Portal Hypertensive Bleeding

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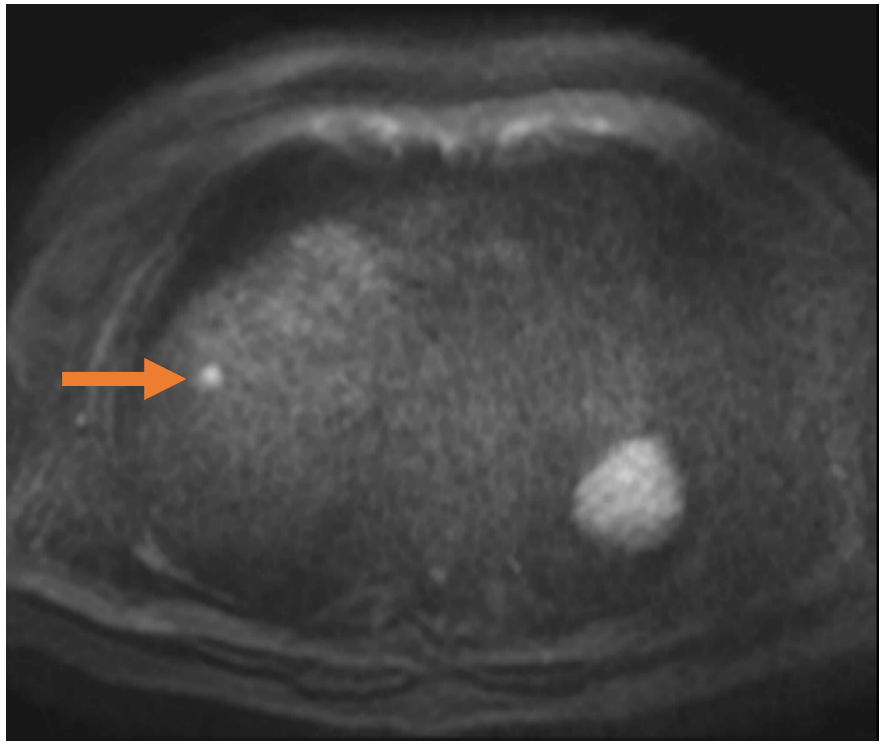
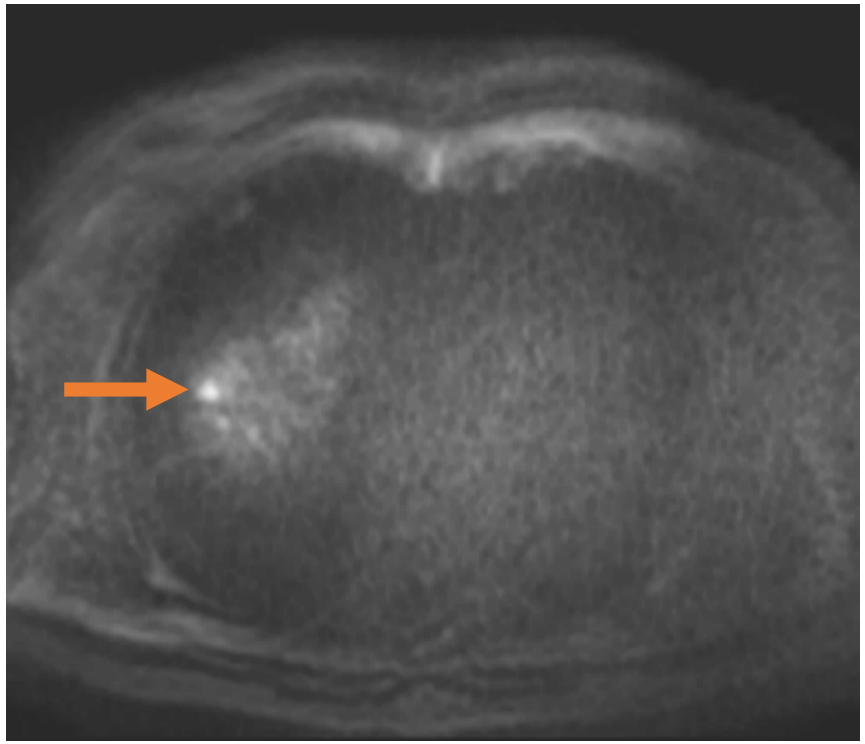
Case

- 70M
- Background:
  - NAFLD with cirrhosis 2016
  - DVT 2014
  - HCC 2017 – hepatic resection
  - Grade 1 oesophageal varices on OGD 2020
  - Ex-smoker
  - Significant coronary artery calcification on CT

