

**Clinical Notes For  
Mrs Jean Grey  
DOB: 16 Aug 1947  
Hospital No: 0123456  
NHS No: 4455667788**

## Clinical Note

Thurs 11 Jan 2018 11:13  
Dr. Harleen Quinzel  
Senior House Officer

Cardio SpR Napier & SHO Quinzel Admission Clerking

70F PAMI call - Inferior STEMI

B/G:

T2DM on tablets HTN

COPD

No hx of MI / prev angio / stroke / GI bleeding

HPC:

Woke up @ 6am today with central chest tightness / heaviness, 5/10 severity, non- radiating

A/w SOB, nausea & dizziness

Given 300mg Aspirin & GTN spray by LAS Currently CP improving but still present

Allergies: tetracycline, septrin (rash)

DH:

Enalapril 20mg OD Gliclazide 80mg OD Sitagliptin 100mg OD

Atorvastatin 20mg ON

Bolamyn SR 1g BD (Metformin) Co-codamol 30/500 T QDS

Fostair 100mcg/6mcg TT BD Eklira 322mcg/dose Genuair T BD

SH:

Smokes ~5/day

Lives with son, independent ADLs, no POC

Obs HR 69 BP 140/69 Sats 97% RA

O/E alert HS I+II+0

Chest clear

ECG: sinus, inferolateral STE

Bedside echo: moderate LVSD, inferior wall & basal inferoseptum hypokinesia

P.

Loaded Ticagrelor 180mg OD For lab

Bleep - 999

Thurs 11 Jan 2018 19:09  
Miss Daisy Johnson

Nursing entry

Sister

Mrs Grey transfer to CCU from cath lab at 1720hrs received nursing care and management care handover post inferior STE, and L+ R Cor Angio, PCI 1 DES vi aRRA, TR band off

A= SV and airway maintained

B= Sats 97% on Ra, RR 20, patient has COPD, and uses regular inhaler, nil SOB on admission  
C= on cardiac monitor, haemodynamically stable, in SR, HR 60, BP 125/52 (mean 93), Temp 36.4 NEWS= 0  
D= in tirofiban in progress, 15mls/hr, blood sugar monitor 9.0 mmol.  
GCS 15, alert and orientated  
E = on restricted bed rest, eating and drinking and has passed urine in cath lab post procedure.  
all pressure areas intact,  
MRSA and CRE swab done, S & A screen completed.

Fri 12 Jan 2018 00:25  
Mr Philip Coulson

Staff Nurse

Nursing entry (night):

1. Saturations above 95% on RA, RR within normal parameters, no SOB and speaking in full sentences.
2. EWS = 0. SBP = 110-150. On cardiac monitor, HR = 55-70bpm SR. 2 small runs of slow NSVT noted on the monitor. Mg 0.68, have bleeped doctor to please prescribe a top up. Apyrexial.
3. GCS 15/15, complaints of a headache, paracetamol given.
4. Medium risk of falls due to attachments, able to transfer to commode independently. Grip socks in situ.
5. Eating and drinking well. BM 8.9.
6. Independent with personal hygiene.
7. Pressure areas are intact, self-repositioning in bed.
8. Using the commode to pass moderate volumes of urine. BNO. 9/10. Communicating well, reassurance given.

All due medications given as prescribed. Tirofiban running at 15ml/hr. PVC in situ, day 1, VIP = 0. Needed to top up electrolytes.  
Cardiac rehab referral sent. Has not slept much overnight.

UPDATE at 5am: Mg topped up. Still not slept much overnight.  
Current fluid balance is +120ml.

Fri 12 Jan 2018 08:17  
Dr. Harleen Quinzel  
Senior House Officer

CCU WR Romanova

68F PAMI call 11/06  
B/G T2DM, HTN, COPD, smoker

Issues:  
Inferior STEMI

Successful PCI to distal mid vessel and distal RCA with DES; residual diffuse LAD disease with moderate to severe D1 disease (for initial medical management and revascularisation based on symptoms)  
Bedside echo mod LVSD

Feels slightly light headed but improved compared to yesterday No CP  
Declined nicotine patches

Obs HR 74 BP 132/61 SpO2 96% RA  
O/E alert HS I+II+0  
Chest clear  
Calves SNT, no peripheral oedema, cool peripheries

P.

