Linn Armour | DOB: 04-Apr-1967 | IHI: 8003 6011 9519 5180

Linn Armour

Discharge Summary - 20th June 2024

e-Discharge Summary

20-June-2024

MR LINN CHRISTOPHER **ARMOUR** DoB 4-April-1967 (57years) SEX Male **Individual Healthcare Identifier (IHI)** 8003 6011 9519 5180

Start of document

St. Vincent's Hospital

Author Details	GEMMA BUTTIGIEG (Resident Medical Officer)
Discharge To	Other (includes discharge to usual residence, own accommodation/welfare institution (includes prisons, hostels and group homes providing primarily welfare services))
Discharge From	Patient Transit Lounge

Medications

Medications on Discharge

Ceased Medications (Medications > **Ceased Medications**)

No Information

Current Medications On Discharge (Medications > **Current Medications On Discharge**)

Medications

Drug	Instructions
Amlodipine Tablet	5 mg Oral in the morning (at 08:00)
Candesartan Tablet	16 mg Oral in the morning (at 08:00)
Docusate 50mg + Sennosides 8mg Tablet	1 to 2 Oral when required minimum dose interval 8 hour(s) up to 4 every 1 day(s) - Qualifier: For constipation
Folic acid Tablet	5 mg Oral in the morning (at 08:00) on Mon Wed Fri - Indication: methotrexate rescue
Methotrexate 10mg Tablet	10 mg Oral once daily (at 11:00) on Thu - Indication: sarcoidosis
Pantoprazole EC Tablet	40 mg Oral once daily (at 08:00)
Paracetamol 500mg Tablet	1000 mg Oral when required minimum dose interval 6 hour(s) - Qualifier: For pain or fever
Prednisolone Tablet	70 mg Oral in the morning (at 07:00) - Indication: multi-organ sarcoid - Qualifier: with food. reduce by 10mg per week until 40mg, then by 5mg per week.
Sulfamethoxazole 800mg + Trimethoprim 160mg Tablet	1 Oral once daily (at 07:00) on Mon Wed Fri - Qualifier: PJP prophylaxis dose
Able to self medicate	Yes
Medications changed since admission	Yes
Details of Medication Change	
See discharge list attached	
Additional Comments	

Event

Next of kin

Name	Relation	Address	Homephone	Workphone	Mobile
ORIDA LUSHMOOR ARMOUR	Wife	600 CHAILDOWLA RD, BOOKHAM, NSW 2582	0408 251 290		

Clinical Synopsis (Event > **Clinical Synopsis**)

Past Medical History
Ross river virus MVA - laparotomy in 30s Post vaccine syndrome

Summary of stay

Dear Doctor

Thank you for your ongoing care of Mr Linn Armour, who presented to St Vincent's Hospital with 3 days of central chest pain and exertional dyspnoea, on a background of recent admissions with chest pain, arthralgia, myalgias, hypercalcaemia and subacute renal dysfunction. Mr Armour was admitted under the care of Dr Kathir and the Cardiology team for further investigation and management.

Troponin and TTE were reassuring, with a pre-existing RBBB on ECG. Investigations revealed widespread pulmonary nodules, and in the context of his biochemical changes Linn underwent investigation into sarcoidosis, and his care was taken over by Dr Girgis, Dr Penglase and the Rheumatology team.

Mr Armour received supportive IV fluid for management of his hypercalcaemia. Renal biopsy confirmed sarcoidosis, with PET indicating FDG-avid lymphadenopathy and pulmonary nodules. A cardiac MRI indicated LGE and myocardial oedema, consistent with sarcoidosis. Mr Armour was on cardiac monitoring during his admission, which identified an episode of asypmotmatic NSVT.

With input Electrophysiology Cardiology team, it was recommended that Mr Armour have an AICD placed, however with discussion, his preference was to he undergo this in some months time, and a loop recorder was placed.

Mr Armour was discharged home in the 20th of June with the plan outlined below.

