

IN THE NAME OF GOD

ACUTE MYOCARDIAL INFARCTION IN A 26-YEAR-OLD MAN WITH NORMAL ST-SEGMENT

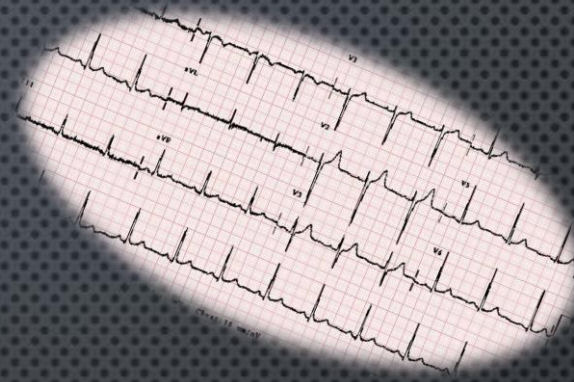
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PRODUCED BY: ALI GHADIRI



• EMERGENCY CARE

- CBR
- ECG
- O₂ THERAPY
- BLOOD TEST
- CARDIAC MONITORING
- PULSE OXIMETRY
- CHECK VITAL SIGNS
- ASA . OSEVIX . ATORVADTATIN
- MORFIN
- TNG
- CONSULTATION



• CASE REPORT

A 26-YR-OLD WORKMAN ADMITTED TO THE EMERGENCY DEPARTMENT WITH 16 HOURS OF SEVERE, CENTRAL CRUISING CHEST PAIN. THE PAIN RADIATED TO HIS LEFT ARM AND WAS ACCOMPANYING WITH PROFUSE SWEATING.

• HISTORY:

- FAMILY: NO
- DM : NO
- HTN : NO
- SMOKING : YES
- HLP : YES
- OBESITY : NO
- PCI : NO
- CABG: NO

• Vital signs :

- T : 36.5
- RR: 21
- PR: 81
- Bp :115/90

• CASE REPORT

THE PATIENT WAS TREATED WITH ASPIRIN (300 MG), TICAGRELOR (180 MG), AND ROSUVASTATIN CALCIUM (20 MG) IN THE EMERGENCY DEPARTMENT WHICH IMPROVED BUT DID NOT COMPLETELY ALLEVIATE HIS SYMPTOMS.

Laboratory test	Result	Normal values
(Creatine Kinase) CK	1148.00	25 - 192
(Creatine Kinase-MB) CK-MB	154.27	0.001 - 24
(Triglyceride) TG	2.76	0.23 - 1.71
(Cholesterin) CHOL	6.45	3.6 - 6
(High-density lipoprotein c) HDLc	0.95	0.7 - 2
(Low-density lipoprotein c) LDLc	5.30	1.76 - 3.49
(Apolipoprotein AI) APO-AI	1.24	1 - 1.6
(Apolipoprotein B) APO-B	1.40	0.6 - 1
(High sensitivity troponin T) TnT-HS	0.560	0.003 - 0.014

- Emergent laboratory values demonstrating hyperlipidemia and Myocardial injury markers increase.