Departmental TTE  
Increase Ramipril to 2.5mg OD

Bleep - 999

Fri 12 Jan 2018 16:44  
Mrs Maria Hill  
Staff Nurse

NURSING ENTRY

NEWS 1: Pulse 57bpm.

- 1) AIRWAY - SV on RA. sats 100% on RA. Nil SOB/CP. C/o headache, PRN analgesia given with good effect.
- 2) VITAL SIGNS - Haemodynamically stable and afebrile. Monitoring in SB. Morning ECG this reviewed on the WR. Nil arrhythmia
- 3) NEUROLOGICAL STATE - GCS 15/15. Alert and oriented of self, place and time.
- 4) FALLS - No falls risk.
- 5) NUTRITION - Eating and drinking well. C/O nausea just before lunch time, PRN anti-emetic given with good effect.  
Blood sugar level monitored and stable.
- 6) HYGIENE - Minimal assistance required for personal care. Self-caring with ADL.
- 7) Pressure Areas - Skin integrity is intact. No pressure area damage.
- 8) Elimination - Had bowel movement this afternoon, type 5

Fri 12 Jan 2018 16:53  
Mr Clint Barton  
Clinical Nurse Specialist

Cardiac Health and Rehabilitation Nurse: Visited patient on the ward this afternoon on CCU. Given post MI discharge information pack.

We will contact patient post discharge to assess her suitability for cardiac rehab programme.

Fri 12 Jan 2018 23:48  
Miss Toni Stark  
Staff Nurse

Nursing Entry (Night)

1. Breathing: Patient short of breath intermittently, has history of COPD. PRN inhaler given (Ventolin). sats >95% on air.
2. Observations: NEWS 1 -Temp 35.4, BP 132/55, hr 65BPM NSR, RR 14, SATS 98%..
3. Neurological state: GCS 15/15 alert and orientated.
- 4 Falls: Mobilising to the toilet under supervision.
5. Nutritional needs: Eating and drinking well. Patient is diabetic 11.0 mmol
6. Personal hygiene: Self caring with all hygiene needs.

7. Skin Integrity: Pressure areas intact, Right radial site intact. No haematoma or any sign of infection noted.

8. Elimination: Passing urine in toilet, bowels not opened today.

9/10. Communication & wellbeing: Able to communicate well with good comprehension, call bell within reach.

Other: Had a settled night, all due medications given as prescribed. Safety and dignity maintained. Consent gained for all care. PVC insitu, VIP 0

Sat 13 Jan 2018 08:13  
Dr Rumiko Fujikawa

WR CONS ROMANOVA

Senior House Officer

Conclusion - successful PCI to distal mid vessel and distal RCA with DES; residual diffuse LAD disease with moderate to severe D1 disease (for initial medical management and revascularisation based on symptoms)

ECHO:

The left ventricle is normal in size. Left ventricular ejection fraction is mildly reduced. Overall right ventricular systolic function is at least mildly impaired.

At least mild mitral regurgitation

There are regional wall motion abnormalities septal and inferior

Sitting out in chair Feeling chesty

Reduced AE R side. few creps

Plan:

- Treat as IECOPD - give doxy
- Double bisoprolol
- Home tomorrow
- FU 3/12

Bleep 222

Sat 13 Jan 2018 13:07  
Mrs Maria Hill

NURSING ENTRY

Staff nurse

Received handover of patient from night staff at 8am this morning, patient sitting out in the chair - appeared comfortable.

AIRWAY Patent and self-maintained.

OBSERVATION On continuous cardiac monitor. Observations stable. NEUROLOGICAL GCS 15/15. Alert and orientated to time, place and person. No complaints of pain.

