Ventricle

Basal #1	1
Basal #2	1
Basal #3	2
Basal #4	1
Basal #5	1
Basal #6	1
Mid #7	1
Mid #8	1
Mid #9	2
Mid #10	1
Mid #11	1
Mid #12	1
Apical #13	1
Apical #14	3
Apical #15	3
Apical #16	1

WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

WMSI
1,38

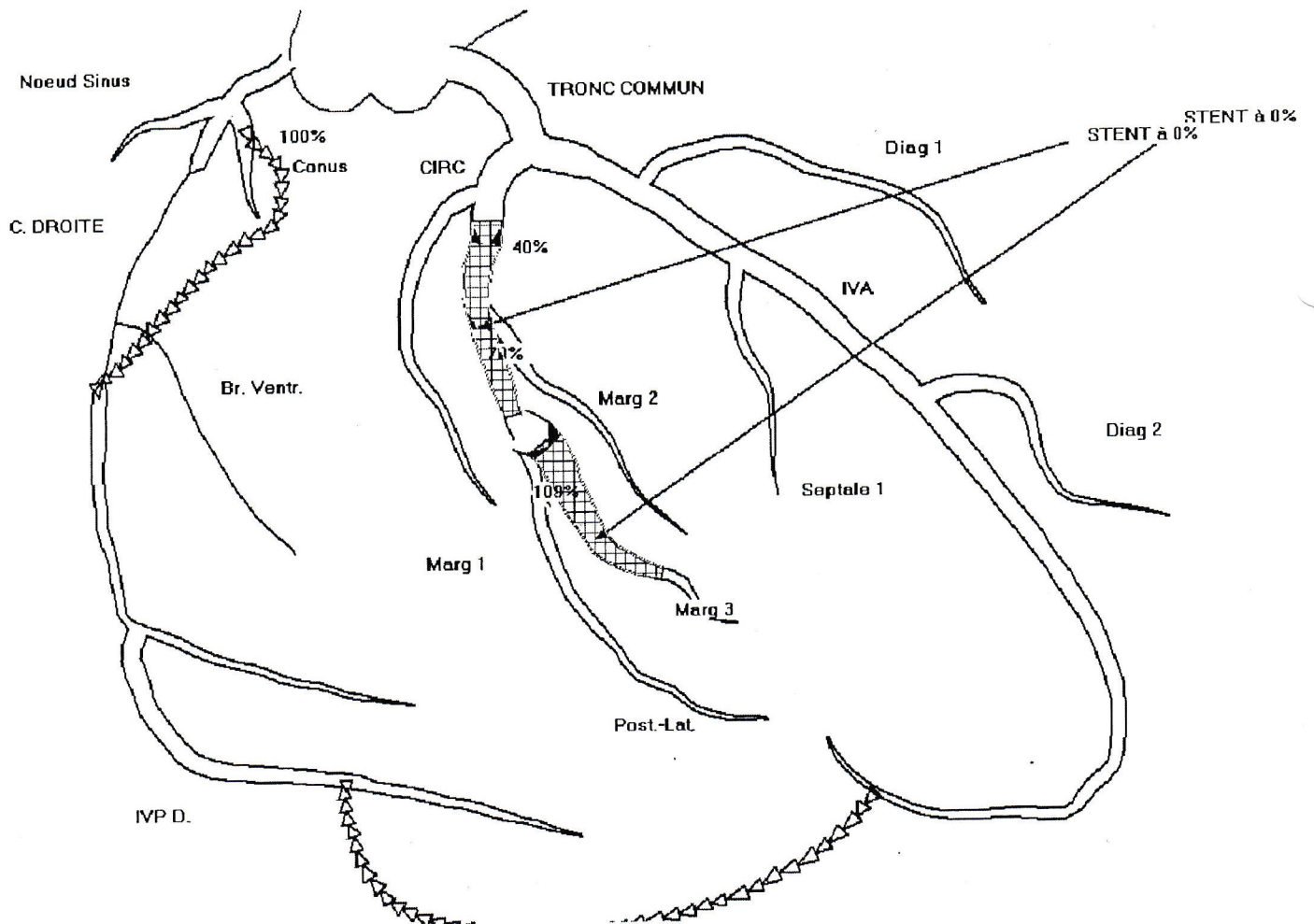
LVEF
54

No 47

Coron.: Acute M3 occlusion stented.

Severe Cx stenosis stented.

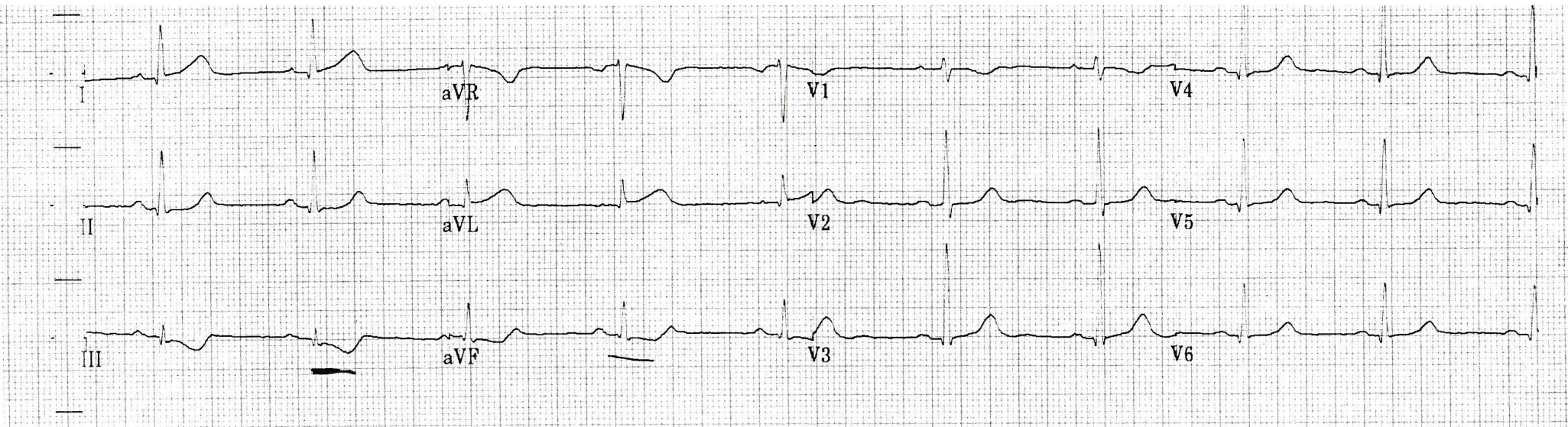
Chronic occlusion of RCA with collateral.



No 48

F 63y. Myocardial infarction.

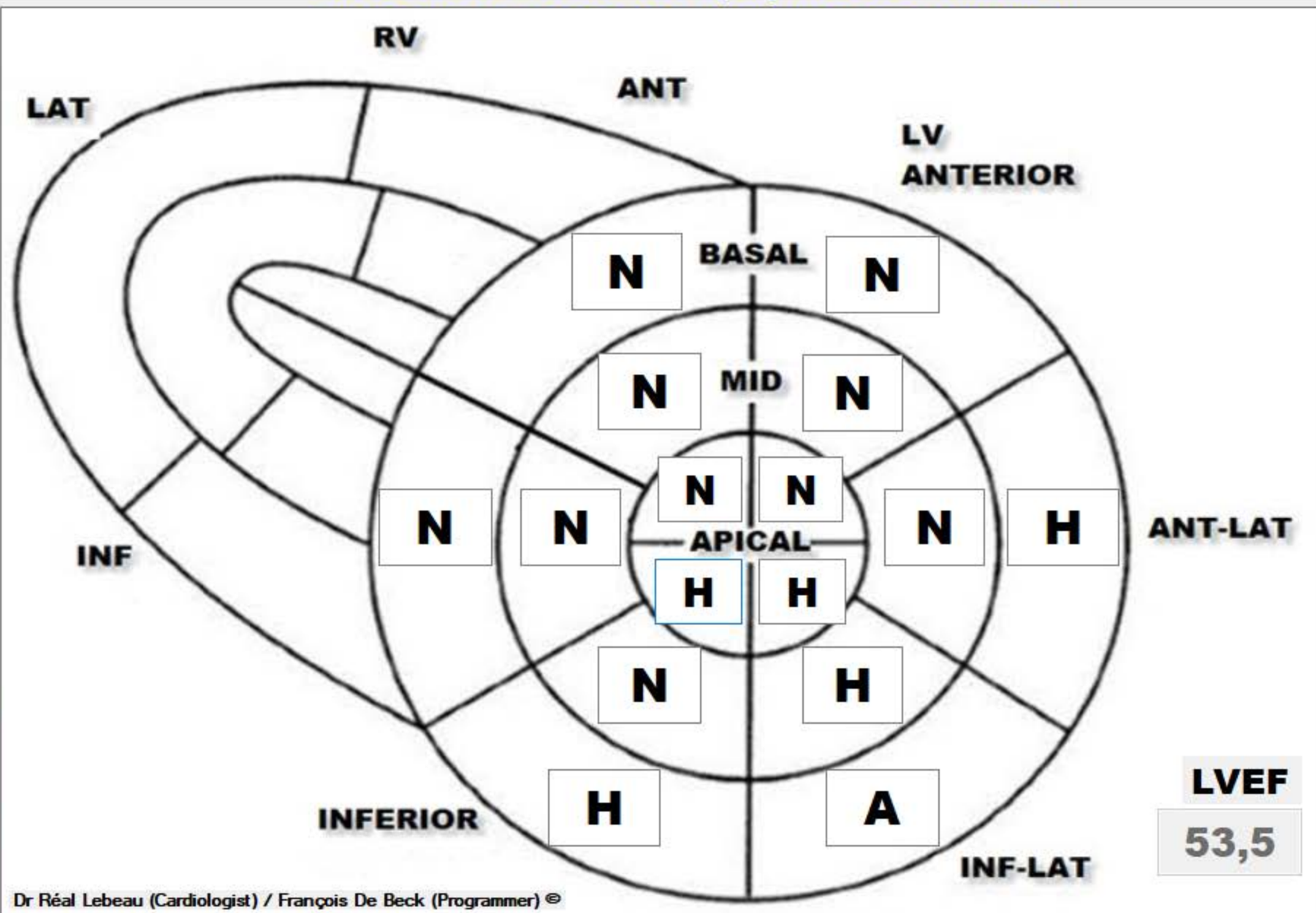
ECG.: your conclusion...



ECG.: Inferior ischemia.

EJECTION FRACTION (EF) MEASUREMENT

Legend



16 EF Score Model

EXAM DATE: 2020-11-05

NAME:

SURNAME:

BIRTH DATE: 2020-11-05

Left Ventricle

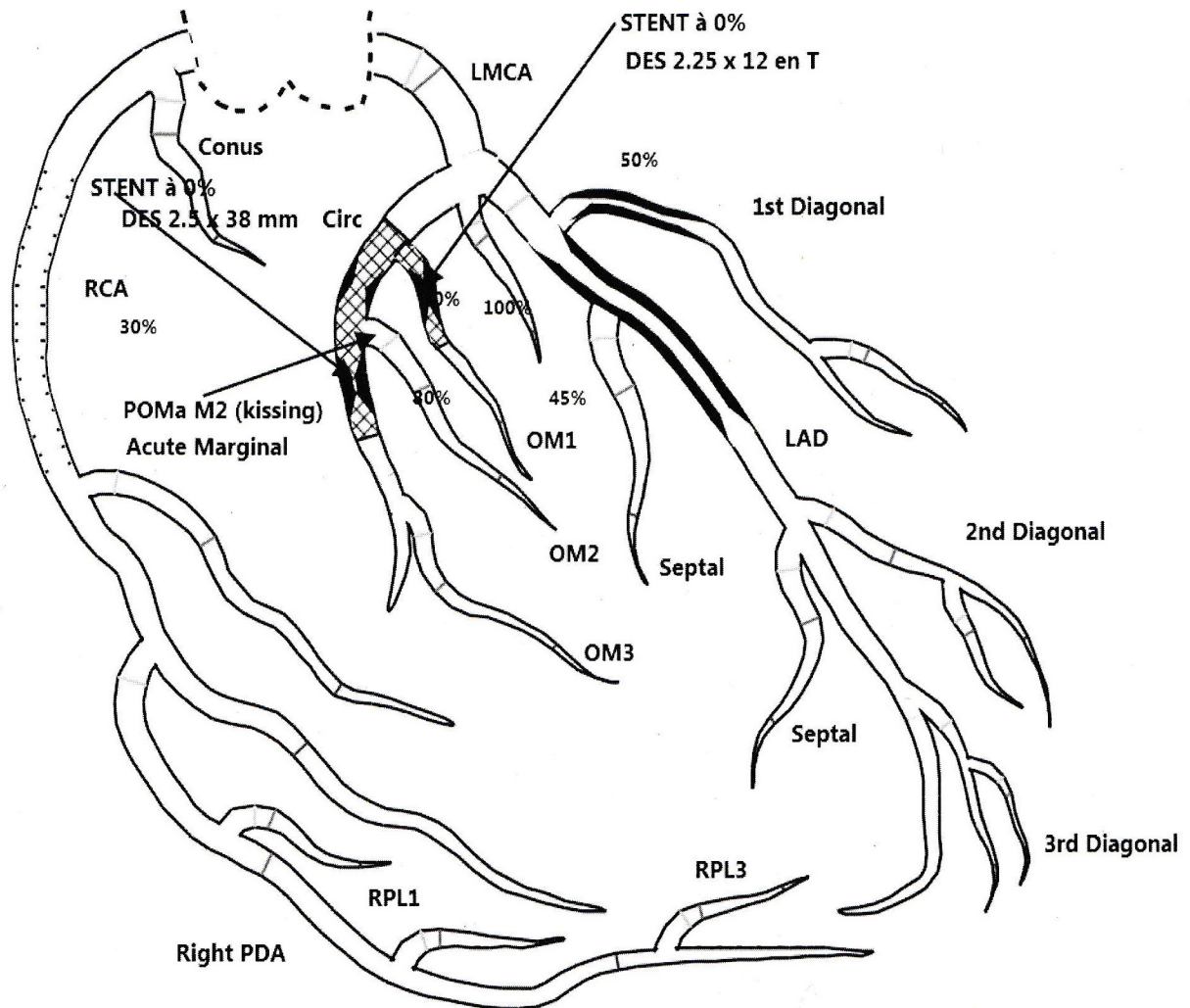
Basal #1	4 %
Basal #2	2,5 %
Basal #3	1 %
Basal #4	2,5 %
Basal #5	4 %
Basal #6	4 %
Mid #7	4 %
Mid #8	4 %
Mid #9	2,5 %
Mid #10	4 %
Mid #11	4 %
Mid #12	4 %
Apical #13	4 %
Apical #14	2,5 %
Apical #15	2,5 %
Apical #16	4 %

Ref.: Echo Research And Practice June 2018 Vol. 5-2 p. 63-69

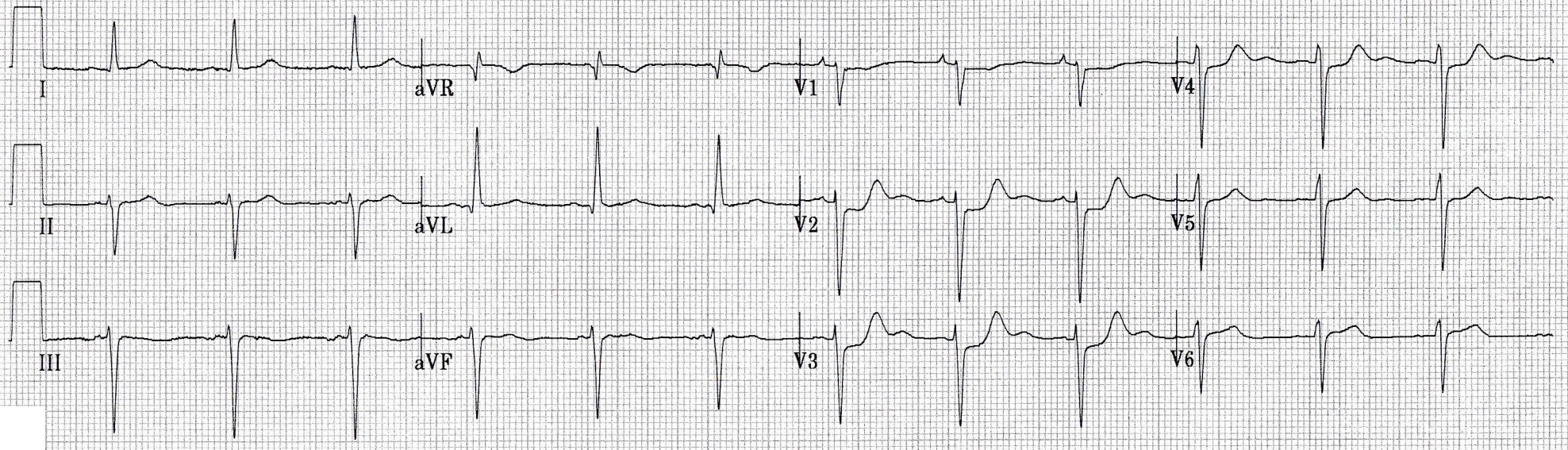
No 48

Coron.: Acute M1 occlusion stented.

Severe stenosis of Cx stented.