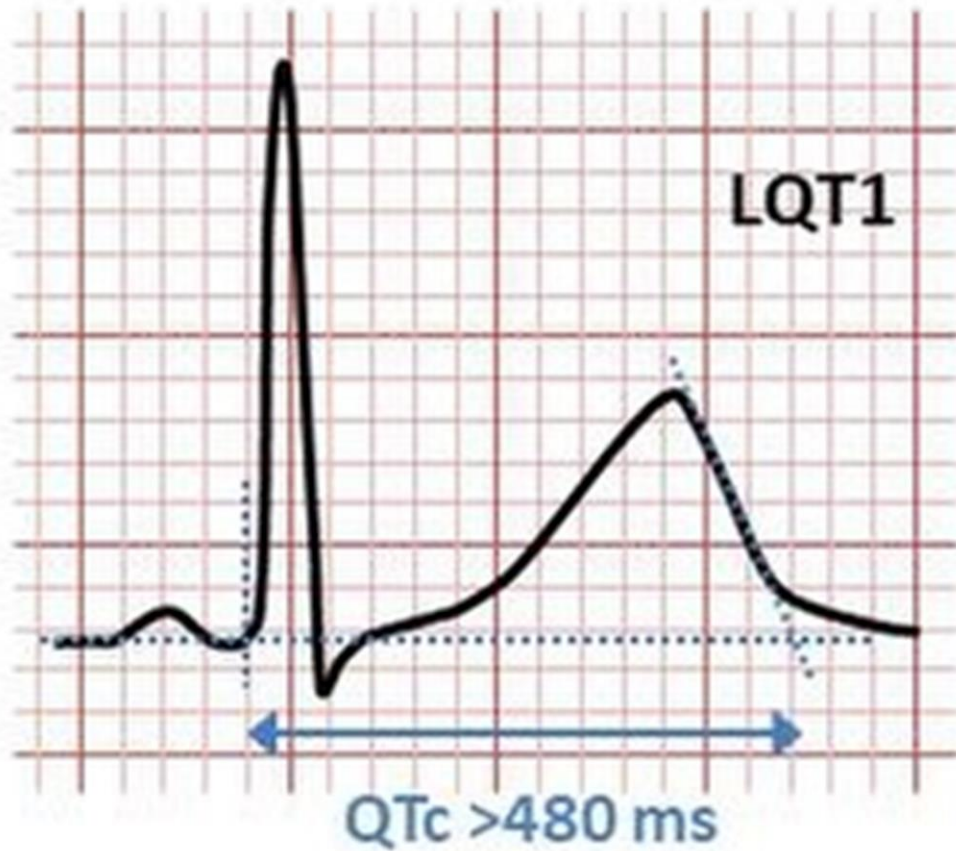
• CASE REPORT

• ELECTROCARDIOGRAM

INITIAL ELECTROCARDIOGRAM SHOWING NORMAL SINUS RHYTHM, ST SEGMENT NORMAL, AND QTC INTERVAL WAS 530 MS , BUT, AFTER 20 MINUTES, ELECTROCARDIOGRAM SHOWING ST SEGMENT ELEVATIONS IN LEADS I, AVL, AND V1 TO V6



NOTICE



QT prolongation

QT prolongation may increase the risk of developing abnormal heart rhythms and may lead to sudden cardiac arrest.

• ECHOCARDIOGRAPHY


ECHOCARDIOGRAPHY USES ULTRASOUND WAVES TO CREATE A PICTURE OF THE HEART.

• DURING AN ECHOCARDIOGRAM, A DOCTOR CAN SEE:

- THE SIZE AND THICKNESS OF THE CHAMBERS
- HOW THE VALVES OF THE HEART ARE FUNCTIONING
- THE DIRECTION OF BLOOD FLOW THROUGH THE HEART
- ANY BLOOD CLOTS IN THE HEART
- AREAS OF DAMAGED OR WEAK CARDIAC MUSCLE TISSUE
- PROBLEMS AFFECTING THE PERICARDIUM, WHICH IS THE FLUID FILLED SAC AROUND THE HEART