FALLS At low risk of falls. Mobilising independently.

NUTRITION Eating and drinking well.

PERSONAL CARE Independent with personal and oral hygiene needs. SKIN INTEGRITY Pressure areas intact.

ELIMINATION Mobilising to the toilet independently. WELLBEING All medication given via EPR prescription.

COMMUNICATION Can communicate needs and concerns to members of staff. None raised this morning.

PLAN ?home tomorrow

UPDATE Patient trying to give up smoking following PAMI. Had previously stated she will go 'cold turkey' however now is requesting replacement therapy. Patient usually smokes between 10-15 cigarettes/day.

Sat 13 Jan 2018 19:30  
Miss Merin Lukose  
Staff Nurse

Nursing Notes: Transfer to Peppar Ward

Received patient from CCU bed to bed 7 at 18.30. Patient awake and alert, mobilising independently at time of transfer.

Family present at this time. Introduced myself to patient and family.

Obs taken at time of transfer - NEWS: 0. T2DM with high BM at 15. Doctor informed as no supplemental insulin is prescribed, patient has had evening dose of gliclazide so doctor informed me that it will take effect. Requested doctor to restart patient's Metformin as it has been over 48 hours since contrast.

Also requested doctor Rumiko to prescribe Nicotine patches for the patient as per Jean's request.

Patient is settled and comfortable, chatting with family. Independent with personal hygiene.

Sun 14 Jan 2018 00:37  
Ms Emma Frost  
Staff Nurse

Nursing entry (Night)

1. SV on room air RR: 17 Sats:96% 2.NEWS:0

3. Alert and oriented, GCS: 15/15

4.Low risk for falls, independent with mobility

5.Eating and drinking.

6. Independent with hygienic needs.

7.Skin intact

8. Continent

9&10. communicating and comprehending well.

Sun 14 Jan 2018 10:20  
Dr Jack Napier  
Specialty Registrar

CARDIO WR SpR NAPIER

70F PAMI call 11/01

B/G T2DM, HTN, COPD, smoker

Issues:

Inferior STEMI

Successful PCI to distal mid vessel and distal RCA with DES; residual diffuse LAD disease with moderate to severe D1 disease (for initial medical management and revascularisation based on symptoms)

EF 45%

Trop 50000

TODAY

Feeling well

No further chest pain

Shortness of breath --> inhalers have been changed. Long standing since July since inhaler changed

Walking around the ward without difficulty No leg swelling

No palpitations

Current smoker - 5 day. Adamant that she will stop with her daughter.

Has nicotine replacement

Has seen cardiac rehab

O/E  
HR 80 regular  
HS 1+11+0 v quiet  
Chest scattered crepitations - No peripheral oedema

OBS  
T36.5 spO2 97% RR 18 HR 68 BP 120/69

ECHO  
The left ventricle is normal in size. Left ventricular ejection fraction is mildly reduced. EF 45% Overall right ventricular systolic function is at least mildly impaired. At least mild mitral regurgitation. Moderate sized septal and inferior wall motion abnormality with hypokinesis to akinesis of these segments

BLOODS  
Trop to 50000  
CRP 47  
Creatine 72, urea 9, Na 141  
Liver AST 149, Alk Phos 88, GGT19 Hb 127

PLAN  
Home today - TTA Nicorette inhalator Ramipril to 2.5mg BD IRT team as OP

Sun 14 Jan 2018 16:00  
Miss Sinead Moriarty  
Staff Nurse

Patient discharged, own transport home, cannula removed, no issues

Mon 16 Jan 2018 13:56  
Mr Clint Barton  
Physiotherapist

Integrated Respiratory Team 14/01/18  
Referral received for outpatient follow up.  
Nil LFTs completed and incomplete set on local care records. Note on triple therapy for COPD.