Discharge plan

1. Discharge home - as discussed with the electrophysiology team, advised not to drive for at least 1 month. If no events of the loop recorder then cleared to drive.

2. Medication changes
- Prednisolone 70mg in the morning with food - to treat sarcoidosis
----> weaning plan: reduce by 70mg a week (currently on Fridays). Once down to 40mg, reduce by 5mg a week.
- Methotrexate 10mg a week (on Thursdays) - to treat sarcoidosis
- folic acid 5mg Mon/Wed/Friday - while on methotrexate
- Amlodipine 5mg in the morning - blood pressure control
- Candesartan 16mg in the morning - blood pressure and kidney protection
- Pantoprazole 40mg daily - reduces stomach acid while on steroids
- Bactrim 1 tab Mon/Wed/Friday - prophylaxis while on steroids

3. Follow up with Dr William Lee in Suite 802 at St Vincent's Clinic - Please call 8382 6808 to book an appointment in approximately 3 month's time

4. Follow up in the Rheumatology Clinic at St Vincents in the Level 3 clinic in 3 months time - you will be contacted regarding the timing of this.

5. Your progress will be handed over to Dr Justin Chan, a Renal physician in Canberra for ongoing follow up.

6. Please arrange Bone Mineral Studies as a baseline while on steroids - form provided

7. Follow up with your pre-existing Endocrinologist appointment in Canberra

8. Please have monthly blood tests - form provided

9. Please seek medical attention if you develop worsening chest pain, high fevers, or have any concerns.

GP to kindly
- facilitate monitoring of symptoms, blood tests and ongoing referrals as required
Please do not hesitate to contact the treating team if you have any queries or concerns regarding this admission.

Kind regards,
Dr Gemma Buttigieg - Rheumatology SRMO
On behalf of Dr Ross Penglase - Consultant Rheumatologist.

Issues

Multi organ sarcoid
- renal, cardiac, lung involvement
- reduced renal function - eGFR 29, Cr 211 on admission.
- Hypercalcaemia to 3.02, treated with IV fluids
- Renal biopsy indicated granulomatous interstitial nephritis in keeping with sarcoidosis
- Commenced on high dose steroids 80mg Prednisolone daily from 14/09
- improvement in calcium and renal function following commencement of steroids
- methotrexate commenced 20/06 as a steroid sparing agebt.

Lung nodules
- input from Respiratory team
- Lung functions within normal range
- will need progress imaging

Cardiac sarcoid and arrhythmia management
- TTE - normal biventricular size and systolic function. Mild concentric left ventricular hypertrophy
- MRI indicated myocardial oedema, suspicious for sarcoid.
- No cardiac involvement identified on PET, however enlarged and PET-avid hilar and mediastinal lymphadenopathy suspicious for active cardiac sarcoid.
- Episode of NSVT on monitoring, asymptomatic
- Dr William Lee (Electrophysiology Cardiologist) involved - advised for AICD , however patient elected to delay AICD. Loop recorder placed 18/06
- EP studies - mild to moderate conduction abnormality, no VT/VF induced.

Covid infection
- tested covid positive on 10/06 after being identified as a close contact
- mild illness with fevers. No oxygen requirement.
- treated with 5 day course of paxlovid as advised by Respiratory team, given commencement of high dose steroids
- recovered well.

Diagnostic Investigations (Event > **Diagnostic Investigations**)