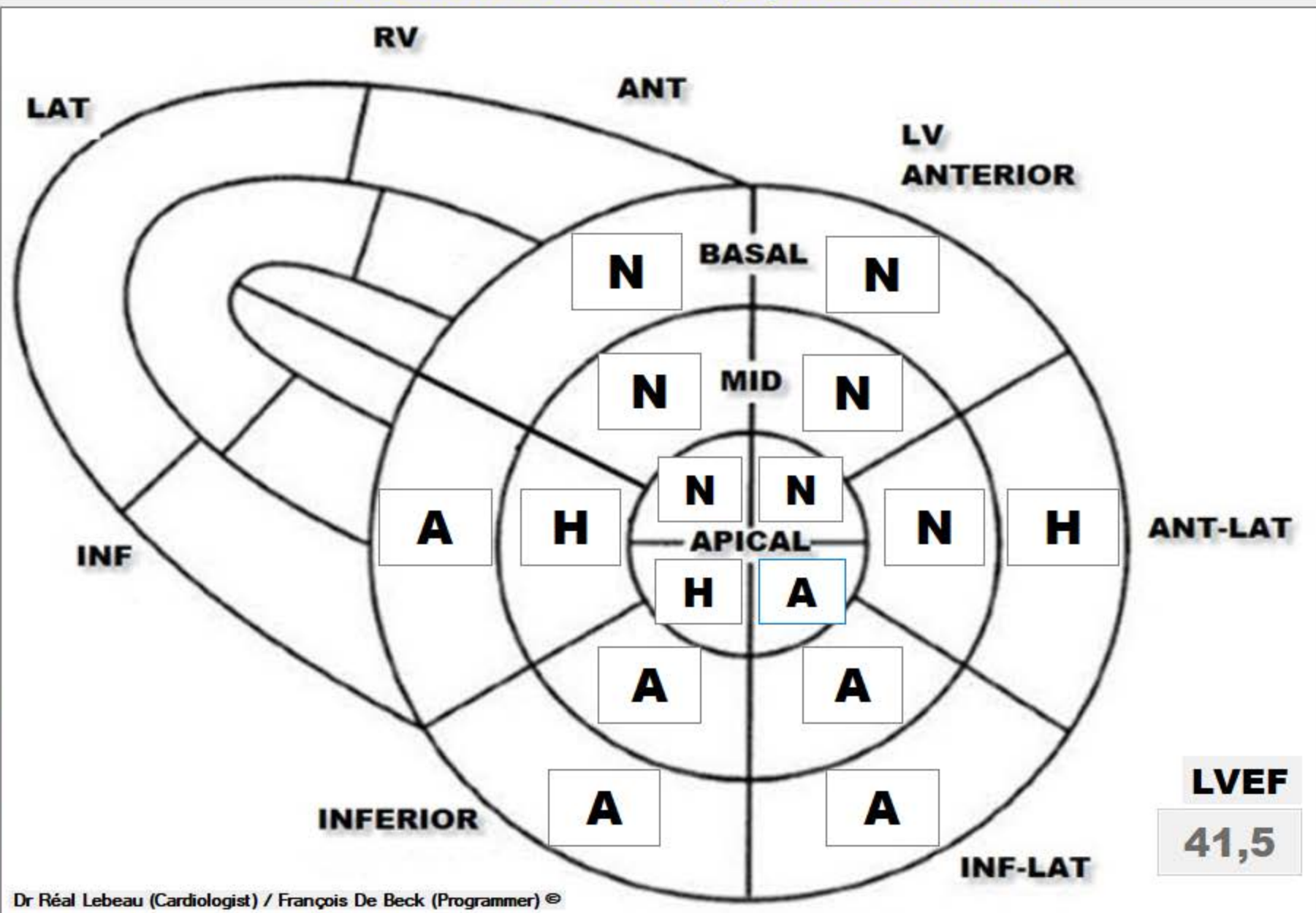
No 49
M57y. Nonstemi
ECG .: your opinion...



ECG.: Possible posterior or anterior injury.

EJECTION FRACTION (EF) MEASUREMENT

Legend



16 EF Score Model

EXAM DATE: 2020-11-05
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-05

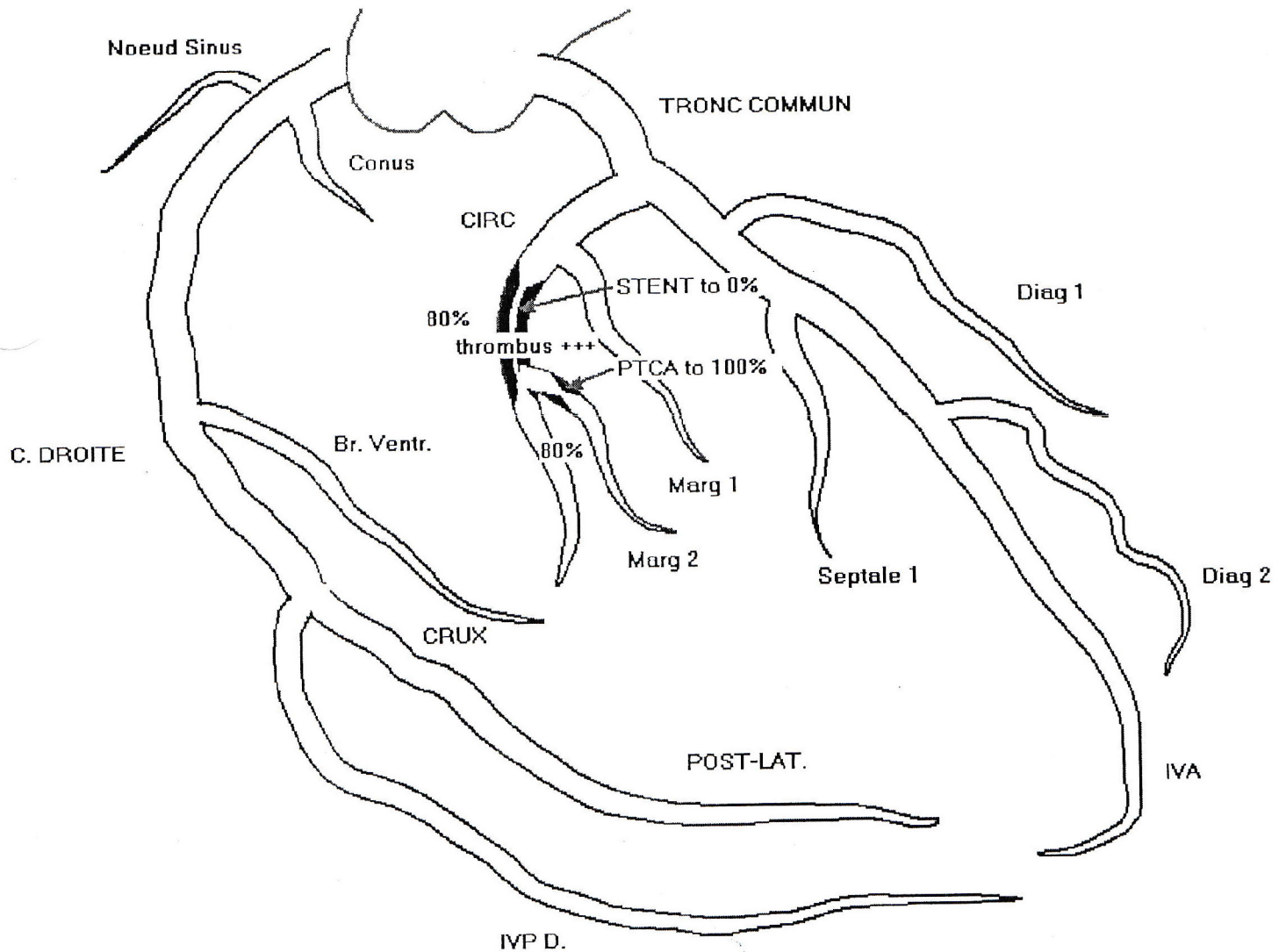
Left Ventricle

Basal #1	4 %
Basal #2	2,5 %
Basal #3	1 %
Basal #4	1 %
Basal #5	1 %
Basal #6	4 %
Mid #7	4 %
Mid #8	4 %
Mid #9	1 %
Mid #10	1 %
Mid #11	2,5 %
Mid #12	4 %
Apical #13	4 %
Apical #14	1 %
Apical #15	2,5 %
Apical #16	4 %

Ref.: Echo Research And Practice June 2018 Vol. 5-2 p. 63-69

No 49

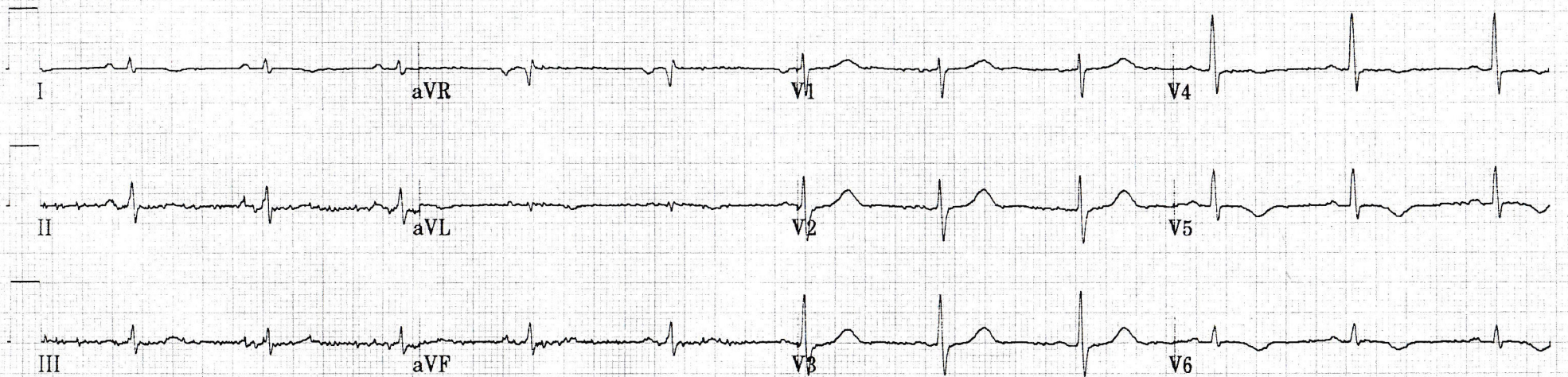
Coron.: Acute occlusion of Cx stented.



No 50

F 60y. Ischemic heart disease.

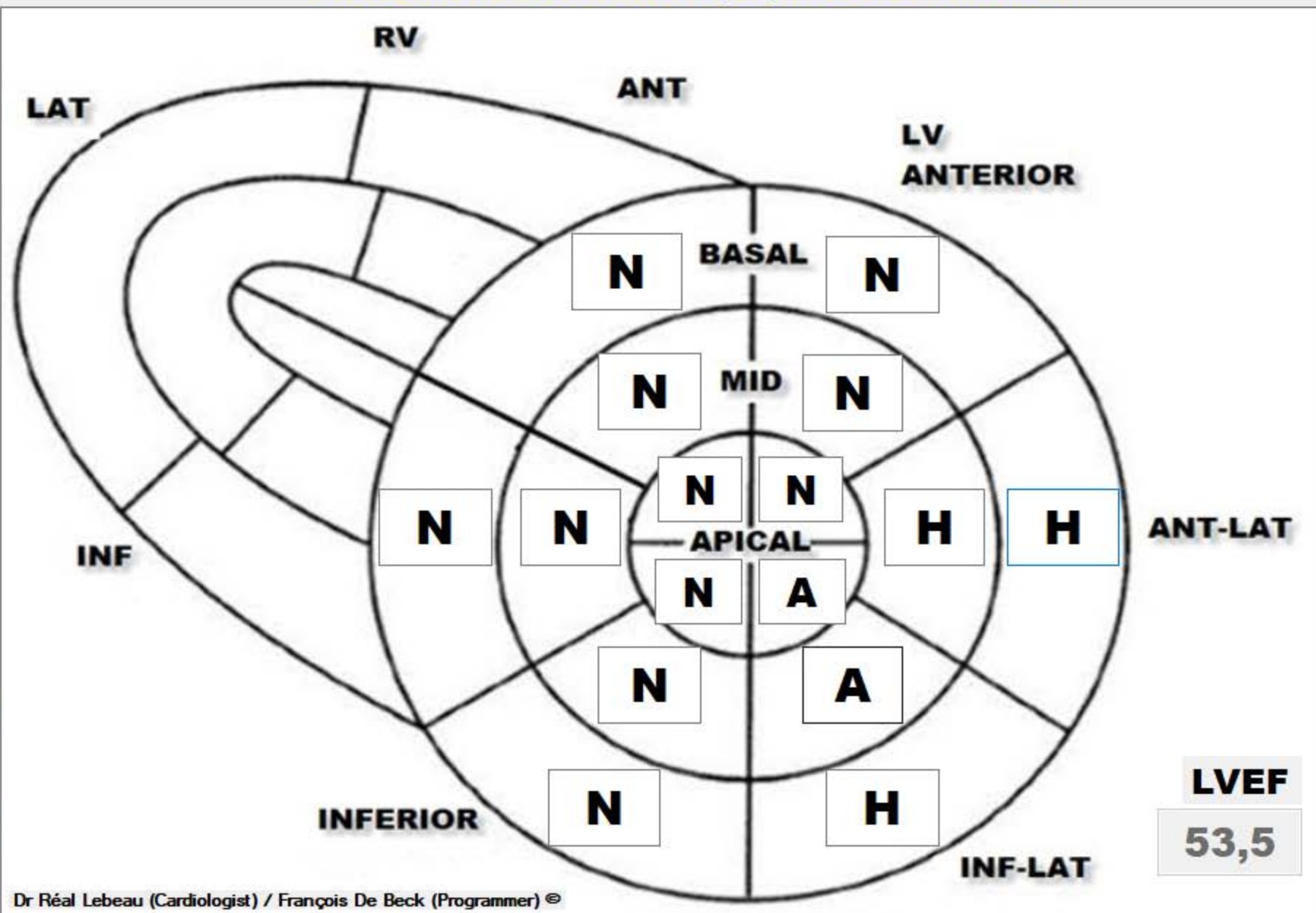
ECG.: your conclusion...



ECG.:Lateral ischemia.

EJECTION FRACTION (EF) MEASUREMENT

Legend



16 EF Score Model

EXAM DATE: 2020-11-05

NAME:

SURNAME:

BIRTH DATE: 2020-11-05

Left Ventricle

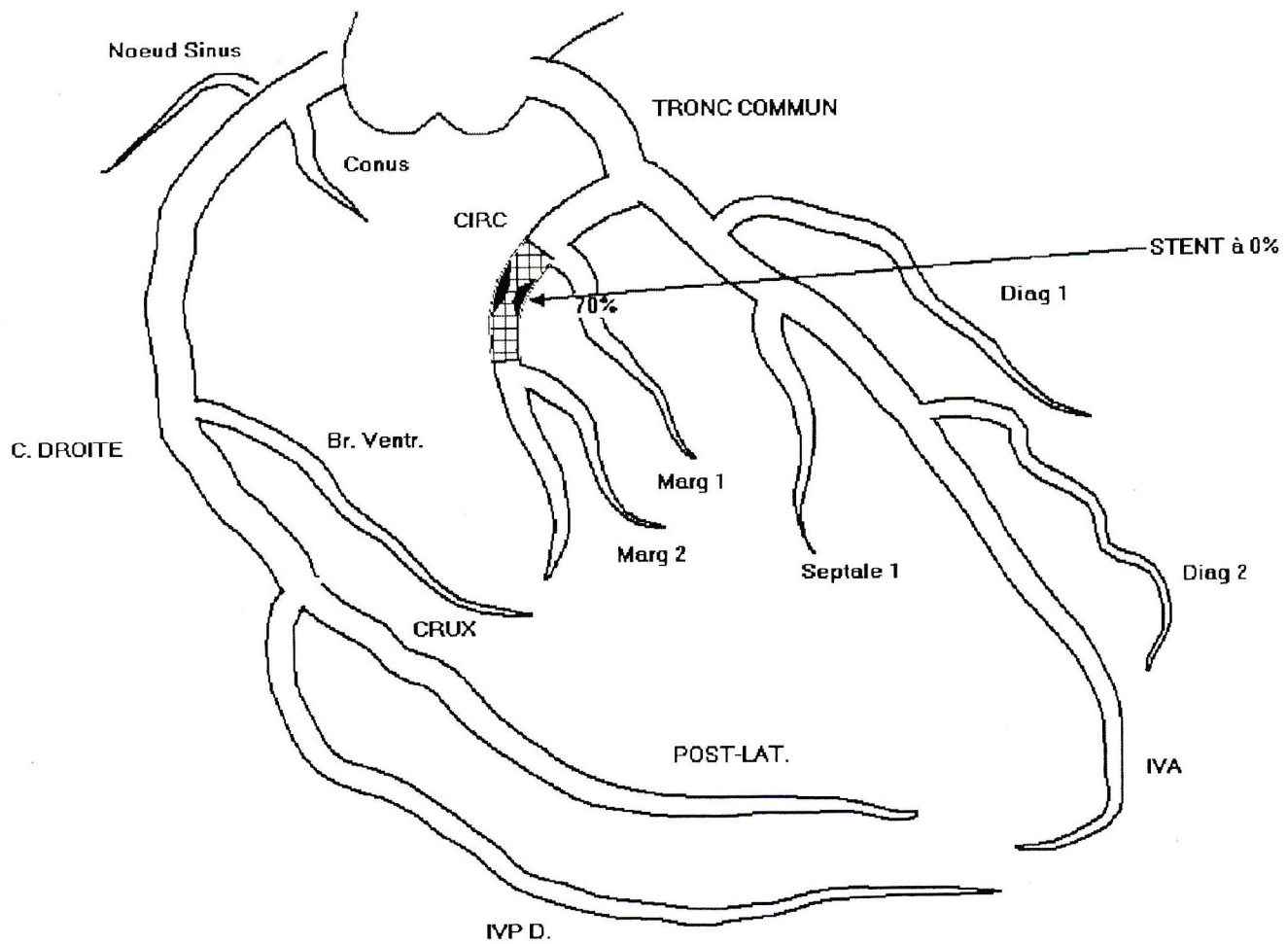
Basal #1	4 %
Basal #2	2,5 %
Basal #3	2,5 %
Basal #4	4 %
Basal #5	4 %
Basal #6	4 %
Mid #7	4 %
Mid #8	2,5 %
Mid #9	1 %
Mid #10	4 %
Mid #11	4 %
Mid #12	4 %
Apical #13	4 %
Apical #14	1 %
Apical #15	4 %
Apical #16	4 %

LVEF
53,5

Ref.: Echo Research And Practice June 2018 Vol. 5-2 p. 63-69

No 50

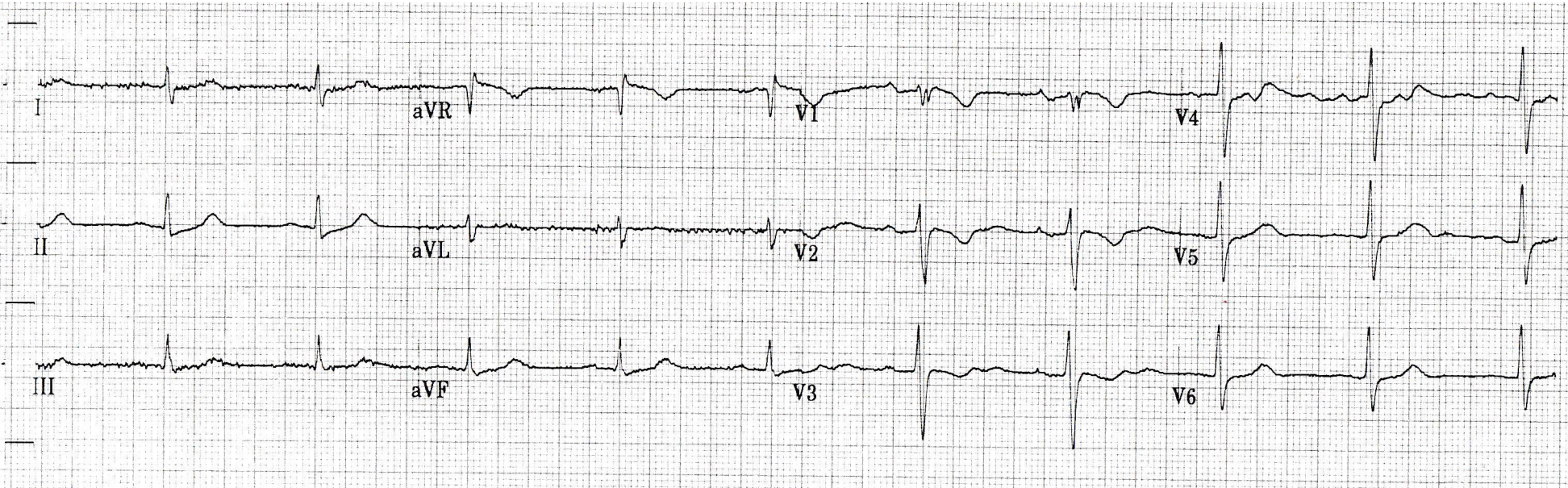
Coron.: Proximal significant stenosis of Cx stented.