Plan:  
- I have booked outpatient LFTs and will review these to decide if follow up required

## ADVERSE DRUG REACTIONS

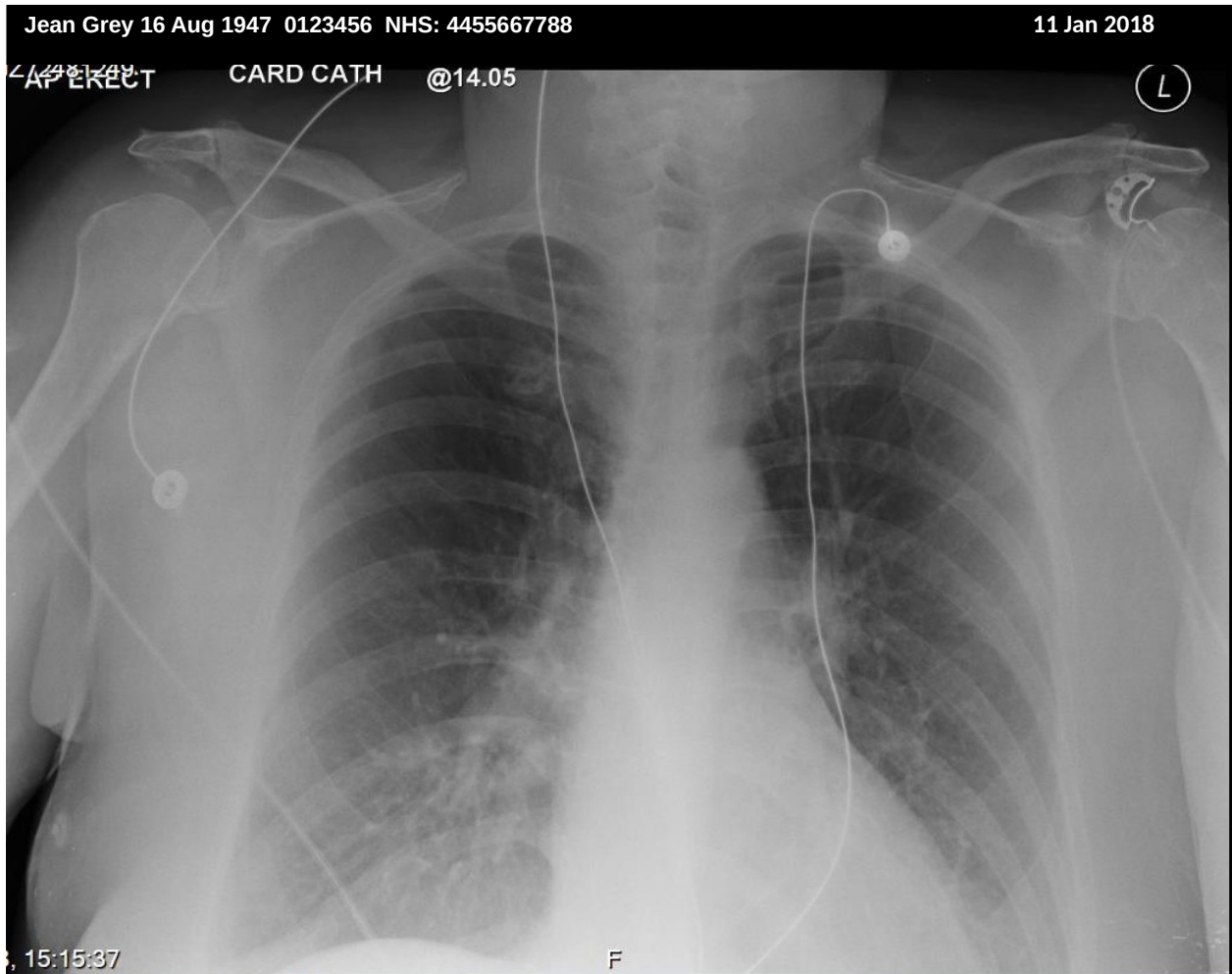
tetracycline, septrin (rash)