Relevant Results

Relevant Results

29 May 24 13:07- Creatinine:_____ 211 (*H) umol/L (60-110)

29 May 24 13:07- eGFR:_____ 29 (*L) mL/mn/1.73m2 (>60)

29 May 24 13:07- Calcium:_____ 2.91 (*H) mmol/L (2.10-2.60)

29 May 24 13:07- Ca alb corr:_____ 2.93 (*H) mmol/L (2.10-2.60)

29 May 24 13:07- Albumin:_____ 38 g/L (33-48)

29 May 24 13:07- Free Kappa:_____ 41.63 (*H) mg/L (3.30-19.40)

29 May 24 13:07- Free Lambda:_____ 30.17 (*H) mg/L (5.71-26.30)

29 May 24 13:07- Kap/Lam ratio:____ 1.38 (0.26-1.65)

29 May 24 13:07- FLC Comment:_____

29 May 24 13:07- IgG:_____ 13.7 g/L (6.0-15.0)

29 May 24 13:07- IgA:_____ 60)

20 Jun 24 09:05- Calcium:_____ 2.49 mmol/L (2.10-2.60)

20 Jun 24 09:05- Ca alb corr:_____ 2.56 mmol/L (2.10-2.60)

20 Jun 24 09:05- Albumin:_____ 34 g/L (33-48)

29 May 24 CT CHEST

Significant change to report:

Report amendment:

Innumerable widespread pulmonary nodules with peribronchovascular and subpleural location suggesting perilymphatic disease.

Widespread moderate axillary, supraclavicular, mediastinal and bilateral hilar lymphadenopathy.

Some of these nodes exhibit amorphous calcification.

Minor splenomegaly.

Nonobstructing right renal calculus.

These findings can be accounted for by sarcoidosis with atypical pulmonary nodules. If the patient has had previous scans, these would be useful to demonstrate stability. Alternatively, malignancy would need to be considered; further clinical evaluation, extended CT or FDG-PET CT may be helpful. CT guided lung biopsy may be feasible, however the lesions are small in size.

(Incidental bone island in the left fifth rib.)

Findings:

Innumerable bilateral solid nodules in both upper and lower lobes with random distribution throughout both lungs seen. Some of these nodules have mild adjacent ground-glass changes, for example at left lung apex.

There is nodularity of anterior aspect of right oblique fissure and diaphragmatic pleura.

No focus of consolidation identified.

No pleural or pericardial effusion.

Relevant Results

There is interlobar conglomerate lymphadenopathy on both sides. On the left side the lymph nodes are encasing left main bronchus and major branches, with no significant stenosis.
Additional diffuse mediastinal lymphadenopathy at right and left paratracheal space and subcarinal region. The lymph node at right subcarinal region measures 23 mm in short axis.

Axillary lymphadenopathy nodes measuring up to 12 mm also noted.

No chest wall mass seen.

Spleen is at upper limit of normal and measures 14 cm craniocaudally.
Surgical clip at right lobe of the liver identified.
Mesentery and celiac prominent upper abdominal lymph nodes identified.
Upper abdominal viscera are otherwise normal.

No suspicious lytic lesion identified.

Conclusion:
Innumerable soft tissue density well defined nodules with smooth margin, some with subtle ground changes, seen in both upper and lower lobes bilaterally. These nodules are in random pattern with involvement of right oblique fissure and diaphragmatic pleura.
There is diffuse mediastinal and interlobar lymphadenopathy with encasement of left main bronchus with no significant stenosis.
Findings are suspicious for metastatic cancer of unknown origin, with lack of infective features including tree in bud appearance and consolidation making infective process less likely.

31 May 24 US renal
There are multiple small echogenic foci within the right kidney. These measure up to 7 mm in diameter.

The kidneys are otherwise normal. No hydronephrosis.

Both kidneys are normal in size. The right measures 3.5 cm and the left 4.7 cm.
Both demonstrate normal surface contours, parenchymal echogenicity and corticomedullary differentiation.
Normal resistive indices on both sides.
No focal renal lesions.

Relevant Results

The bladder is normal in appearance, with smooth, non-thickened walls.
Prevoid bladder volume is 532 ml. Postvoid bladder volume is 258 ml. The patient was unable to void further.

Mild prostatomegaly, measuring 28 mL.

Conclusion:
Multiple small echogenic foci within the right kidney are likely small non-obstructing calculi.
No hydronephrosis or obstruction is seen.
Increased post-void residual volume, otherwise normal bladder.
Mild prostatomegaly.