No 51

M 69y. Ischemic heart disease.

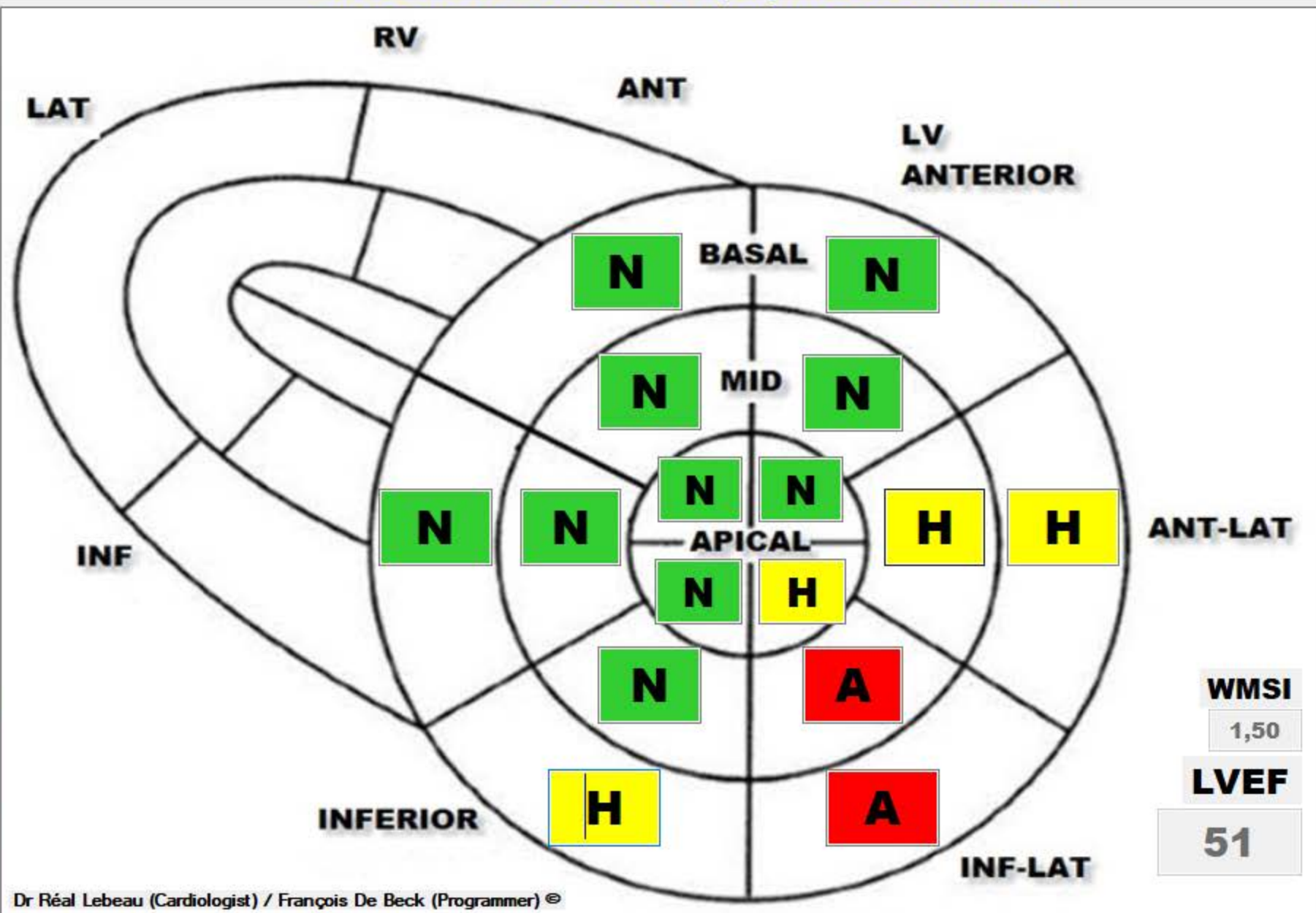
ECG.: your conclusion...



ECG.: Antero septal ischemia.

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-05
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-05

Left Ventricle

Basal #1	1
Basal #2	2
Basal #3	3
Basal #4	2
Basal #5	1
Basal #6	1
Mid #7	1
Mid #8	2
Mid #9	3
Mid #10	1
Mid #11	1
Mid #12	1
Apical #13	1
Apical #14	2
Apical #15	1
Apical #16	1

WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

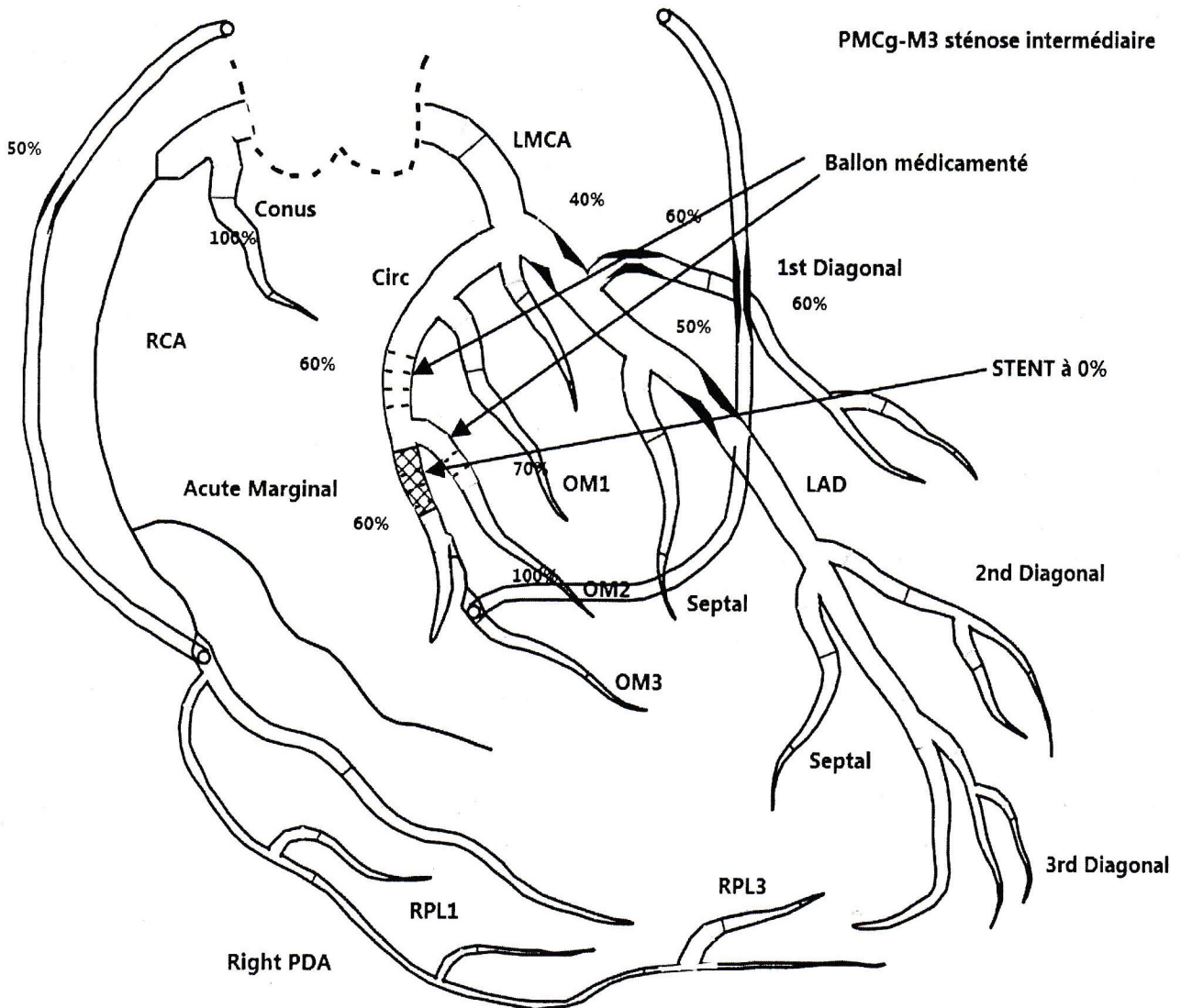
Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

WMSI
1,50

LVEF
51

No 51

Coron.: Cx intra stent restenosis stented.



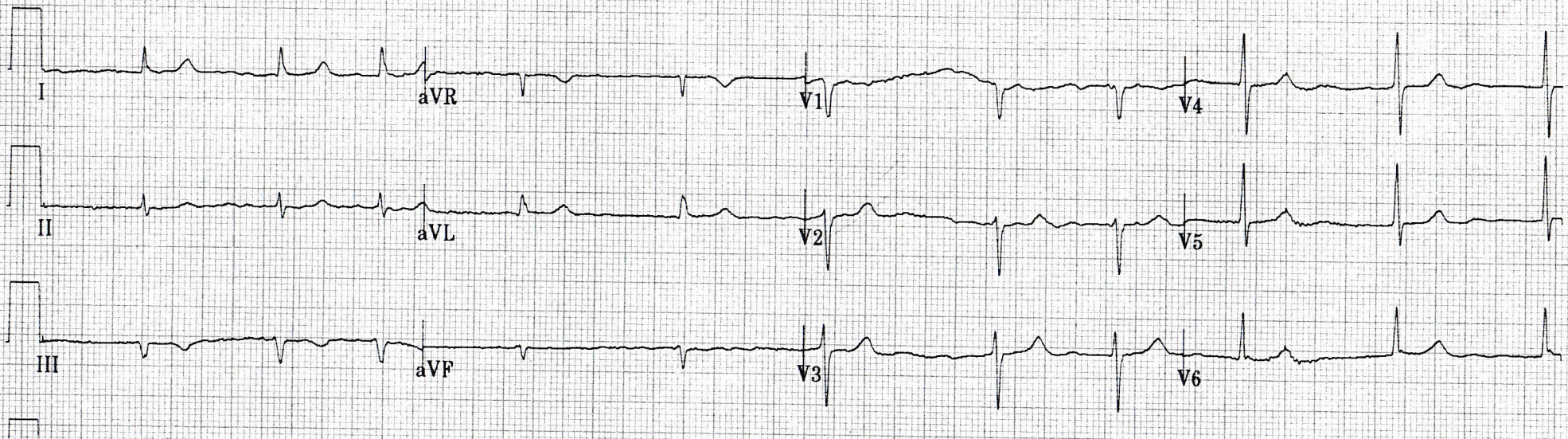
UNUSUAL CASES

52	ECG normal
53	ECG normal
54	Left main coronary artery
55	Left main coronary artery
56	Left main coronary artery
57	CMP (cardiomyopathy)
58	CMP (cardiomyopathy)
59	Stress echo
60	Stress echo

No 52

M 81y. Angina

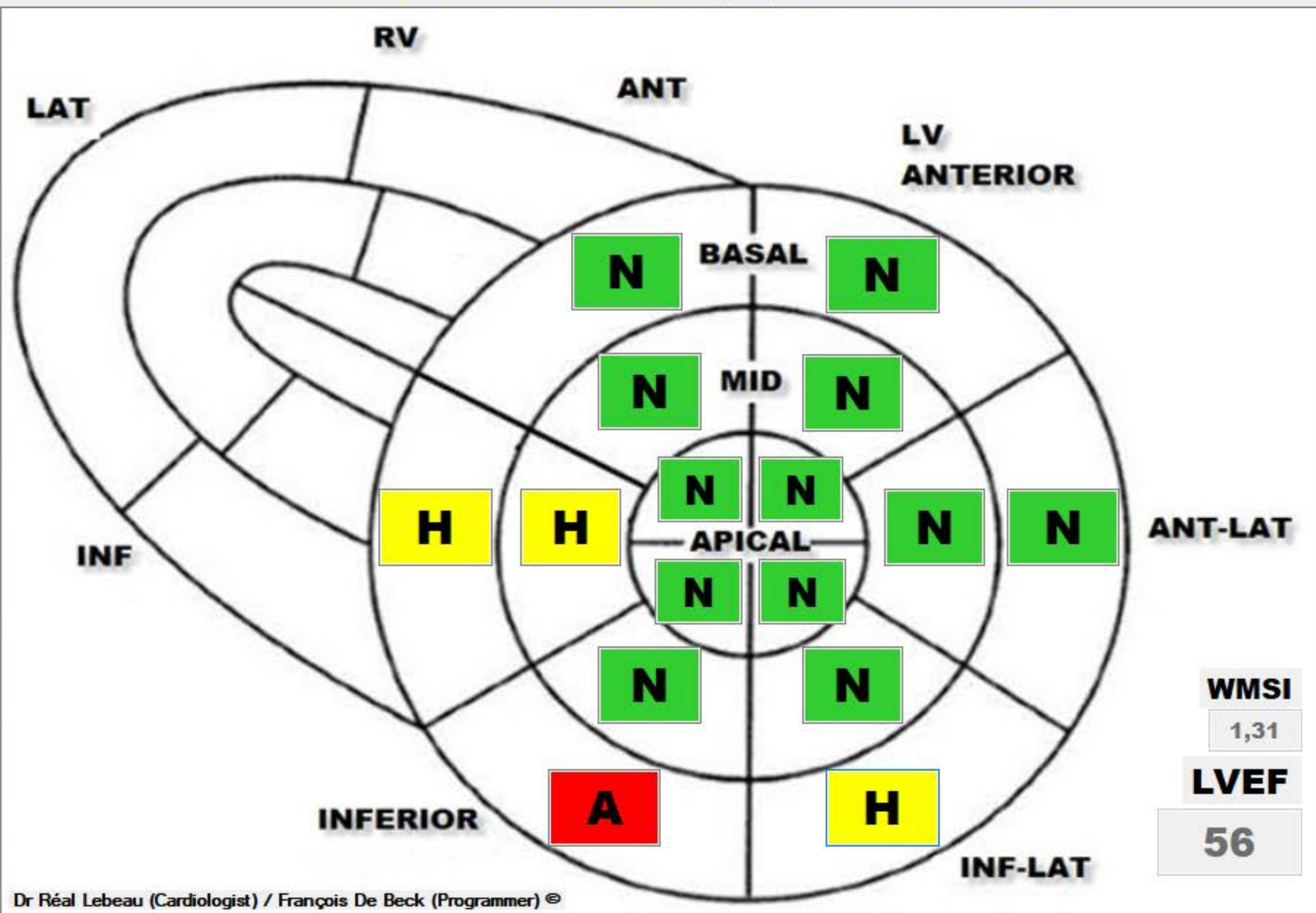
ECG.: your conclusion...