### MEDICATION CHART

REGULAR		11/01/2018	12/01/2018	13/01/2018	14/01/2018
Acclidinium (Eklira Genuair) Inhaler 322mcg	1 Puff(s), Inhalation, (Equivalent to aclidinium bromide 375 microgram)	08:00 18:00 ✓	08:00 ✓ 18:00 ✓	08:00 ✓ 18:00 ✓	08:00 ✓ 18:00
Aspirin Dispersible Tablet	75 mg, Oral,	08:00	08:00 ✓	08:00 ✓	08:00 ✓
Atorvastatin Tablet	80 mg, Oral	22:00 ✓	22:00 ✓	22:00 ✓	22:00
Beclometasone & Formoterol (FOSTAIR) Inhaler 100/6	1 Puff(s), Inhalation, Rinse mouth with water after use	08:00 22:00 ✓	08:00 ✓ 22:00 ✓	08:00 ✓ 22:00 ✓	08:00 ✓ 22:00
Bisoprolol Tablet	1.25 mg, Oral	08:00	08:00 ✓		
Bisoprolol Tablet	2.5 mg, Oral			08:00 ✓	08:00 ✓
Gliclazide Tablet	80 mg, Oral	08:00	08:00 ✓	08:00 ✓	08:00 ✓
Metformin M/R Tablet	1000 mg, Oral, Swallow this medicine whole. Do not chew or crush. Take with or just after food, or a meal	08:00 18:00 ✓	08:00 ✓ 18:00 ✓	08:00 ✓ 18:00 ✓	08:00 ✓ 18:00
Omeprazole Capsule	20 mg, Oral	08:00	08:00 ✓	08:00 ✓	08:00 ✓
Sitagliptin Tablet	100 mg, Oral	08:00	08:00 ✓	08:00 ✓	08:00 ✓
Ticagrelor Tablet	90 mg, Oral, ACS with PCI (drug eluting stent), Therapy duration:12 Months Until 11/06/19	08:00 20:00 ✓	08:00 ✓ 20:00 ✓	08:00 ✓ 20:00 ✓	08:00 ✓ 20:00
Doxycycline Capsule	200 mg, Oral, Swallow whole with plenty of water, during meals, while sitting or standing Indication: Infective exacerbation of COPD. Until 19/06/1		08:00 ✓	08:00 ✓	08:00 ✓
Nicotine (Nicotinell '30') Patch	1 Patch(es), Topical. Apply to dry non-hairy skin on trunk or upper arm. Site on different area each day (releasing 21mg over 24 hours).			14:00 ✓	08:00 ✓
Ramipril Tablet	1.25 mg, Oral,		08:00 ✓ 22:00 ✓		
Ramipril Tablet	2.5 mg, Oral,			08:00 ✓ 22:00 ✓	08:00 ✓ 22:00
<b>AS REQUIRED</b>		11/01/2018	12/01/2018	13/01/2018	14/01/2018
Glyceryl Trinitrate Spray 400mcg	1 to 2 Spray(s), Sublingual, As often as required				
Salbutamol Aerosol Inhaler 100mcg	1 to 2 Puff(s), Inhalation, every 6 hours. via volumatic				
Magnesium	20 mmol intravenous		04:00 ✓		
<b>DISCONTINUED</b>					
Enalapril 20mg Oral once d:	Ramipril substituted				



## Chest X-Ray



**Report** XR Chest Mobile

There is bilateral perihilar shadowing with bilateral pleural effusions.

In keeping with pulmonary oedema. The heart size is normal. No focal consolidation.