12 Jun 24 CARDIAC SARCOID STUDY

Diagnostic Summary
Intense FDG avidity localising to enlarged bilateral hilar and mediastinal lymph nodes. Distribution is suggestive of active sarcoidosis but histopathological correlation is recommended. In addition, there are FDG avid cervical, axillary, upper abdominal and inguinal lymph nodes. The left medial supraclavicular or right inguinal lymph node may be amenable to ultrasound guided biopsy.
The small bilateral pulmonary nodules are FDG avid. This could be related to the underlying mediastinal process if sarcoidosis is confirmed.
No significant FDG avidity within the left ventricular myocardium to suggest active myocarditis Myocardial perfusion study is suboptimal due to persistent intense hepatic activity. Normal LVEF.

MYOCARDIAL PERFUSION SCAN AT REST
Imaging of the heart was performed after 99mTc-Sestamibi injection at rest.

Findings:
Difficult examination due to intense adjacent hepatic activity, persisting on prone imaging.
Possible tiny defect at inferior apex but possibly artefactual.
No other wall perfusion abnormality identified.
LVEF measures 70%.

RADIONUCLIDE TOF FDG PET/CT (ITERATIVE) STUDY
The patient was prepared with a low carbohydrate diet for 24 hours and a free fatty acid load 3 hours prior to injection. The patient was given 355 MBq of F-18 FDG (BSL was 4.3 mmol) and dedicated imaging of the heart as well as imaging of the body from the vertex of the skull to the mid thigh

Relevant Results

was obtained after 63 minutes with concurrent low dose CT for attenuation correction and anatomical localisation. Oral contrast was not administered.

Cardiac findings:

Good suppression of myocardial glucose metabolism.

Tiny focus of faint activity in the basal septum (SUVmax 2.6) which remains well below background hepatic activity (SUVmax 3.6).

No appreciable FDG avidity elsewhere in left ventricular myocardium.

Extracardiac Thoracic findings:

Extensive intensely FDG avid bilateral hilar and mediastinal lymphadenopathy. Representative lymph nodes documented below.

Left prevascular with SUV 11.2

Right upper paratracheal with SUV 10.0

Subcarinal 26mm with SUV 10.3

Right hilar with SUV 7.1

Left hilar with SUV 8.0

Bilateral axillary, more intense on right measuring 13mm with SUV 4.7

The small pulmonary nodules noted on recent diagnostic CT in bilateral lungs are mildly FDG avid. For reference, there is a 10mm perifissural nodule in the lateral right middle lobe with SUV 3.0.

There is no pleural or pericardial effusion.

Head and Neck

No abnormal intracranial activity allowing for high physiological cortical activity.

Moderate FDG avidity localising to bilateral supraclavicular nodes

12mm medial left supraclavicular node with SUV 7.4

7mm right medial supraclavicular node with SUV 5.9

Mild FDG avidity localising to other subcentimetre lymph nodes in bilateral neck including submandibular and submental.

Abdomen and pelvis:

Mild FDG avidity localising to subcentimetre periportal (SUV 4.2) and portacaval (SUV 4.8) lymph nodes.

Moderate FDG avidity localising to bilateral distal external iliac and inguinal nodes with right inguinal lymph node measuring 13mm with SUV 6.1.

No abnormal FDG avidity within the liver, spleen, adrenals, pancreas, gallbladder or kidneys.

No splenomegaly.

Small volume left perinephric haematoma, presumably from recent biopsy.

Relevant Results

Musculoskeletal:

No FDG avid osseous lesion.