ECG.: Atrial fibrillation . low voltage . otherwise normal

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-06
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-06

Left Ventricle

Basal #1	1
Basal #2	1
Basal #3	2
Basal #4	3
Basal #5	2
Basal #6	1
Mid #7	1
Mid #8	1
Mid #9	1
Mid #10	1
Mid #11	2
Mid #12	1
Apical #13	1
Apical #14	1
Apical #15	1
Apical #16	1

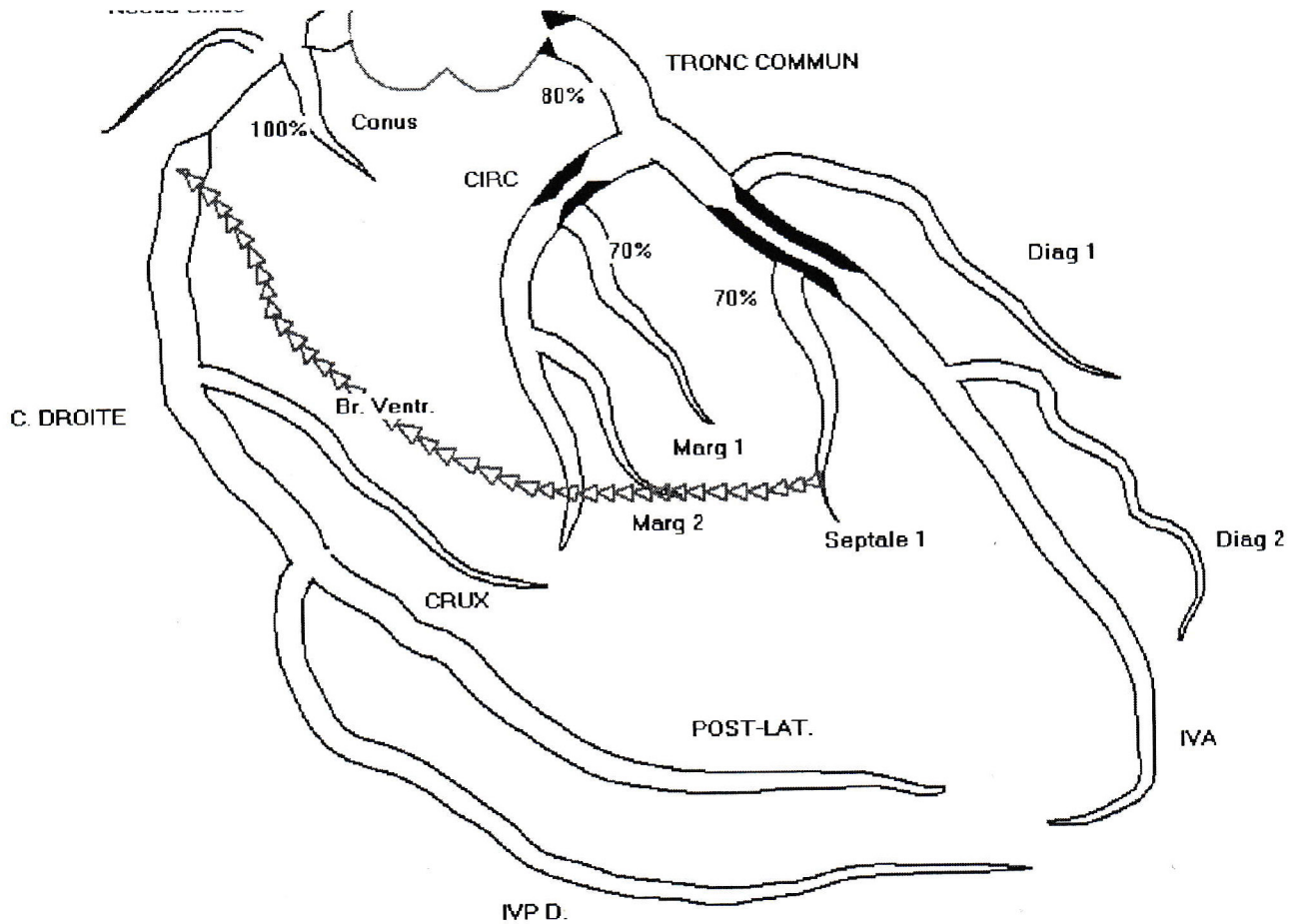
WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98
 Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

WMSI
1,31

LVEF
56

No 52

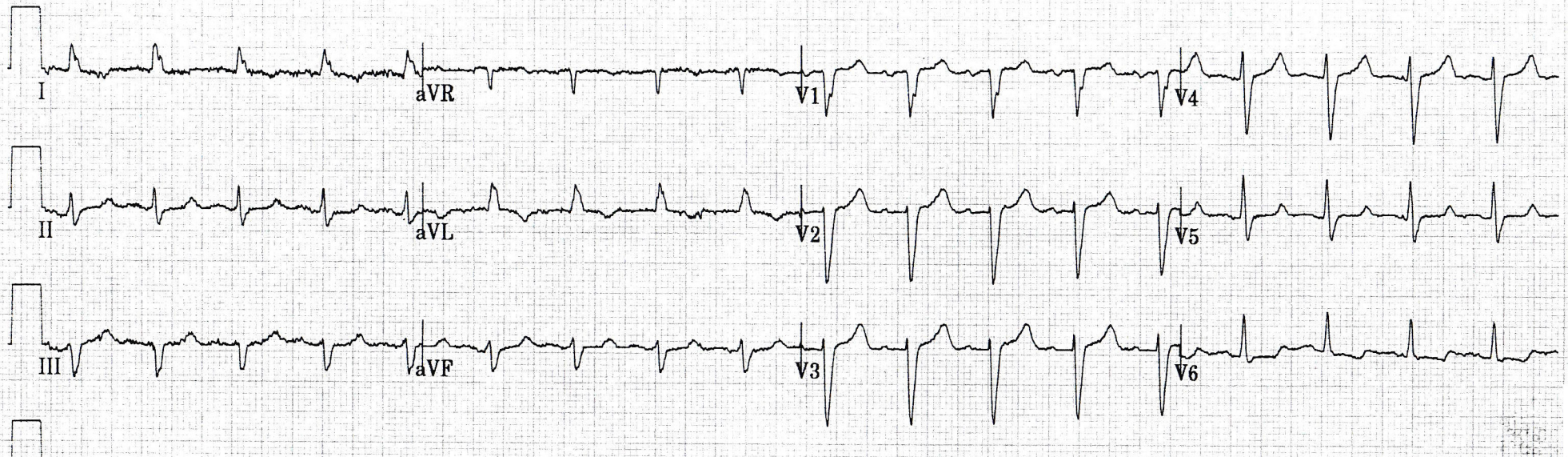
Coron.: Old RCA occlusion with collateral from LAD.



No 53

M 71y

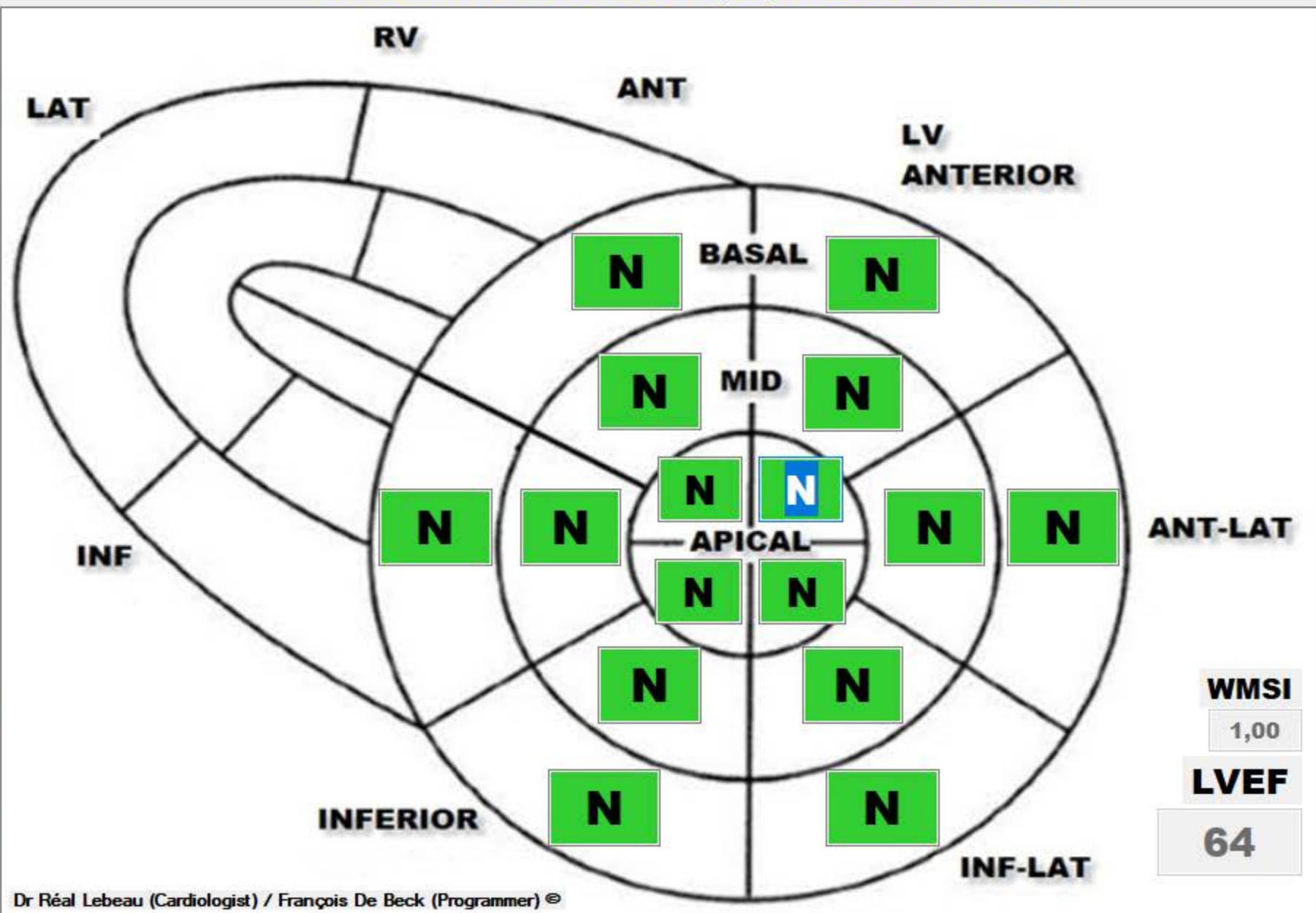
ECG.: your conclusion...



ECG.: Lateral ischemia.

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-06
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-06

Left Ventricle

Basal #1	1
Basal #2	1
Basal #3	1
Basal #4	1
Basal #5	1
Basal #6	1
Mid #7	1
Mid #8	1
Mid #9	1
Mid #10	1
Mid #11	1
Mid #12	1
Apical #13	1
Apical #14	1
Apical #15	1
Apical #16	1

WMSI=(Score 16 segments)/16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

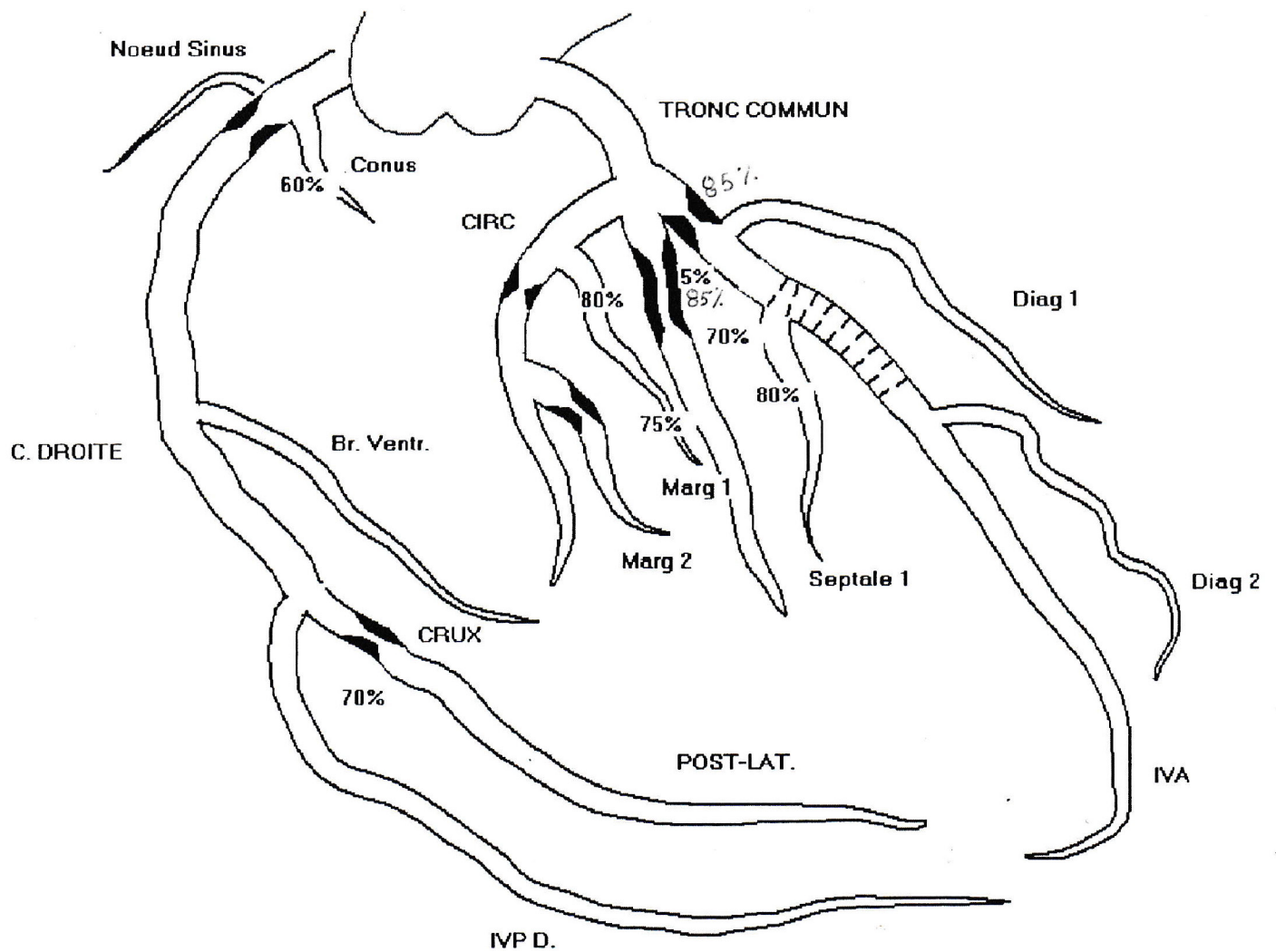
WMSI
1,00

LVEF
64

No 53

Coron.: 3 vessels disease .Aortic valve stenosis.

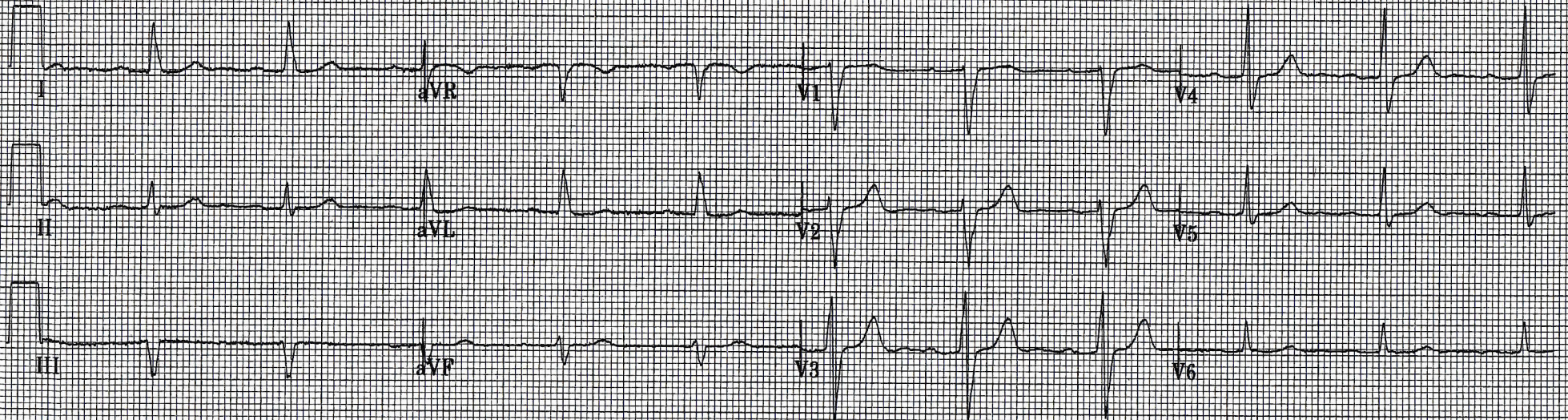
Cardiac surgery consultation.



NO 54

M 71y Angina

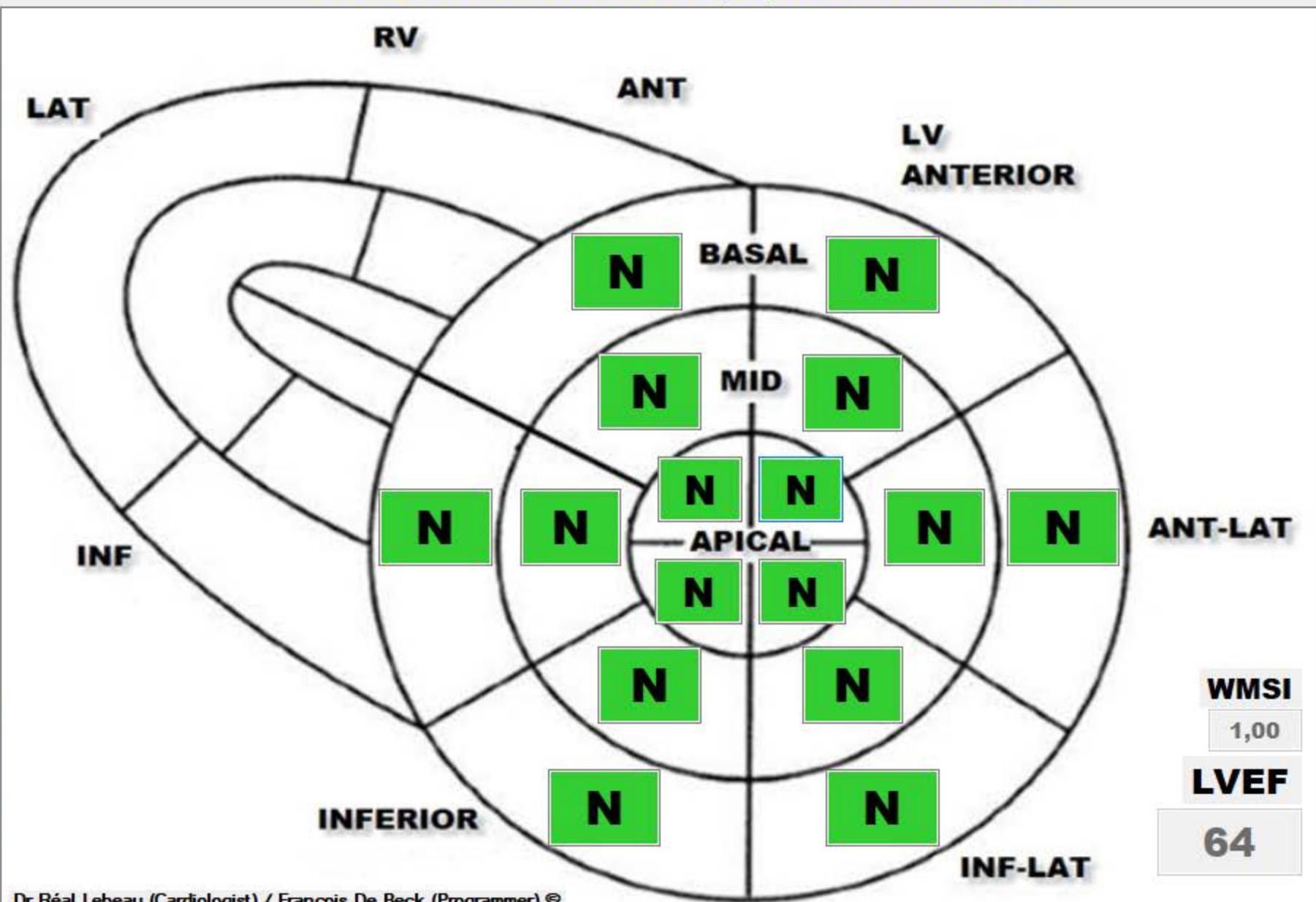
ECG.: your conclusion...