# Results

	11Jan18 09:36	11Jan18 10:30	11Jan18 13:57	12Jan18 06:30	12Jan18 09:29
<b>Biochemistry</b>					
<b>Routine chemistry</b>					
C-reactive protein	* ↑ 57.5			* ↑ 46.8	
Sodium	138			141	
Potassium	4.4			3.9	
Creatinine	76			72	
Urea	↑ 11.0			↑ 9.0	
Phosphate	↓ 0.70			1.12	
Calcium	1.98			2.13	
Corrected Calcium	↓ 2.06			2.15	
Total Protein	↓ 59			63	
Magnesium	↓ 0.68			↑ 1.21	
Albumin	36			39	
Globulin	↓ 23			↑ 24	
Bilirubin (Total)	4			7	
Alkaline Phosphatase	83			88	
Aspartate Transaminase	26			↑ 149	
Gamma-glutamyl Transferase	14			19	
Creatine Kinase	* ↑ 288				
Cholesterol	* 3.8				
Triglyceride	* 0.5				
HDL-Cholesterol	* 1.3				
LDL-Cholesterol	* 2.3				
Total Cholesterol-HDL Ratio	* 2.9				
Thrombin time (patient)	>180.0				
Estimated GFR	66			70	
Troponin I.	↑ 6191			↑ >50000	
HBA1c (DCCT)	↑ 7.0				
<b>Haematology</b>					
<b>General</b>					
WBC	7.40			6.31	
RBC	4.33			4.70	
Hb.	118			127	
PCV	↓ 0.369			0.401	
MCV	85.1			85.3	
MCH	27.2			27	
MCHC.	↓ 319			↓ 316	
RDW	15.0			15.0	
PLT	210			210	
MPV	7.4			7.7	
NRBC	<0.2%			<0.2%	
% Hypo	7.0			7.3	
Neutrophils	6.19			3.91	
Lymphocytes	↓ 0.90			1.85	
Monocytes	0.20			0.33	
Eosinophils.	0.07			0.18	
Basophils	0.03			0.04	
<b>Haemostasis</b>					
INR	1.11				
APTT Ratio	* ↑ 3.59				
D-Dimer					
<b>Transfusion</b>					
Antibody Report		NO ATY...			
Blood group.		A Rh D...			

**ADULT ECHOCARDIOGRAM REPORT**

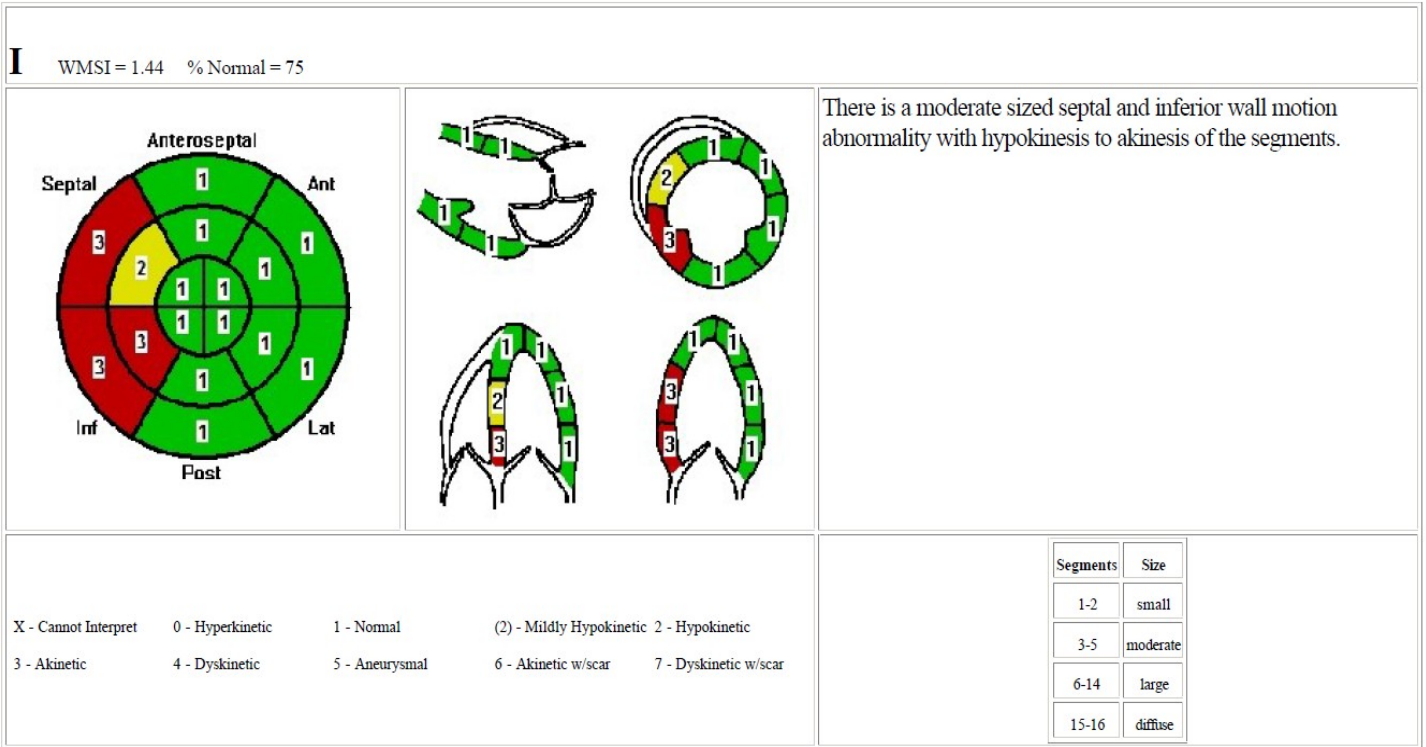
Jean Grey, DOB: 16 Aug 1947, Hosp No: 0123456, NHS No: 4455667788  
 Female; White British  
 Study date: 12/01/2018  
 History: Inferior STEMI; TTE please review RWMA and EF