Yours sincerely,

DR KEITH WONG FRANZCR

Ordering Dr: Girgis, Laila (0602985J)

---

11 Jun 24 12:59- Hep B Surf Ag:____ NonReactive

11 Jun 24 12:59- Hep B Core Ab:____ NonReactive

11 Jun 24 12:59- Hep B Surf Ab:____ 288 mIU/mL

11 Jun 24 12:59- Hep B Surf Ab:____

11 Jun 24 12:59- Hepatitis C Ab:___ NonReactive

11 Jun 24 12:59- HCV Comment:_____

11 Jun 24 12:59- V. zoster IgG:____ Detected (*A)

11 Jun 24 12:59- VZV IgG Com:_____

11 Jun 24 12:59- Strongyloides:____ Pend'g

31 May 24 07:30- TB Quant Inte:____ Negative

31 May 24 07:30- QFT Nil Tube:_____ 0.13 IU/mL

31 May 24 07:30- QFT TB1-NIL:_____ -0.01 IU/mL

31 May 24 07:30- QFT TB2-NIL:_____ 0.00 IU/mL

31 May 24 07:30- QFT MTGEN-NIL:____ 9.87 IU/mL

31 May 24 07:30- TB Quant Com:_____

29 May 24 13:07- IgG:_____ 13.7 g/L (6.0-15.0)

29 May 24 13:07- IgA:_____ <0.10 (*L) g/L (0.70-3.90)

29 May 24 13:07- IgM:_____ 0.64 g/L (0.30-2.30)

TTE 31/05/24

The patient is in sinus rhythm at 93 bpm. The left ventricle is not dilated with normal systolic function. The estimated ejection fraction is 65%. The diastolic assessment is normal for age. Left ventricular wall thickness is mildly increased. The mitral valve is structurally normal with trivial physiological regurgitation. The aortic valve is normal. The aortic root and ascending aorta are not dilated, considering the patient?s body surface area. The left atrium is not dilated. The right atrium is not dilated. The right ventricle is not dilated with normal systolic function. The tricuspid valve is normal. The estimated pulmonary artery systolic pressure is normal. The pulmonary valve is normal. There is no pericardial pathology. The inferior vena cava is not dilated and collapses with inspiration.

Conclusions

1. Normal biventricular size and systolic function.

2. Mild concentric left ventricular hypertrophy.

3. No significant valvular pathology.

Cardiac Magnetic Resonance Imaging

Relevant Results

Height: 198.0 cm Weight: 107.00 kg BSA: 2.42 m²

Image Quality: Adequate

REPORT

Cine imaging, late gadolinium enhancement, T1, T2 maps were performed at

3T.

ANATOMICAL ORIENTATION

Normal anatomical orientation.

LEFT VENTRICLE

LV Wall Thickness: 12 mm

CARDIAC VALVES

No significant functional or structural valve abnormalities.

ATRIA (LA 30 cm² , RA 27 cm²).

GREAT VESSELS

Aorta: Mildly dilatd aortic root measuring

40mm.Ascending aorta is of normal calibre.38mm

x 38mm.Sinotubular junction is of normal

appearance.31mm.

Pulmonary Arteries: The pulmonary arteries are of normal calibre. MPA

21mm, RPA 18mm, LPA 19mm.

Pericardium: Normal pericardial appearance.

CARDIAC SHUNT STUDY

Interventricular

Septum:

Interventricular septum appeared intact.

Interatrial Septum: Interatrial septum appeared intact.

BHV Flow Mapping: On breath-hold velocity flow mapping, there is no

significant shunt detected.

Qp/Qs= 1.14

TISSUE CHARACTERISATION

Gadolinium Study In the early phase no thrombus is identified.

Early Phase:

Mid-wall LGE in the basal to mid septum and lateral

wall with elevated T2 values in keeping with

associated oedema.

Ventricular Indices (normal male ranges in brackets)

EDV (ml) ESV (mL) SV (mL) EF (%) Mass (g)

LV 181(102-235) 79(29-93) 102(68-148) 56(55-73) 157(85-181)

RV 185(111-243) 89(47-111) 96(62-134) 52(44-63)

Ventricular Indices (corrected for BSA, mean +/- 2SD)

Indexed Values EDVi (mL/m²) Mass index (g/m²)

LV 75(82+/-30) 65(65+/-18)

RV 76(86+/-28)