ECG.: First degree AV block. Incomplete LBBB.
Otherwise normal

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-06
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-06

Left Ventricle

Basal #1	1
Basal #2	1
Basal #3	1
Basal #4	1
Basal #5	1
Basal #6	1
Mid #7	1
Mid #8	1
Mid #9	1
Mid #10	1
Mid #11	1
Mid #12	1
Apical #13	1
Apical #14	1
Apical #15	1
Apical #16	1

WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

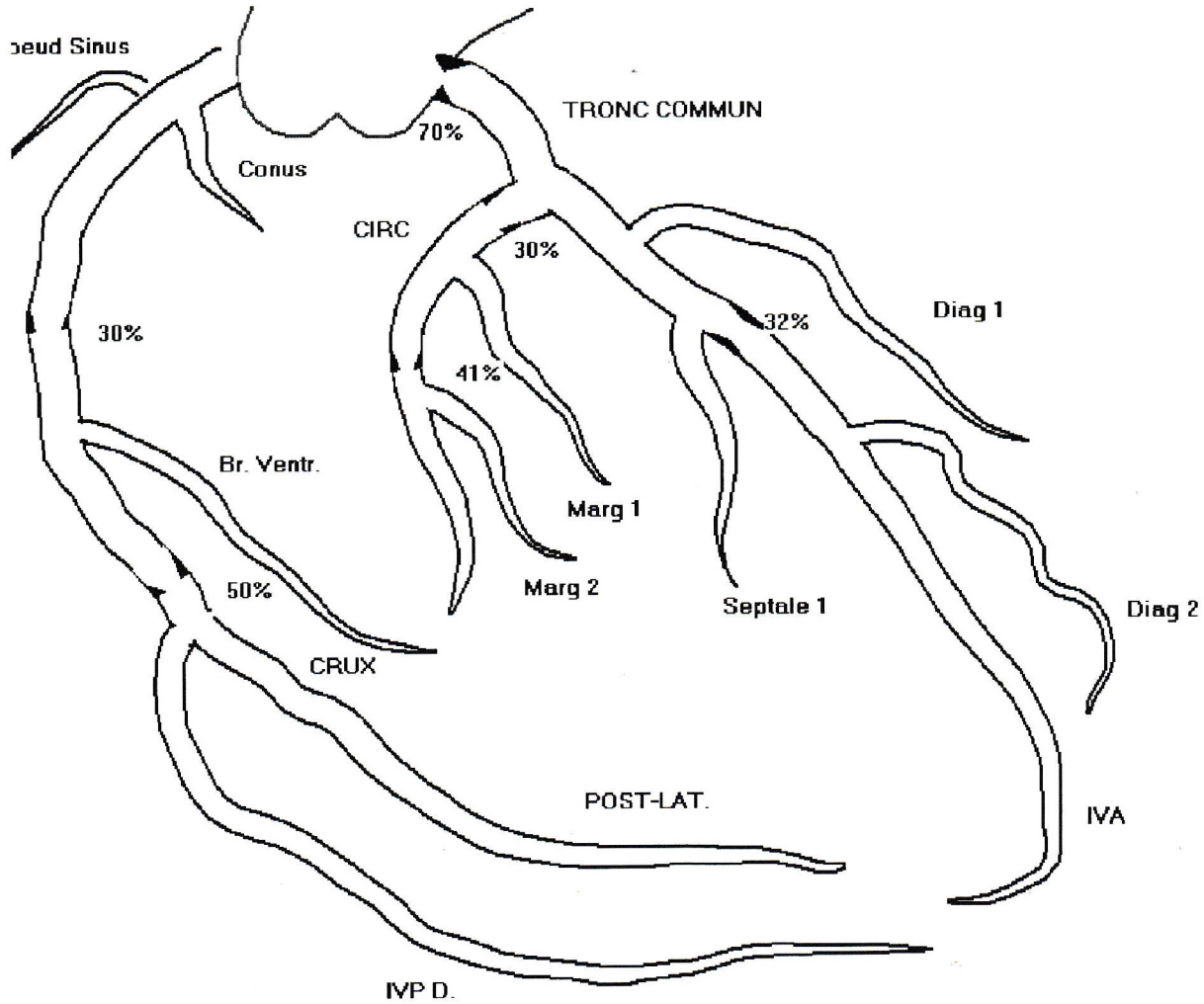
Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

WMSI
1,00

LVEF
64

No 54

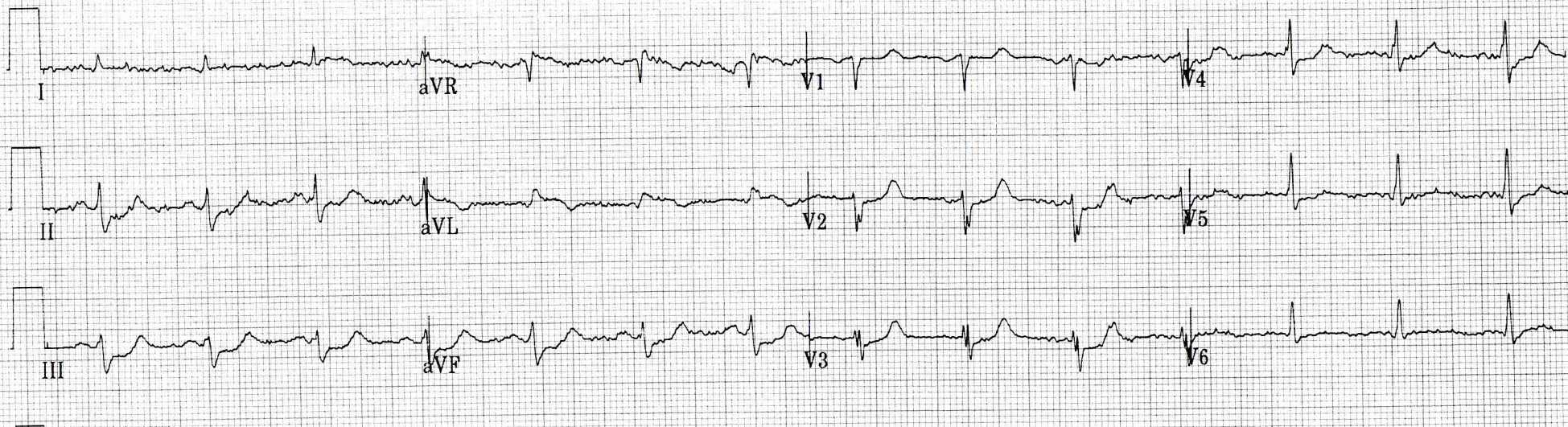
Coron.: Sub total stenosis of the LMA



No 55

M 70y. Myocardial infarction.

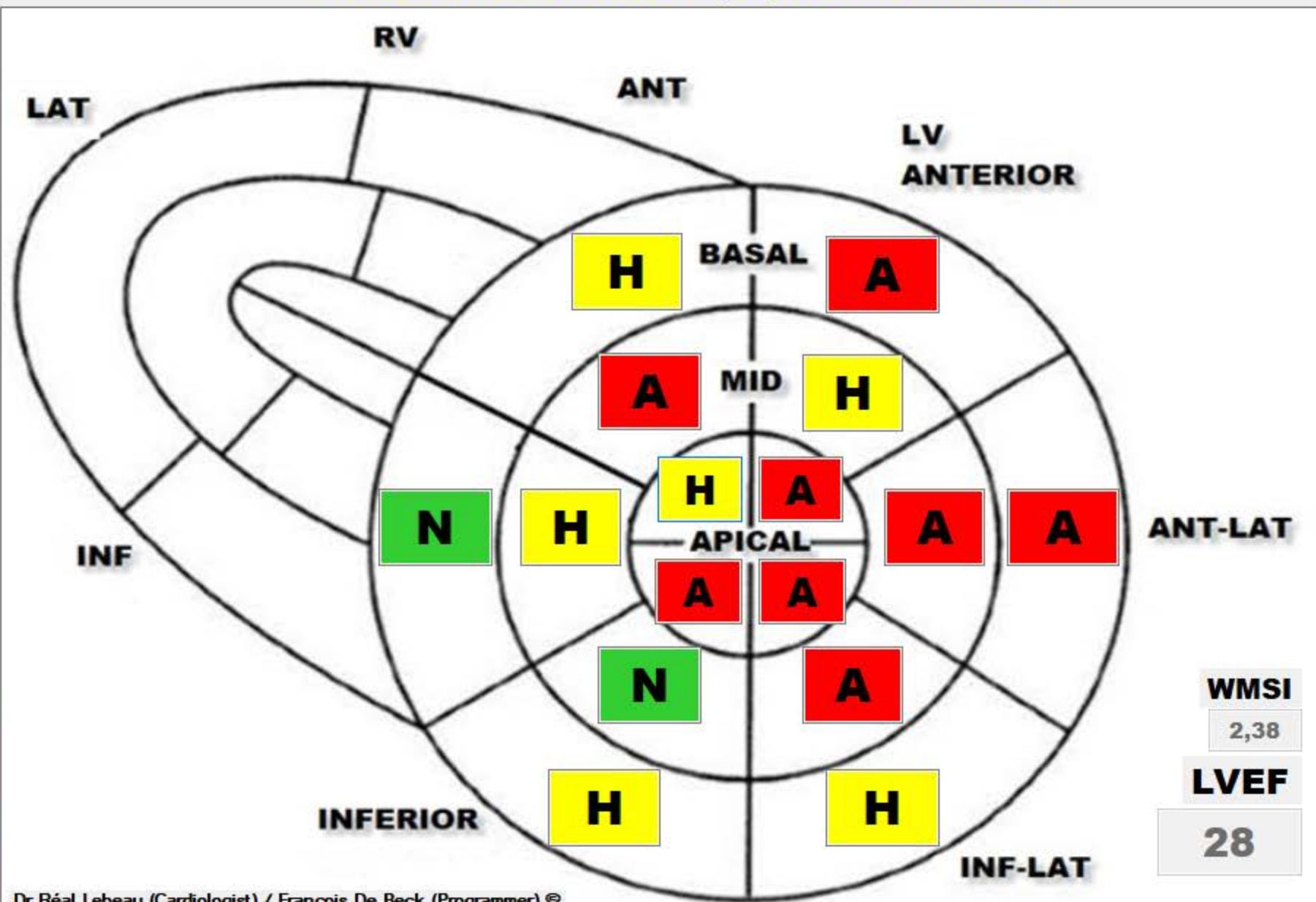
ECG.: your opinion...



ECG.: Lateral injury. Probable anteroseptal ischemia

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-07

NAME:

SURNAME:

BIRTH DATE: 2020-11-07

Left Ventricle

Basal #1	3
Basal #2	3
Basal #3	2
Basal #4	2
Basal #5	1
Basal #6	2
Mid #7	2
Mid #8	3
Mid #9	3
Mid #10	1
Mid #11	2
Mid #12	3
Apical #13	3
Apical #14	3
Apical #15	3
Apical #16	2

WMSI
2,38

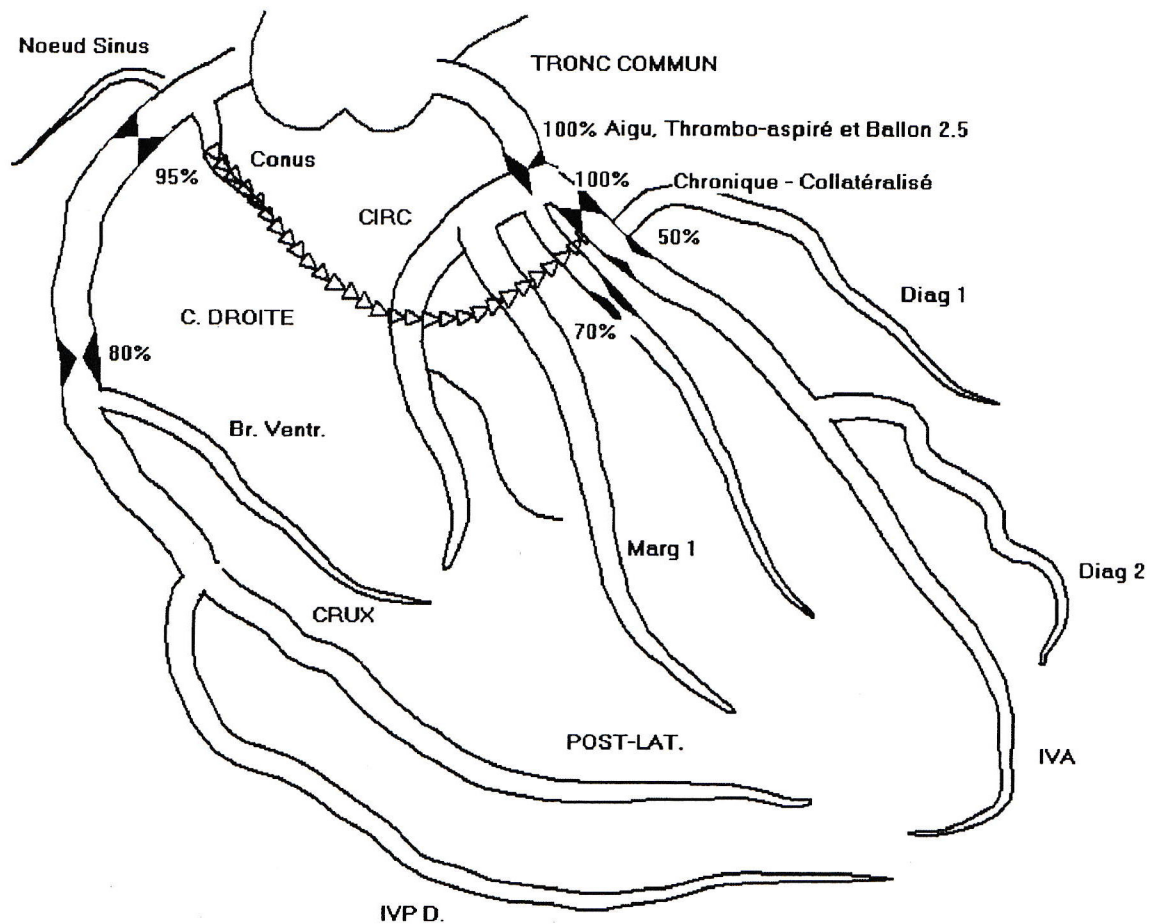
LVEF
28

WMSI=(Score 16 segments)/16
LVEF = 90 - (26 * WMSI)
Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

Right WMSI = (Score right 8 segments) / 8
RVEF = 73.07 - (20.7 * WMSI)
Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

No 55

Coron.: Acute occlusion of LMA. RCA severe stenosis.
LMA dilatation and urgent cardiac surgery consultation.