**SUMMARY**

The study was technically difficult due to body habitus. A two-dimensional transthoracic echocardiogram with M-mode and Doppler was performed. The left ventricle is normal in size. Left ventricular ejection fraction is mildly reduced. There are regional wall motion abnormalities as specified. Overall right ventricular systolic function is at least mildly impaired. At least mild mitral regurgitation.

**Left Ventricle**

The left ventricle is normal in size. There is normal left ventricular wall thickness. Left ventricular ejection fraction is mildly reduced. 2D LVEF (Simson's method) = 44.7 %. There are regional wall motion abnormalities as specified



**Right Ventricle**

The right ventricle is grossly normal size. Overall right ventricular systolic function is at least mildly impaired.

**Atria**

The left atrial size is normal. Right atrial size is normal. The interatrial septum is intact with no evidence for an atrial septal defect.

**Mitral Valve**

There is mild mitral leaflet thickening. At least mild mitral regurgitation.

**Tricuspid Valve**

The tricuspid valve is normal. RAP [0-5mmHg].

**Aortic Valve**

The aortic valve is normal in structure and function. Trace aortic regurgitation.

**Pulmonic Valve**

The pulmonic valve is not well visualized

**Great Vessels**

The aortic sinus is normal size. Normal size ascending aorta.

**Pericardium/Pleural**

There is pericardial fat seen.