Relevant Results

```
CONCLUSION

1. Normal biventricular size and systolic function.

2. Mid-wall LGE in the basal-to-mid septum and lateral wall with associated oedema, in keeping with acute myocarditis.
Differentials include sarcoidosis, or other infiltrative/inflammatory causes. PET-CT correlation suggested if clinically
relevant.

Thank you for referring this patient.

A/Prof Jane McCrohon

Cardiologist (CMR Specialist)

DR Ning Song

Cardiac Imaging Fellow
```

Investigations Pending

Problems/Diagnoses This Visit (Event > **Problems/Diagnoses This Visit**)

DIAGNOSIS

Diagnosis	Diagnosis Date
Principle diagnosis: MULTI-ORGAN SARCOIDOSIS	19 Jun 2024
CHEST PAIN	29 May 2024

PROBLEMS

Problem/Complication	Progress/Summary	Start Date
Multiorgan sarcoid	High dose prednisolone and methotrexate	
Mild Covid-19 infection	treated with Paxlovid	
Pulmonary nodules		
Cardiac sarcoid	loop recorder inserted, planning for AICD insertion	
Sub-acute kidney dysfunction	Biopsy confirmed sarcoidosis. Responded well to treatment of sarcoid	
Hypercalcaemia	secondary to sarcoidosis. Treated with IV fluids, responded well to steroids	

Health Profile

Allergies and Alerts

Adverse Reactions (Health Profile > **Adverse Reactions**)

ADVERSE REACTIONS

Type	Cause	Action	Comments
Drug Allergy	Prazosin	Other	
Food Allergy	Seafood	Unknown	dislike

Plan

Plan

Record of Recommendations and Information Provided (Plan > **Record of Recommendations and Information Provided**)

DISCHARGE INSTRUCTIONS

Person Responsible	Instructions

Administrative Observations

SPECIALTIES

Specialty
RHEUMATOLOGY

Entitlements

Medicare No
2314045381

Administrative details

Encounter Details

ENCOUNTER_DETAILS_TABLE

Admission Date	29-May-2024 00:00+1000
Discharge Date	20-June-2024 00:00+1000
Discharge To	Other (includes discharge to usual residence, own accommodation/welfare institution (includes prisons, hostels and group homes providing primarily welfare services))
Discharge From	Patient Transit Lounge
Specialties	RHEUMATOLOGY

Facility

FACILITY_DETAILS_TABLE

Name	St. Vincent's Hospital
Work Place	390 Victoria St, Darlinghurst, NSW, 2010
Department	Patient Transit Lounge

Responsible Health Professional At Time Of Discharge

RESPONSIBLE_HEALTH_PROFESSIONAL_AT_TIME_OF_DISCHARGE_TABLE

Name	DR LAILA GIRGIS
Work Place	SUITE 403 FL 4, 438 VICTORIA ST, DARLINGHURST, NSW, 2010, Australia

Patient details	*Value*
Name	MR LINN CHRISTOPHER ARMOUR
Sex	Male
Date of Birth	4-April-1967 (57years) Age is calculated from date of birth
Individual Healthcare Identifier (IHI)	8003 6011 9519 5180
Phone 1	0457 913 686 (Home)
Phone 2	0457 913 686 (Mobile Contact)

Author Details

Name	GEMMA BUTTIGIEG (Resident Medical Officer)
Organisation	St. Vincent's Hospital
Department	Patient Transit Lounge
Work Place	390 Victoria St, Darlinghurst, NSW, 2010, Australia

Document details	*Value*
Document type	e-Discharge Summary
Creation date and time	20-June-2024 15:02+1000
Date and time attested	20-June-2024 12:57+1000
Document identity	2.25.118816849368398020890638074925605786018
Document version	1
Completion code	Final

Primary Recipients

Name	Contact	Address	Organisation
HANNAH BURN-PETERSEN	**Phone:** 02-6226 3697 (Workplace) **Facsimile machine:** 026223667 (Workplace)	**Work Place:** 153 COMUR ST,YASS,NSW,2582	

End of document