No 56

M 79y. NSTEMI

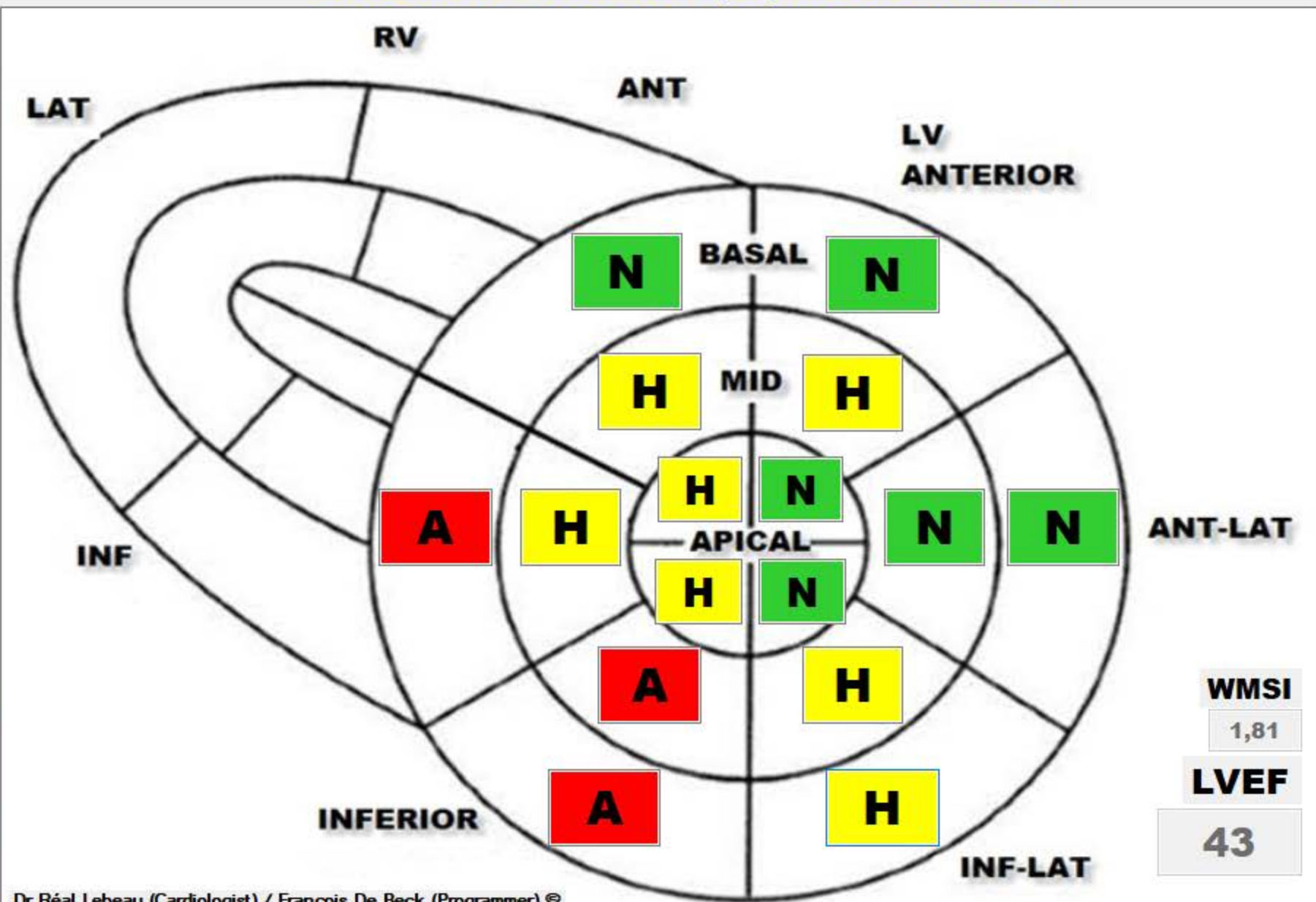
ECG.: your conclusion...



ECG.: Cannot exclude inferior and antero-lateral ischemia.
Possible LVH.

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-07
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-07

Left Ventricle

Basal #1	1
Basal #2	1
Basal #3	2
Basal #4	3
Basal #5	3
Basal #6	1
Mid #7	2
Mid #8	1
Mid #9	2
Mid #10	3
Mid #11	2
Mid #12	2
Apical #13	1
Apical #14	1
Apical #15	2
Apical #16	2

WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

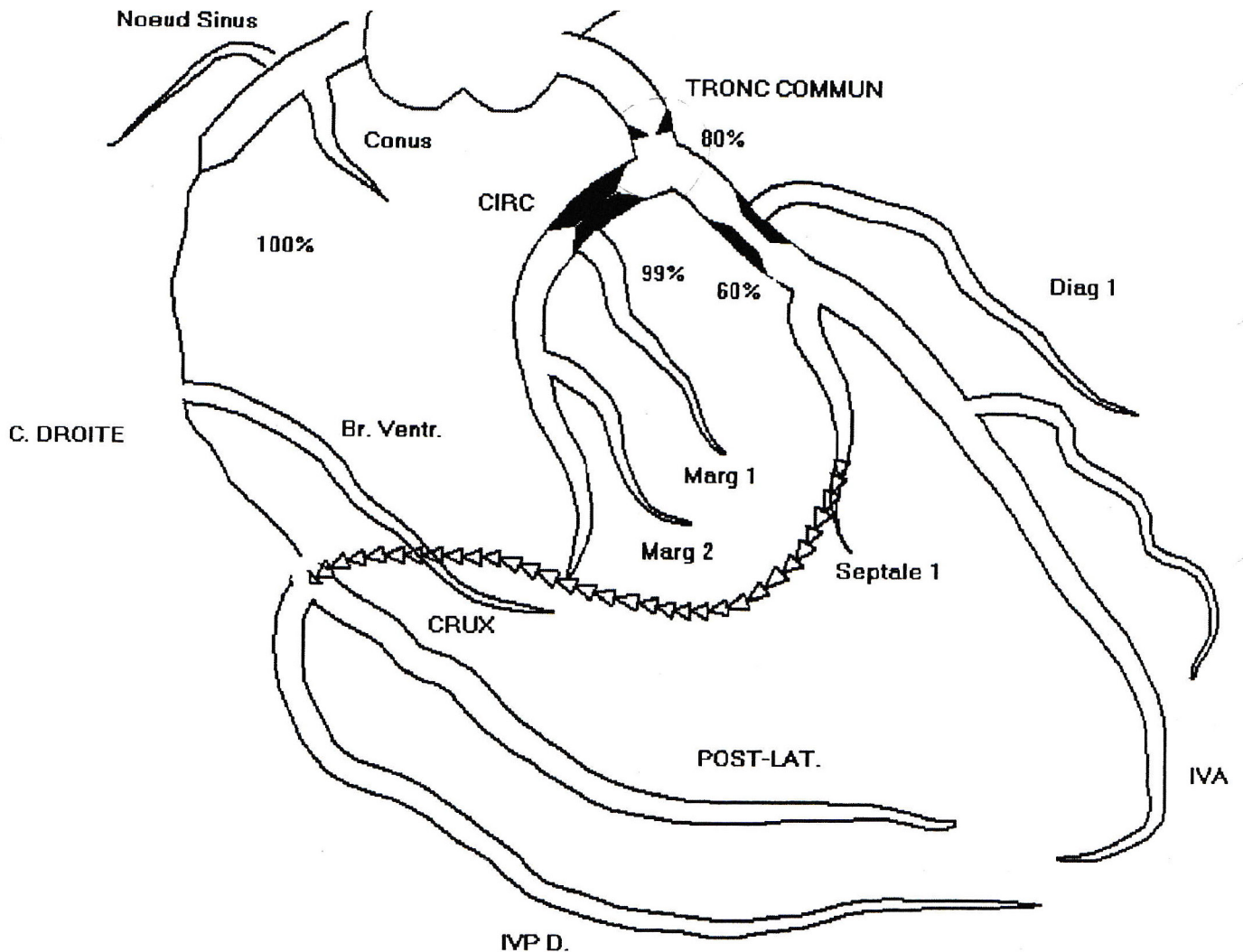
Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

WMSI
1,81

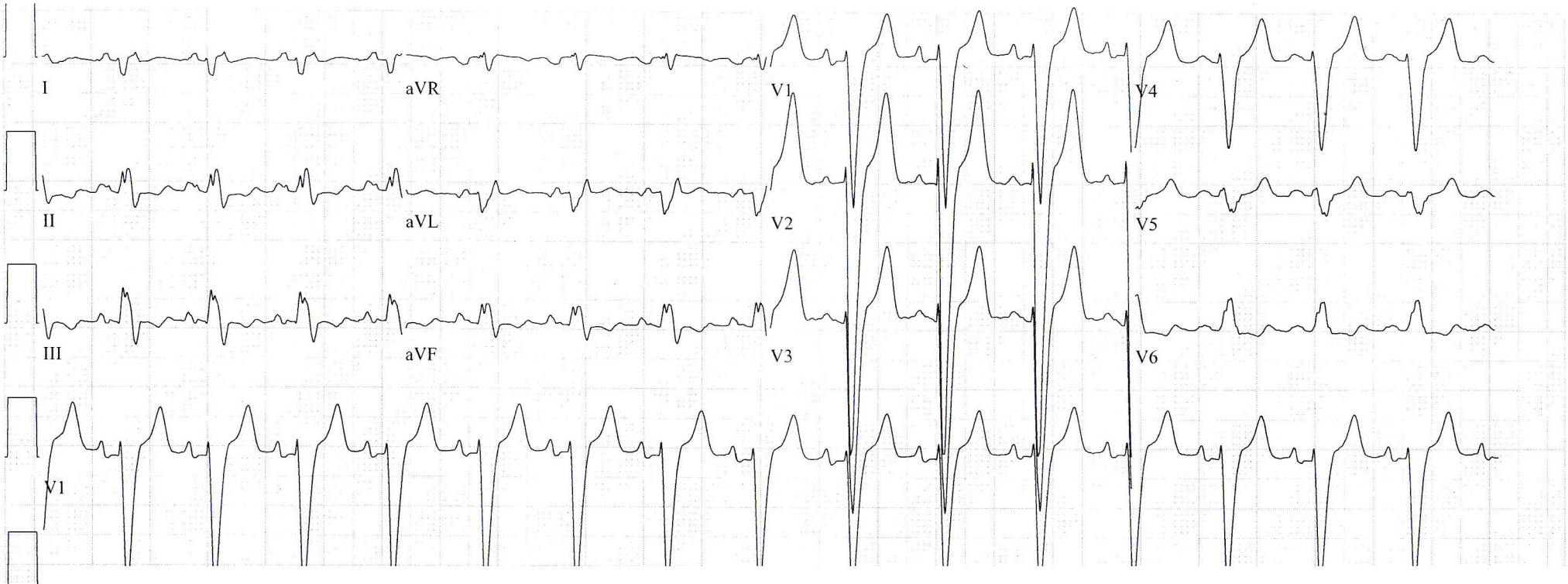
LVEF
43

No 56

Coron.: LMA culprit lesion. Cx occlusion. RCA chronic occlusion. Urgent cardiac surgery consultation.



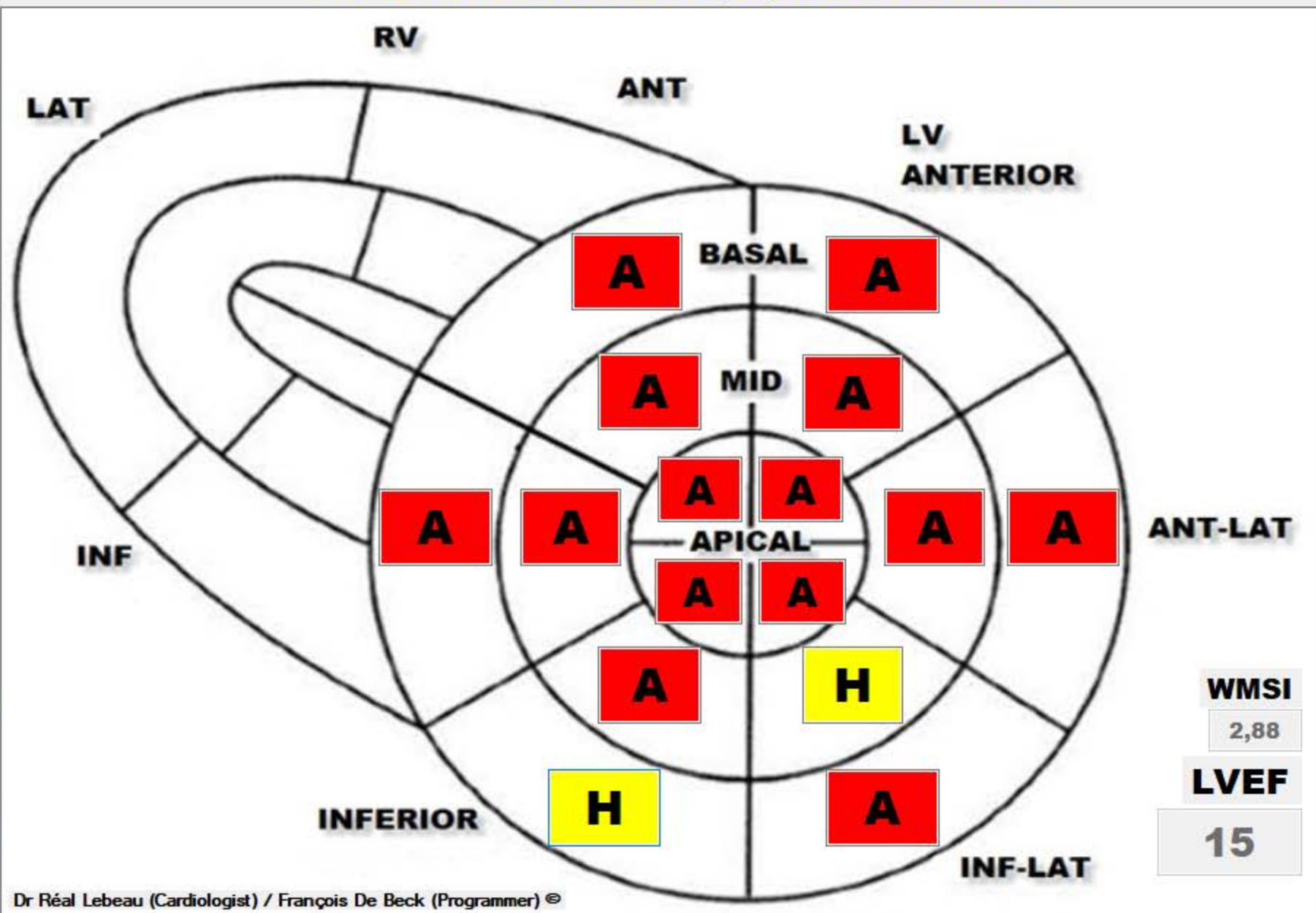
No 57
M 42y. Shortness of breath.
ECG.: your conclusion...



ECG.: Left bundle branch block

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-07

NAME:

SURNAME:

BIRTH DATE: 2020-11-07

Left Ventricle

Basal #1	3
Basal #2	3
Basal #3	3
Basal #4	2
Basal #5	3
Basal #6	3
Mid #7	3
Mid #8	3
Mid #9	2
Mid #10	3
Mid #11	3
Mid #12	3
Apical #13	3
Apical #14	3
Apical #15	3
Apical #16	3

WMSI
2,88

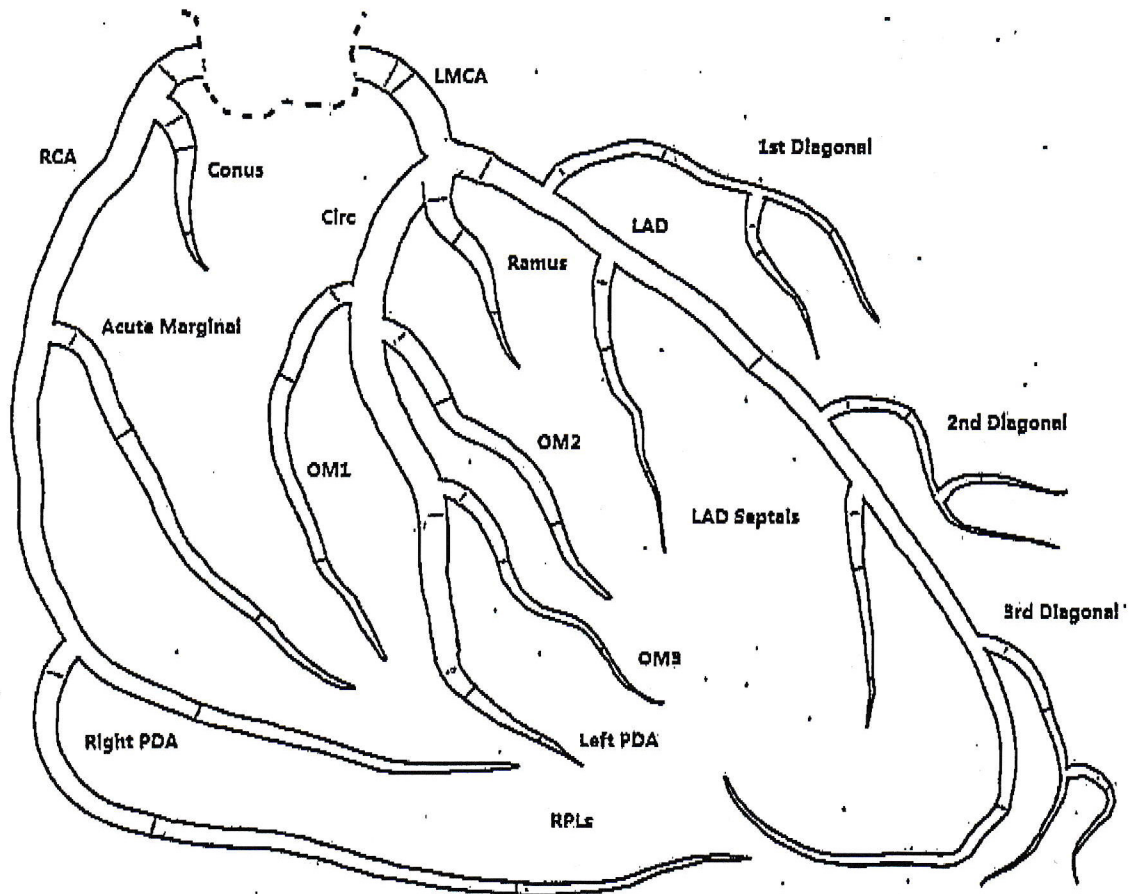
LVEF
15

WMSI=(Score 16 segments)/16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

No 57

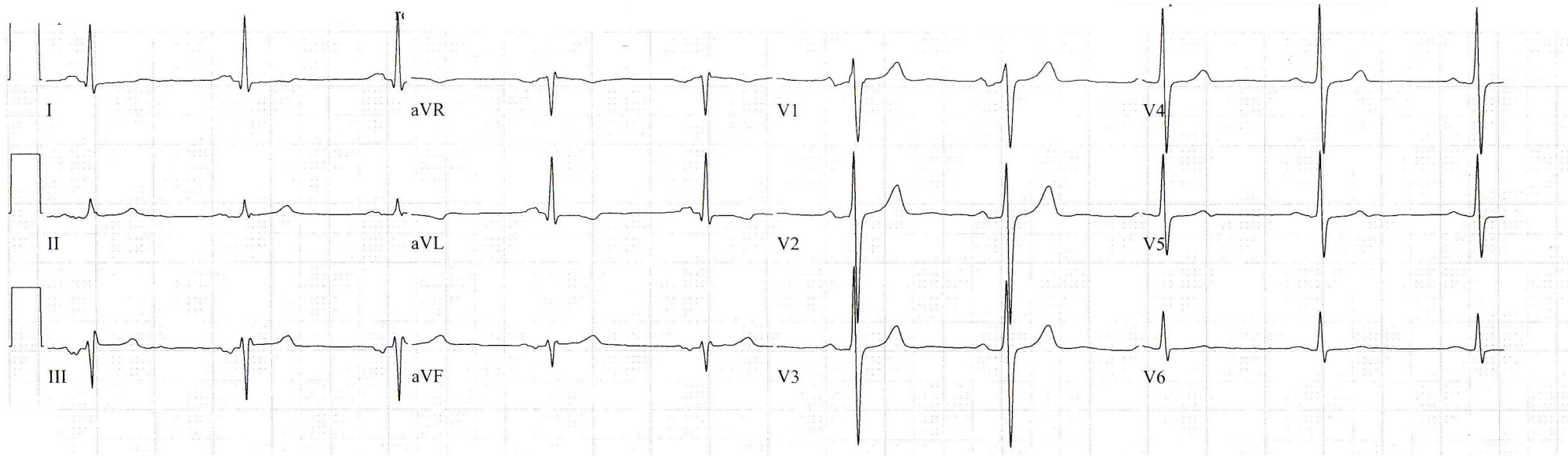
Coron.: Normal.