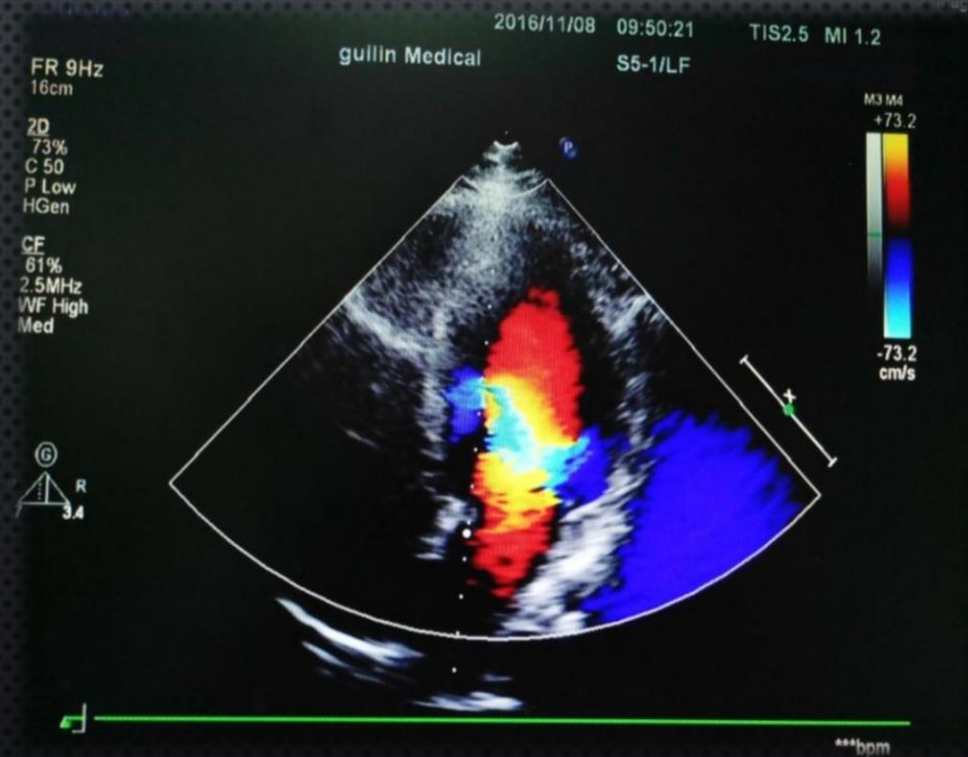


• EXAMPLE

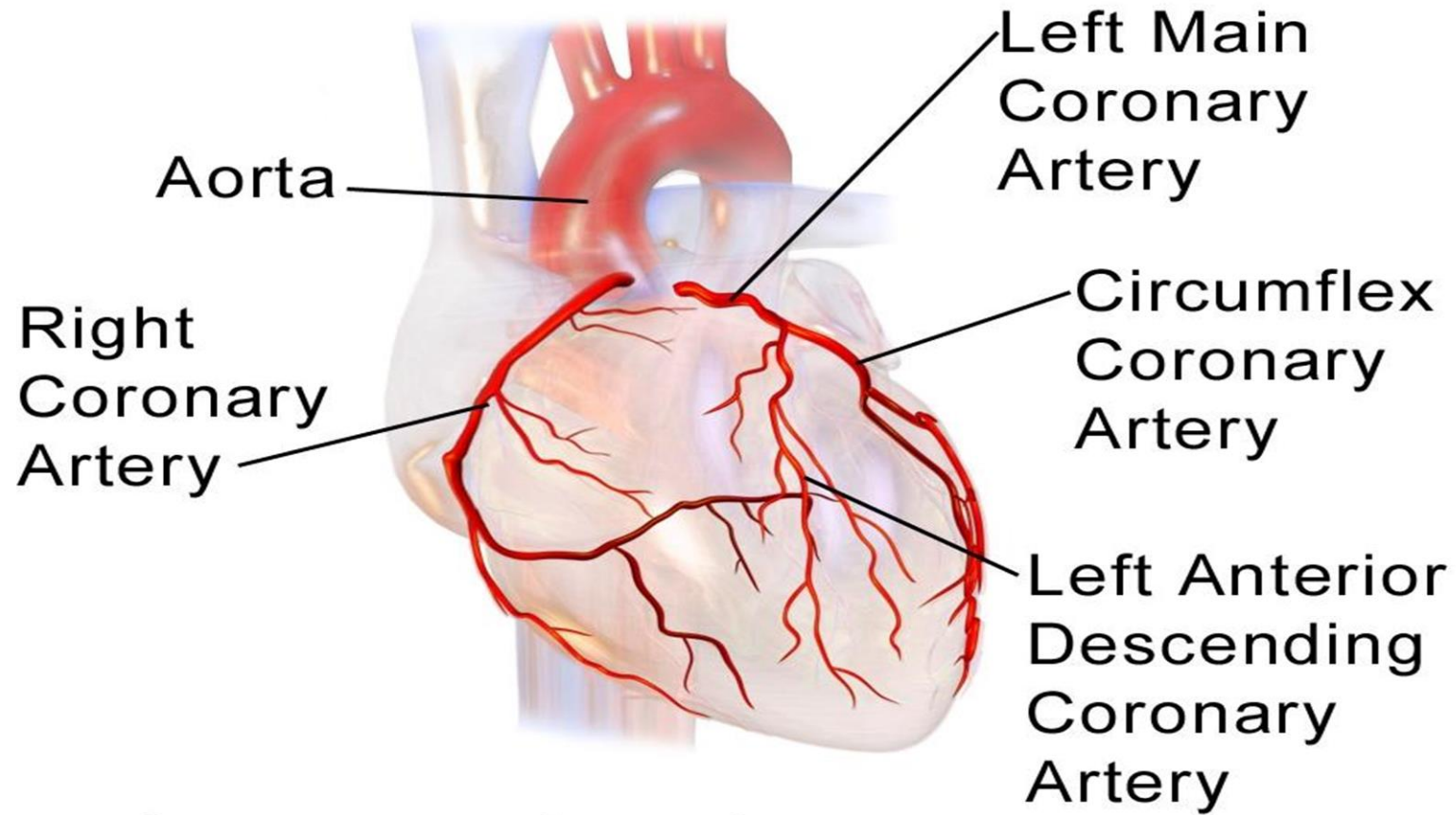
شهرستان تربت جام	 گزارش اکوکاردیوگرافی	بیمارستان سجادیه
Name: <u>دکتر دودری</u>	Date: <u>۱۴۰۱/۰۱/۱۴</u>	Age: _____ Referred by: _____
Clinical data:		Indication: _____
Cardiac Chambers & Walls:		
LA: mm	AO: mm	IVSd: mm
LVDd: mm	LVSD: mm	LVPWD: mm
EDV: cc	ESV: cc	LVEF: <u>55%</u>
<input type="checkbox"/> LV Systolic	<input type="checkbox"/> LVDiastolic Dysfunction	<input type="checkbox"/> RWMA <u>normal</u>
<input type="checkbox"/> Mitral v. <input type="checkbox"/> Normal <input type="checkbox"/> Stenotic <input type="checkbox"/> Calcified <input type="checkbox"/> Prolapse <input type="checkbox"/> Flail= <input checked="" type="checkbox"/> MR = <u>mild to</u> <input type="checkbox"/> MVA =	<input type="checkbox"/> Aortic v. <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bicuspid <input type="checkbox"/> Calcified <input type="checkbox"/> AS= <input type="checkbox"/> Rheumatic = <input type="checkbox"/> AI = <input type="checkbox"/> PG =	<input checked="" type="checkbox"/> Pulmonic v <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Stenotic <input type="checkbox"/> PI= <input type="checkbox"/> PAP= <input type="checkbox"/> PG =
<input type="checkbox"/> Tricusp.v <input type="checkbox"/> Normal <input type="checkbox"/> Stenotic <input checked="" type="checkbox"/> TR = <u>mild to</u> <input type="checkbox"/> TVA = <u>mild to</u> <input type="checkbox"/> PG =		
Shunt: VSD <input checked="" type="checkbox"/> ASD <input checked="" type="checkbox"/> PDA <input checked="" type="checkbox"/> QP/QS	Others: Coarctation: <u>normal</u>	
Pericardium: <u>Normal</u>	Effusion	Tamponade
Result:	<p>- در حد ۱/۲ از دیواره آئورت در سطح ۱/۲ از طول آن</p> <p>میگردد. در دیواره بطن چپ</p> <p>در حد ۱/۲ از طول آن</p> <p>- در حد ۱/۲ از طول آن</p> <p>- در حد ۱/۲ از طول آن</p>	
Diagnosis:	Recommendation:	Signature
	<u>mild to mid TR, mild TS</u>	