**MMode/2D Measurements & Calculations**

<b>LVIDD:</b> 4.9 cm	(3.9-5.3 cm)	<b>IVSd:</b> 0.78 cm	(0.8-1.1 cm)
<b>LVIDs:</b> 3.8 cm	(2.5-4.5 cm)	<b>LVPWd:</b> 0.89 cm	(0.5-1.1 cm)
<b>FS:</b> 22.6 %	(27-45%)	<b>LA dimension:</b> 4.1 cm	(2.7-3.8 cm)
<hr/>			
<b>EDV(Teich):</b> 113.5 ml	<b>EDV(MOD-sp4):</b> 93.6 ml	<b>EDV(MOD-sp2):</b> 108.9 ml	<b>EDV(MOD-bp):</b> 100.9 ml
<b>ESV(Teich):</b> 62.1 ml	<b>LVLs ap4:</b> 6.6 cm	<b>LVLs ap2:</b> 7.0 cm	<b>ESV(MOD-bp):</b> 55.8 ml
	<b>ESV(MOD-sp4):</b> 48.2 ml	<b>ESV(MOD-sp2):</b> 61.2 ml	<b>EF(MOD-bp):</b> 44.7 %
	<b>EF(MOD-sp4):</b> 48.6 %	<b>EF(MOD-sp2):</b> 43.8 %	
<hr/>			
<b>SV(MOD-bp):</b> 45.1 ml	<b>Aortic Sinus (2D):</b> 2.8 cm	<b>Ascending Aorta (2D):</b> 2.6 cm	<b>LA Volume (2D biplane):</b> 55.6 ml
<hr/>			
<b>RA Vol (2D):</b> 27.5 ml	<b>RVD2 (A4C):</b> 2.4 cm	<b>TAPSE:</b> 1.6 cm	

**Doppler Measurements & Calculations**

<b>MV E max vel:</b> 97 cm/sec	<b>MV dec time:</b> 0.17 sec	<b>Ao max PG (full):</b> 1 mmHg	<b>LV V1 max PG:</b> 2 mmHg
<b>MV A max vel:</b> 64 cm/sec			<b>LV V1 mean PG:</b> 1 mmHg
<b>MV E/A:</b> 1			<b>LV V1 max:</b> 84 cm/sec
			<b>LV V1 mean:</b> 55 cm/sec
			<b>LV V1 VTI:</b> 18 cm
<hr/>			
<b>Pulm Sys Vel:</b> 40 cm/sec	<b>E/E' Average:</b> 14	<b>E/E'_Lat:</b> 14	<b>E/E'_Sept:</b> 14
<b>Pulm Dias Vel:</b> 61 cm/sec			
<b>Pulm S/D:</b> 0.66			
<hr/>			
<b>PCWP:</b> 10 mmHg			

Reported by

Pietro Maximoff, Cardiac Scientist (Echo) BSE 9876

# Cardiac Catheterisation Unit

Re: Jean Grey, DOB: 16 Aug 1947, Hosp No: 0123456, NHS No: 4455667788

Thurs 11 Jan 2018 14:00

## HISTORY

70yo F presents with inferior STEMI

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PMH of COPD, current smoking, diabetes

## PROCEDURE

First operator: Hank Pym (SpR)

Supervising consultant: Natalia Romanova

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6F RRA sheath. 5000units heparin, GTN, verapamil. JL3.5/JR4.

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Findings

LMCA - long large calibre with mild atheroma

LAD - mild diffuse atheromatous disease throughout entire vessel with severe stenosis in the distal vessel;

LAD wraps around apex; D1 has a moderate to severe proximal stenosis

LCx - minor irregularities

RCA - dominant vessel with minor proximal and mid vessel plaque with acute occlusion of the distal mid vessel (culprit, DES deployed)

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Images reviewed with Dr Romanova (Consultant)

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Proceeded onto PCI to occluded RCA

1. JR4 guide. DAPT loaded.

2. BMW wire into distal vessel. Tirofiban bolus and infusion given.

3. Bradycardia and reperfusion rhythm noted

4. Predilated with a 2.5mm balloon at low pressure to restore flow.

5. Stented with a 2.5x33mm Xience Sierra DES

6. Post dilated with a 3.0mm NC balloon

7. Excellent angiographic result with no complication.

8. Possible residual thrombus - for tirofiban infusion

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TR band

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Conclusion - successful PCI to distal mid vessel and distal RCA with DES; residual diffuse LAD disease with moderate to severe D1 disease (for initial medical management and revascularisation based on symptoms)

## MANAGEMENT PLAN

Aspirin lifelong.  
Ticagrelor for minimum of 12months.  
Risk factor modification including smoking cessation.  
Departmental transthoracic echocardiogram.

Coronary care unit for monitoring.