No 58

F 53y. Cardiac insufficiency.

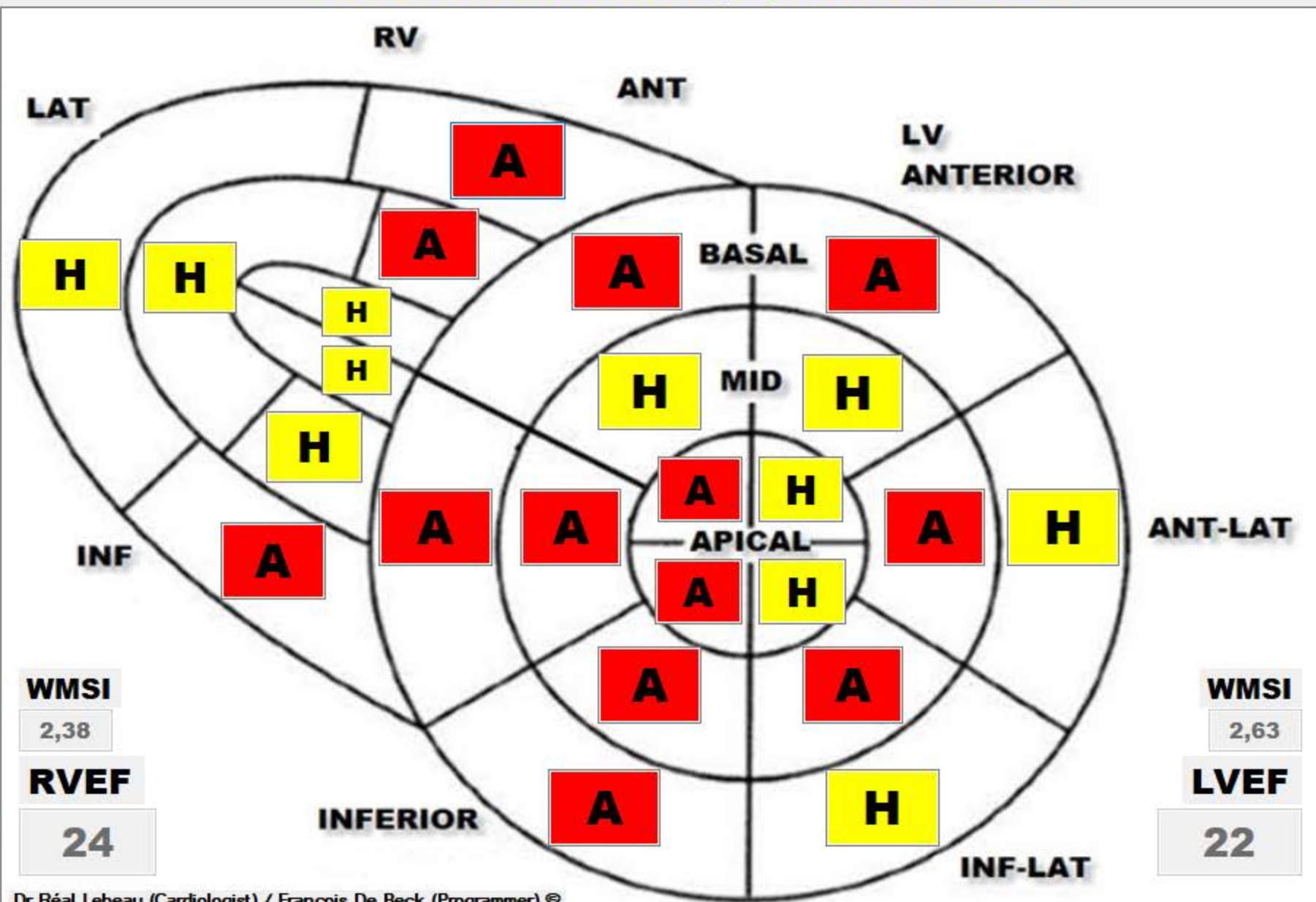
ECG.: your conclusion...



ECG.: Normal

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-07
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-07

Left Ventricle Right Ventricle

Basal #1	3	Basal #1	3
Basal #2	2	Basal #2	2
Basal #3	2	Basal #3	3
Basal #4	3	Mid #4	2
Basal #5	3	Mid #5	2
Basal #6	3	Mid #6	3
Mid #7	2	Apical #7	2
Mid #8	3	Apical #8	2
Mid #9	3		
Mid #10	3		
Mid #11	3		
Mid #12	2		
Apical #13	2		
Apical #14	2		
Apical #15	3		
Apical #16	3		

WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98
 Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

WMSI
2,38

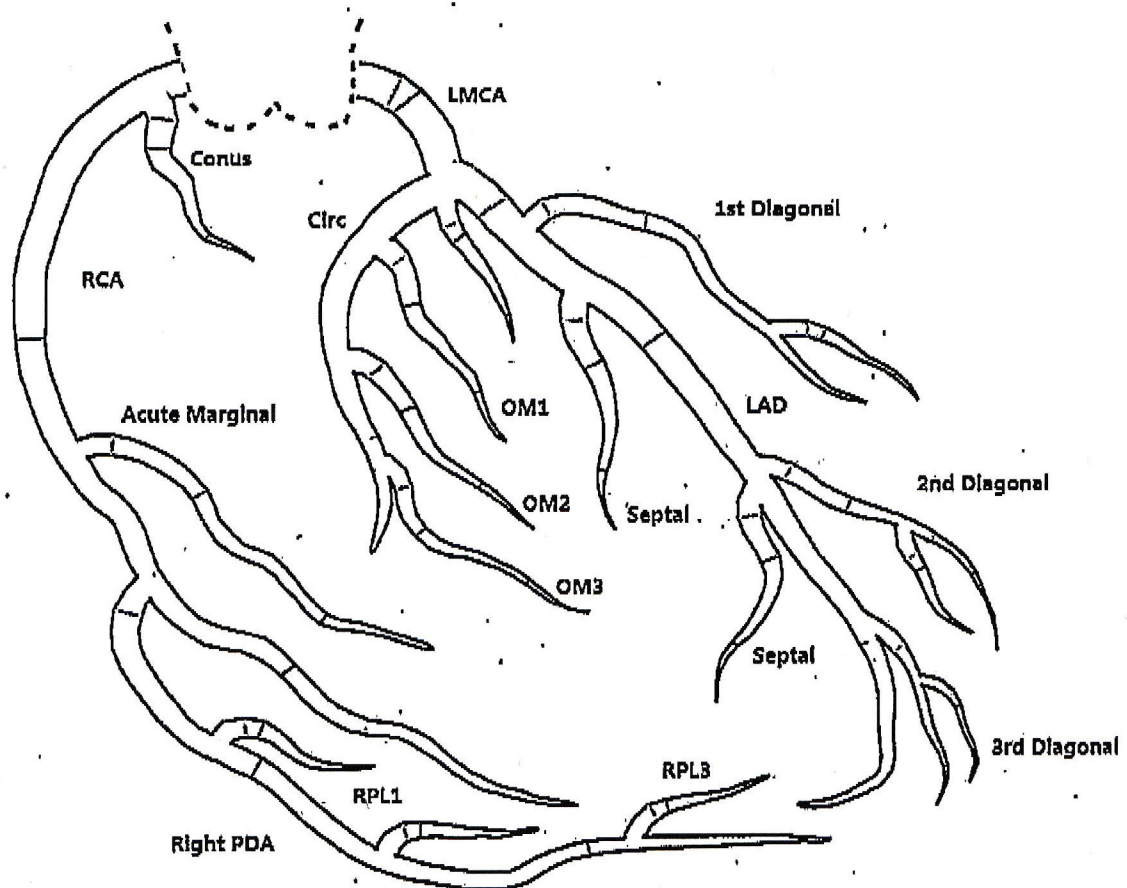
RVEF
24

WMSI
2,63

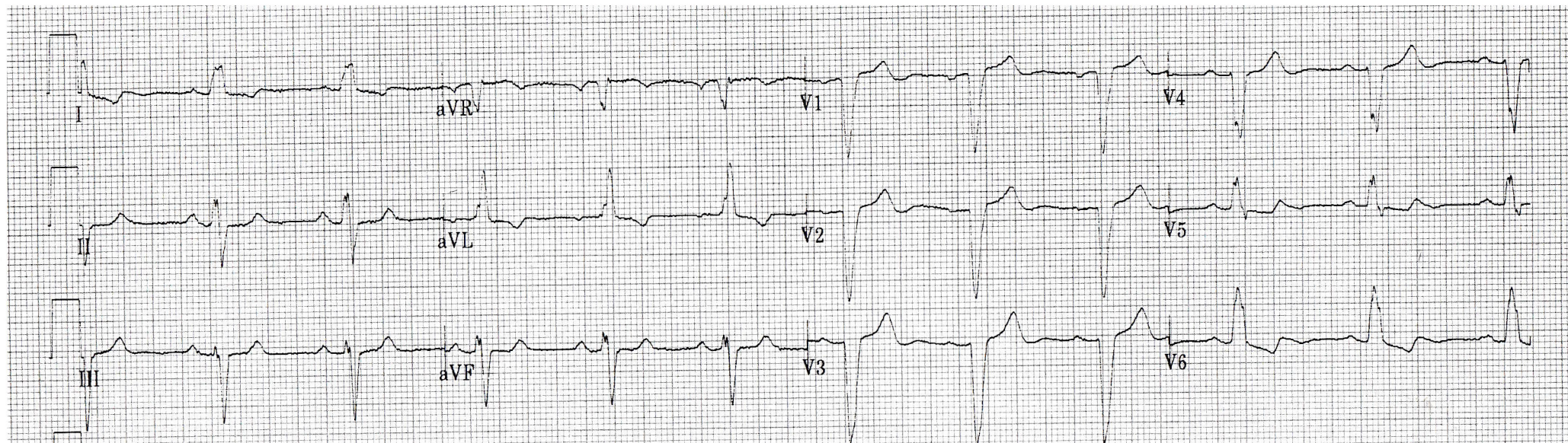
LVEF
22

No 58

Coron.: Normal coronarography suggest non ischemic cardiomyopathy



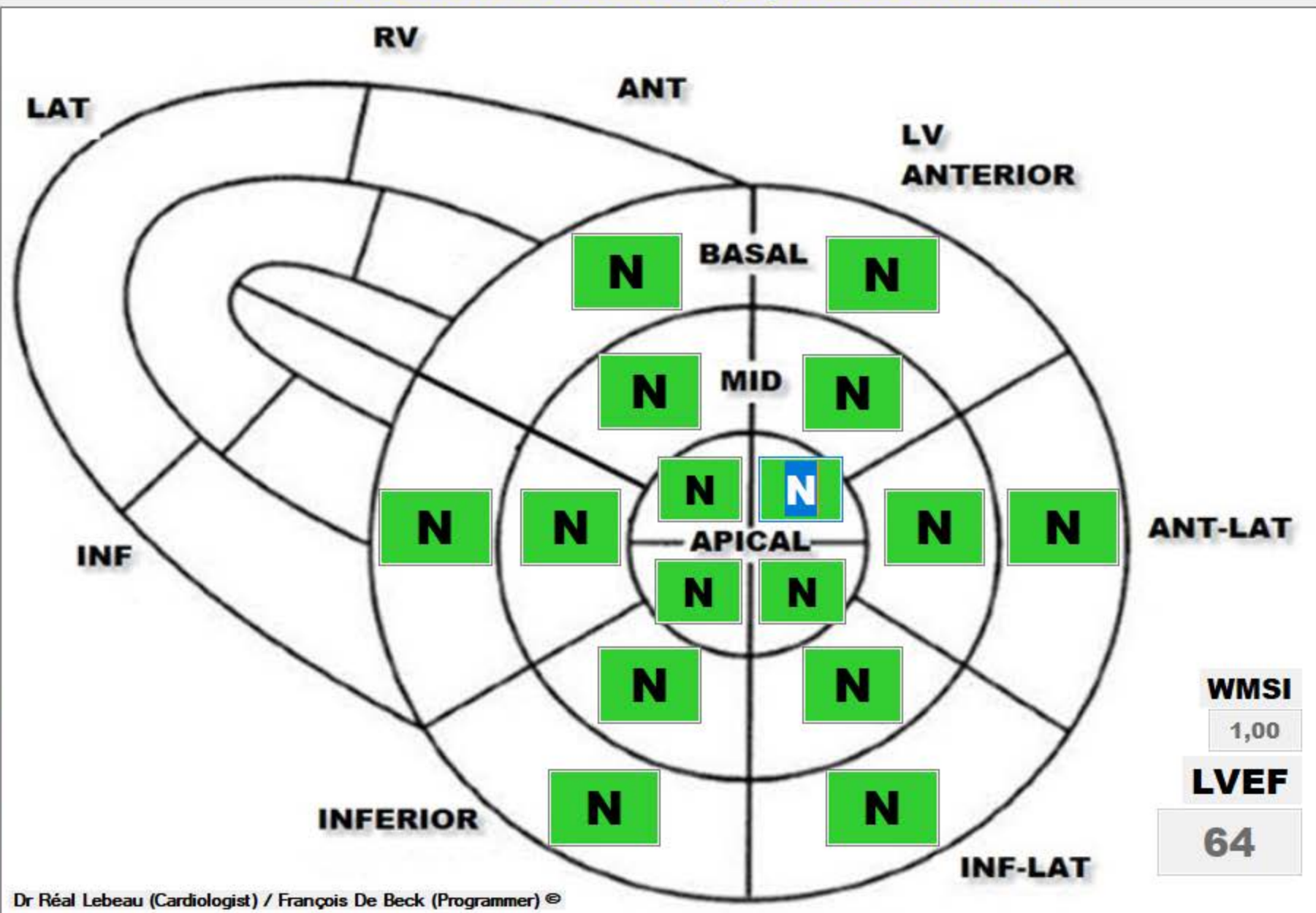
No 59 STRESS ECHO
F 76y Angina
ECG.: your conclusion...