• CASE REPORT

TRANSTHORACIC ECHOCARDIOGRAPHY REVEALED A LEFT VENTRICULAR EJECTION FRACTION OF **58%** WITH **EXTENSIVE WALL MOTION ABNORMALITIES** AND MILD **TRICUSPID VALVE REGURGITATION**



- **ANGIOGRAPHY**



Coronary Arteries

• CASE REPORT(ANGIOGRAPHY)

(A) CORONARY ANGIOGRAPHY REVEALED AN OCCLUSION COMPLETELY IN THE **LEFT MAIN CORONARY ARTERY** WITH TIMI 0 FLOW. (B) AFTER PERCUTANEOUS BALLOON DILATATION, THE CORONARY ANGIOGRAPHY REVEALED LEFT CORONARY ARTERY FLOW RECONSTRUCTION.

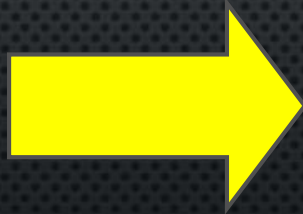
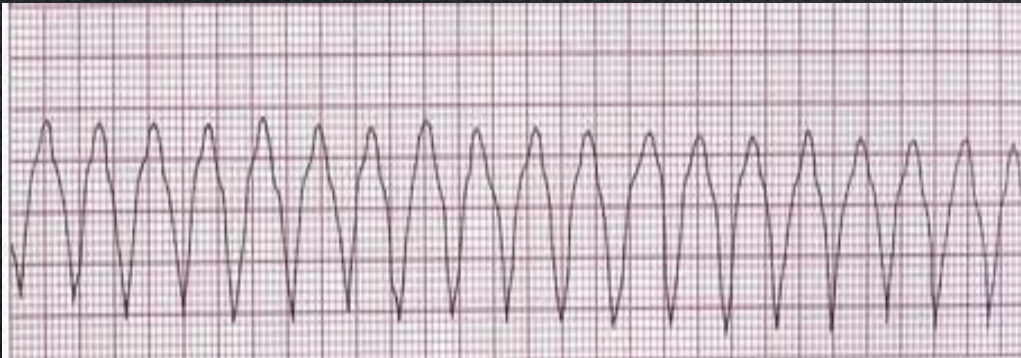


• CASE REPORT

- HE WAS BROUGHT URGENTLY TO THE CARDIAC CATHETERIZATION LABORATORY. SUDDENLY, HIS EXPRESSION IS INDIFFERENT AND PRESENTED WITH SIGNS OF CARDIOGENIC SHOCK. ON EXAMINATION, ARMPIT TEMPERATURE WAS 35.2, RESPIRATORY RATE 20/MIN, PULSE RATE 92/MIN, AND HIS BLOOD PRESSURE CANNOT BE MEASURE.
- DURING THE PROCESS OF CORONARY ANGIOGRAPHY, THE PATIENT PERFORMED VENTRICULAR TACHYCARDIA.
- HE WAS GIVEN INTRAVENOUS AMIODARONE (150 MG) TO RESTORE SINUS RHYTHM. AT THE SAME TIME, HE WAS SUCCESSFULLY TREATED BY PERCUTANEOUS BALLOON DILATATION OF THE LEFT MAIN CORONARY ARTERY.

- CASE REPORT**

BUT 10 MINUTES LATER, HE WITH AN IN-HOSPITAL VENTRICULAR FIBRILLATION (VF) RESULTING IN CARDIAC ARREST WAS TREATED WITH CARDIOPULMONARY RESUSCITATION (CPR) AND TIMELY DEFIBRILLATION, EPINEPHRINE, ATROPINE, AND SODIUM BICARBONATE INJECTION. UNFORTUNATELY, THE PATIENT DIED EARLY AFTER PERCUTANEOUS CORONARY INTERVENTION.



THANKS FOR WATCHING