ECG.: Left bundle branch block

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-07
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-07

Left Ventricle

Basal #1	1
Basal #2	1
Basal #3	1
Basal #4	1
Basal #5	1
Basal #6	1
Mid #7	1
Mid #8	1
Mid #9	1
Mid #10	1
Mid #11	1
Mid #12	1
Apical #13	1
Apical #14	1
Apical #15	1
Apical #16	1

WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

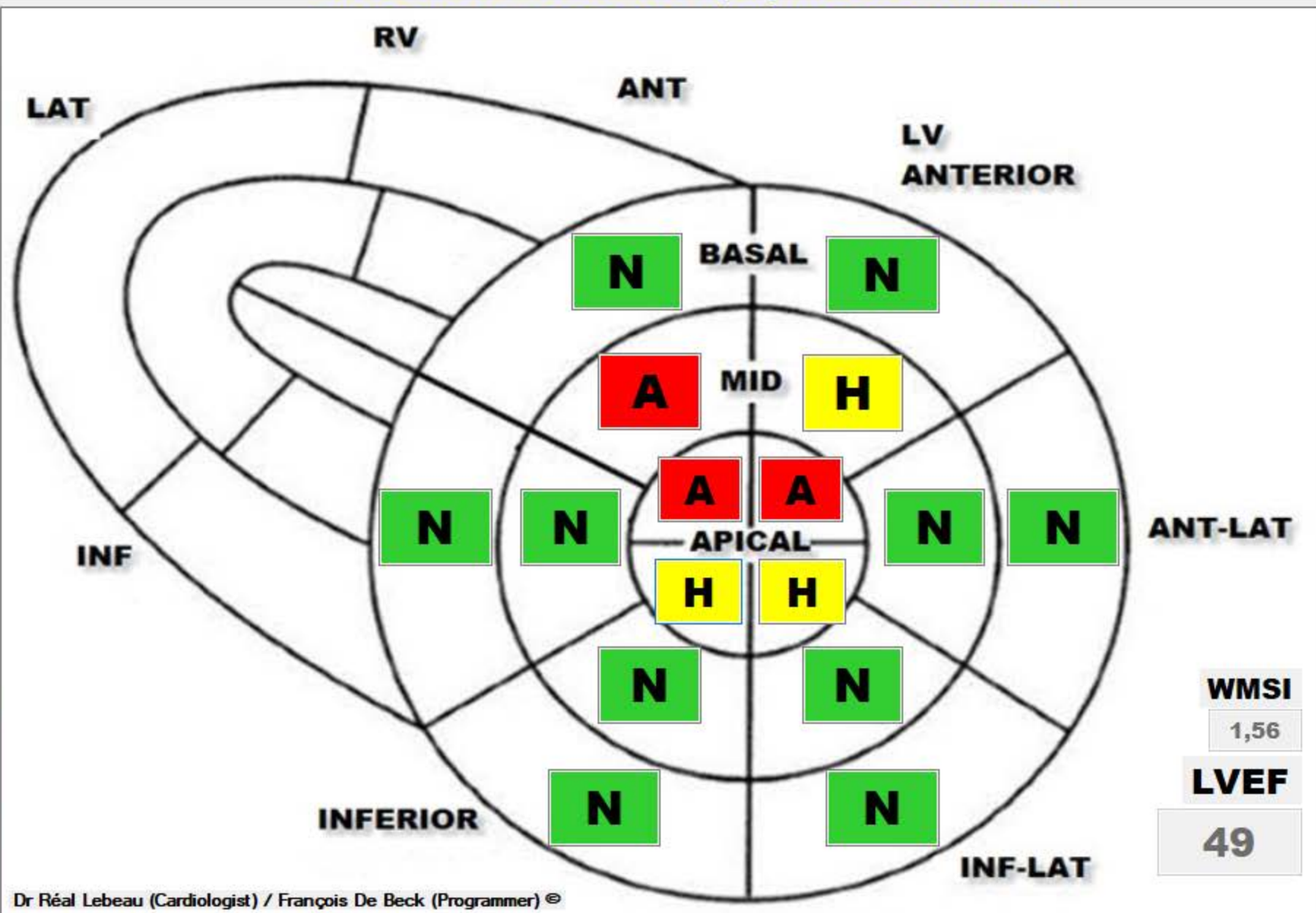
Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

WMSI
1,00

LVEF
64

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-07

NAME:

SURNAME:

BIRTH DATE: 2020-11-07

Left Ventricle

Basal #1	1
Basal #2	1
Basal #3	1
Basal #4	1
Basal #5	1
Basal #6	1
Mid #7	2
Mid #8	1
Mid #9	1
Mid #10	1
Mid #11	1
Mid #12	3
Apical #13	3
Apical #14	2
Apical #15	2
Apical #16	3

WMSI=(Score 16 segments)/16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

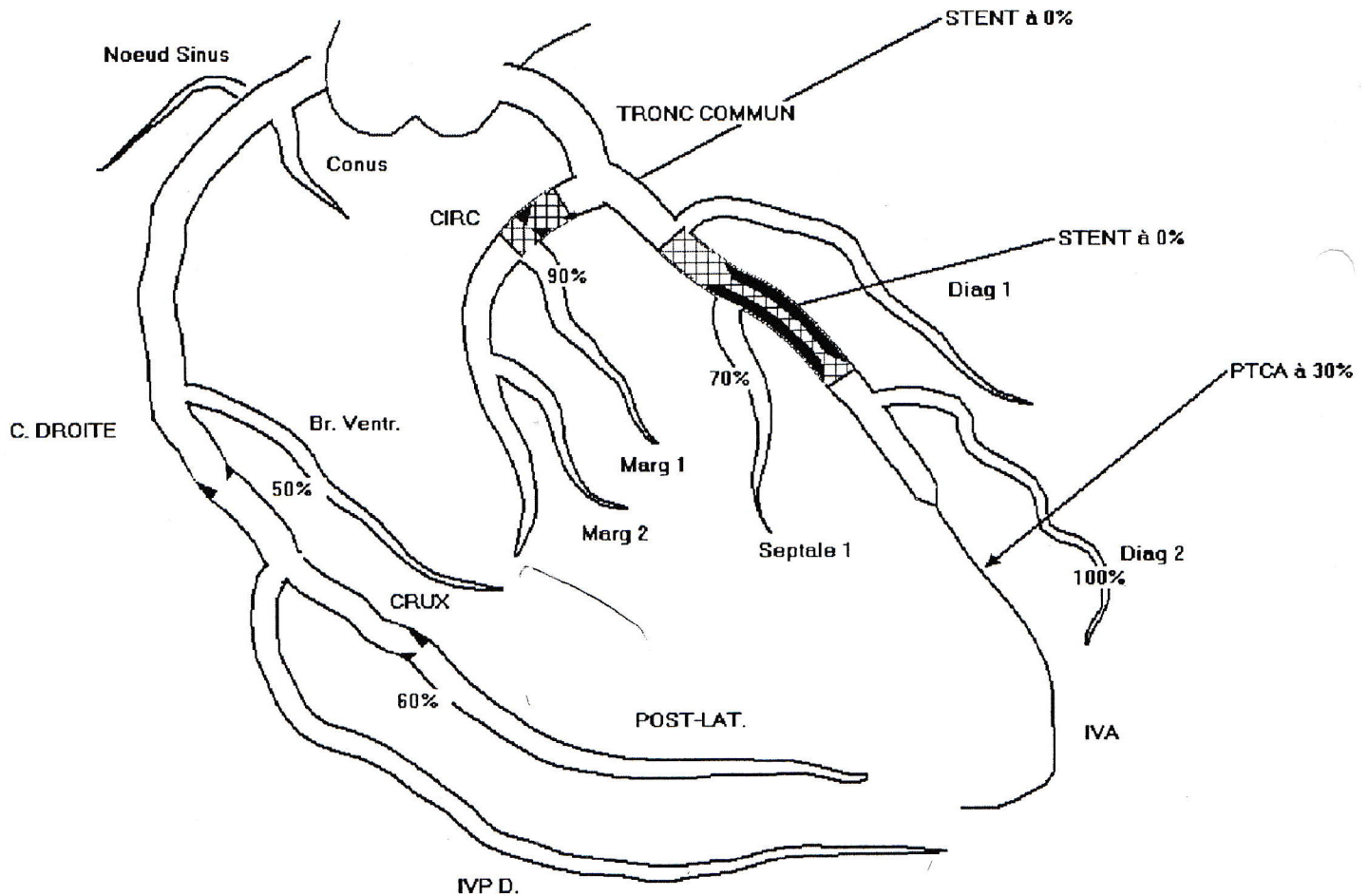
Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

WMSI
1,56

LVEF
49

No 59

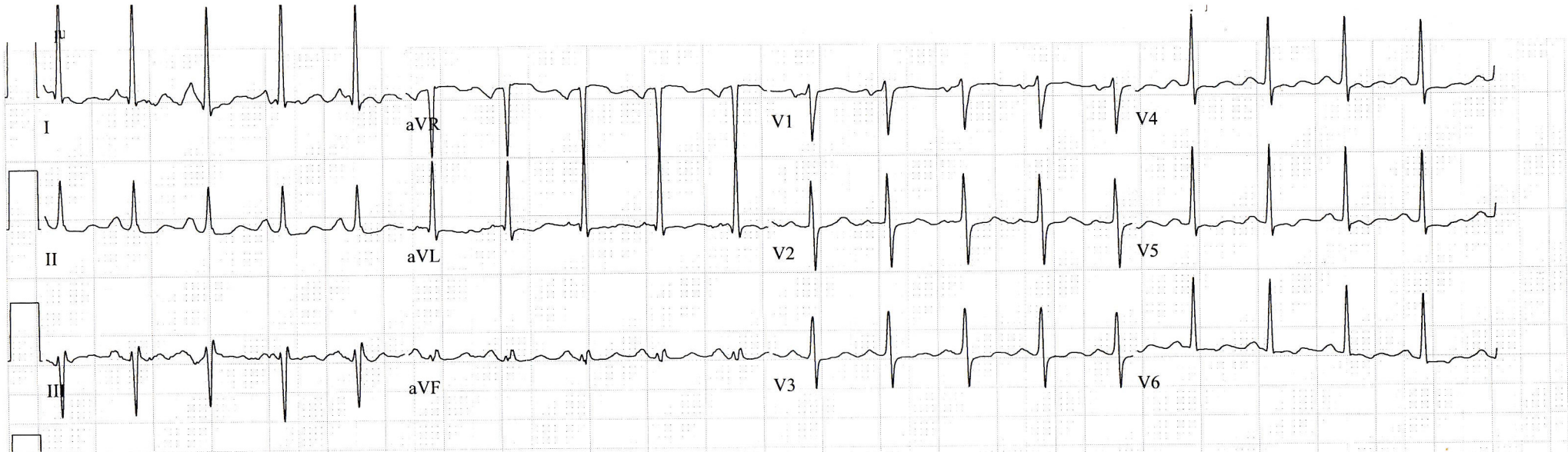
Coron.: LAD and Cx stenosis stented.



No 60

F 69 y. Angina

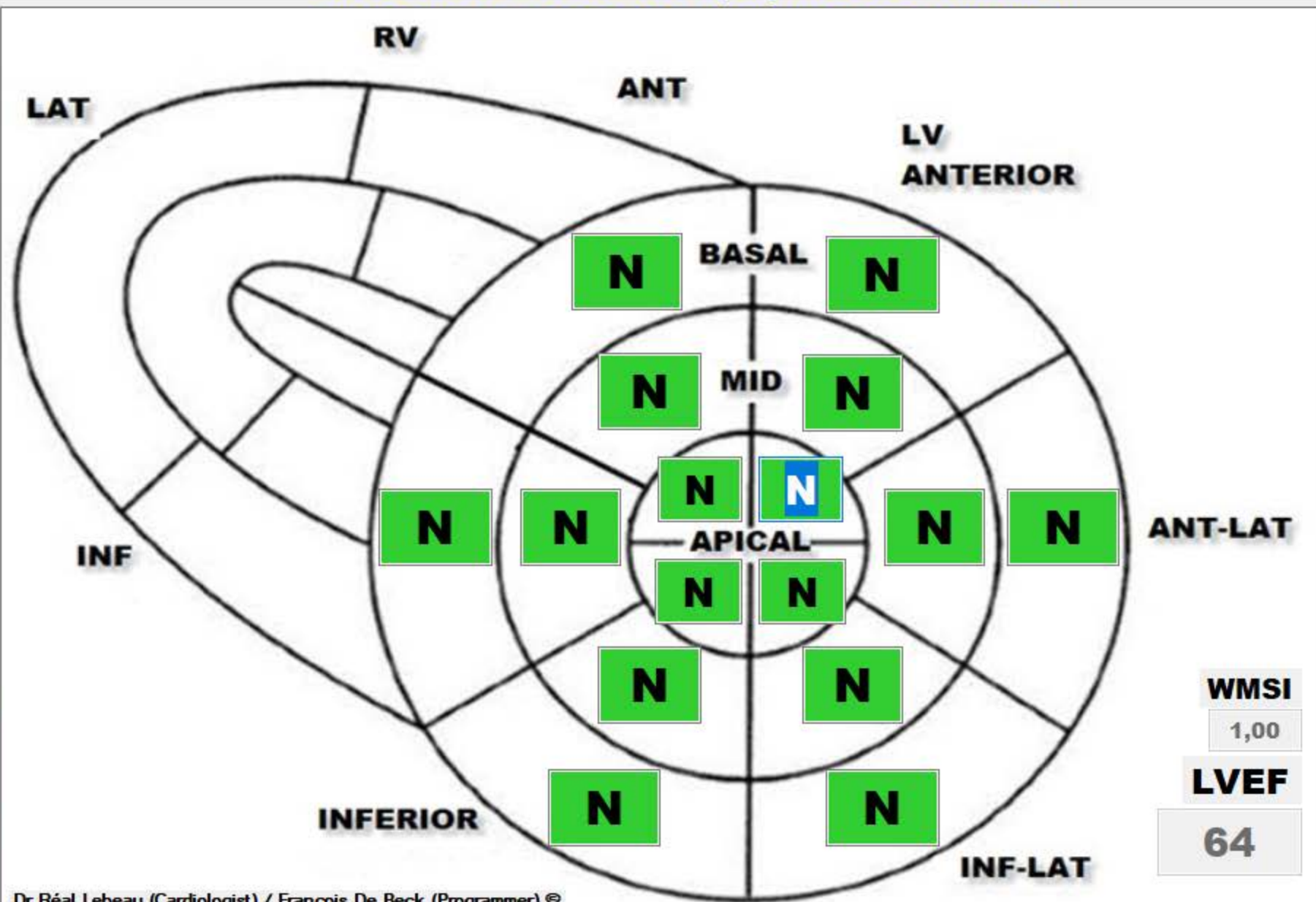
ECG.: your conclusion...



ECG.: Left ventricular hypertrophy and non specific ST change.

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE: 2020-11-07
 NAME:
 SURNAME:
 BIRTH DATE: 2020-11-07

Left Ventricle

Basal #1	1
Basal #2	1
Basal #3	1
Basal #4	1
Basal #5	1
Basal #6	1
Mid #7	1
Mid #8	1
Mid #9	1
Mid #10	1
Mid #11	1
Mid #12	1
Apical #13	1
Apical #14	1
Apical #15	1
Apical #16	1

WMSI = (Score 16 segments) / 16
 LVEF = 90 - (26 * WMSI)
 Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

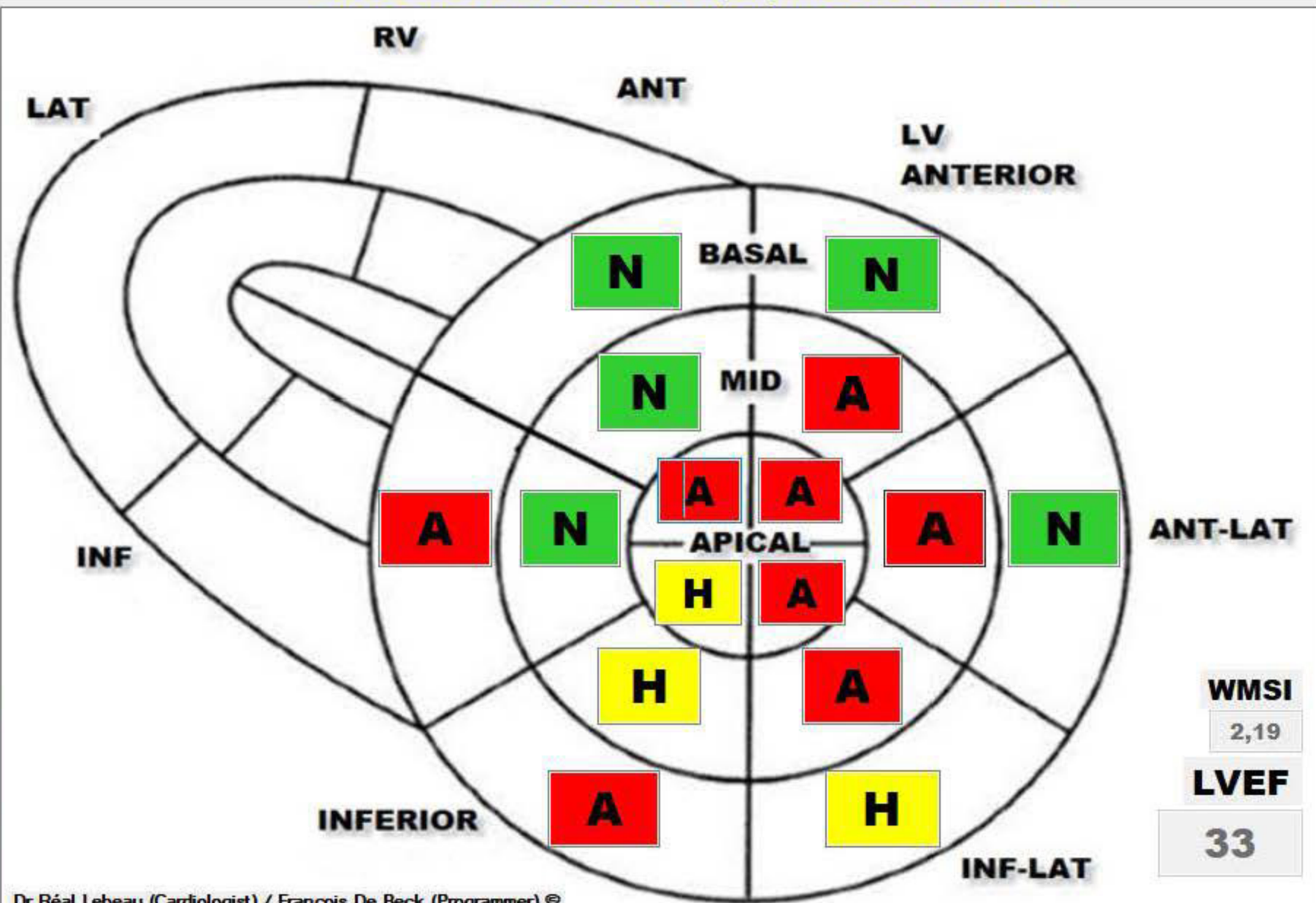
Right WMSI = (Score right 8 segments) / 8
 RVEF = 73.07 - (20.7 * WMSI)
 Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

WMSI
1,00

LVEF
64

EJECTION FRACTION (EF) MEASUREMENT

Legend



Classical Wall Motion

EXAM DATE:

NAME:

SURNAME:

BIRTH DATE:

Left Ventricle

Basal #1	1	
Basal #2	1	Dx.:
Basal #3	2	Post stress echo.
Basal #4	3	Diffuse wall motion
Basal #5	3	anomaly suggestive
Basal #6	1	of 3 vessels disease.
Mid #7	3	
Mid #8	3	
Mid #9	3	
Mid #10	2	
Mid #11	1	
Mid #12	1	
Apical #13	3	
Apical #14	3	
Apical #15	2	
Apical #16	3	

WMSI
2,19

LVEF
33

WMSI=(Score 16 segments)/16
LVEF = 90 - (26 * WMSI)
Ref: Lebeau R et al, Assessment using the WMSI in cardiac resonance imaging, Arch Cardiovasc Dis. 2012; 105(2),91-98

Right WMSI = (Score right 8 segments) / 8
RVEF = 73.07 - (20.7 * WMSI)
Ref: Lebeau R et al, Two dimensional echocardiography estimation of RVEF by WMSI Cdn J Cardiol 2004;20(2):169-176

No 60

Coron.: 3 vessels disease.

Distal LMA ischemic FFR .