Background

- On going HCC surveillance following resection in 2017
- In 2020:





Background

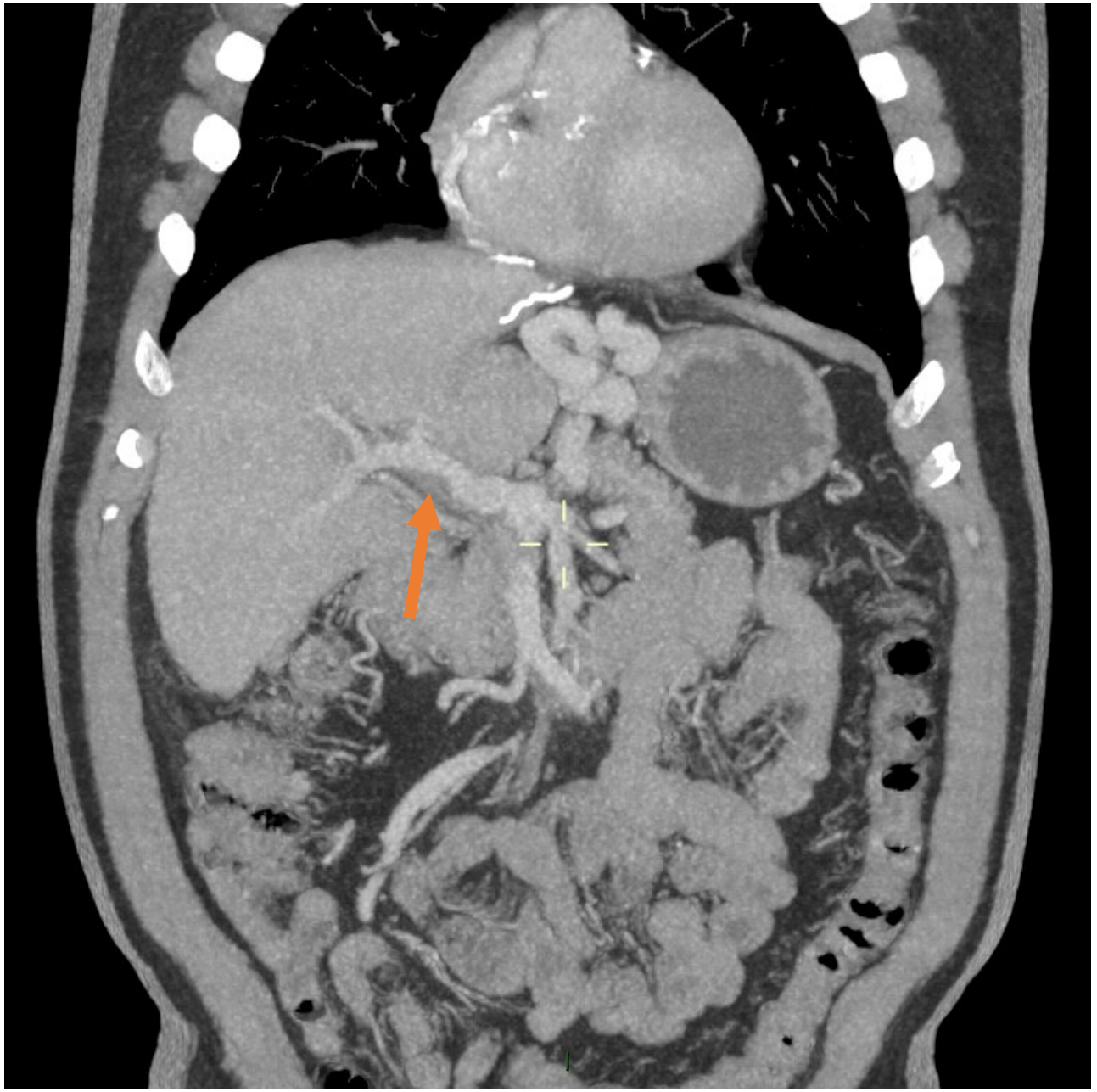
- LIRADS 3 lesions
- On going surveillance with 6 monthly MRI and CT Triple Phase Liver

- December 2021:
  - Lesions developed more typical appearance of HCC on MRI and CT, now LIRADS 4
  - Discussed at MDT – not transplant candidate but suitable for RFA

Background

- Triple Phase CT Dec 2021

- Non-occlusive portal vein thrombosis
- Anticoagulation with LMWH commenced
- Commenced on Carvedilol



Admission 28/02/22

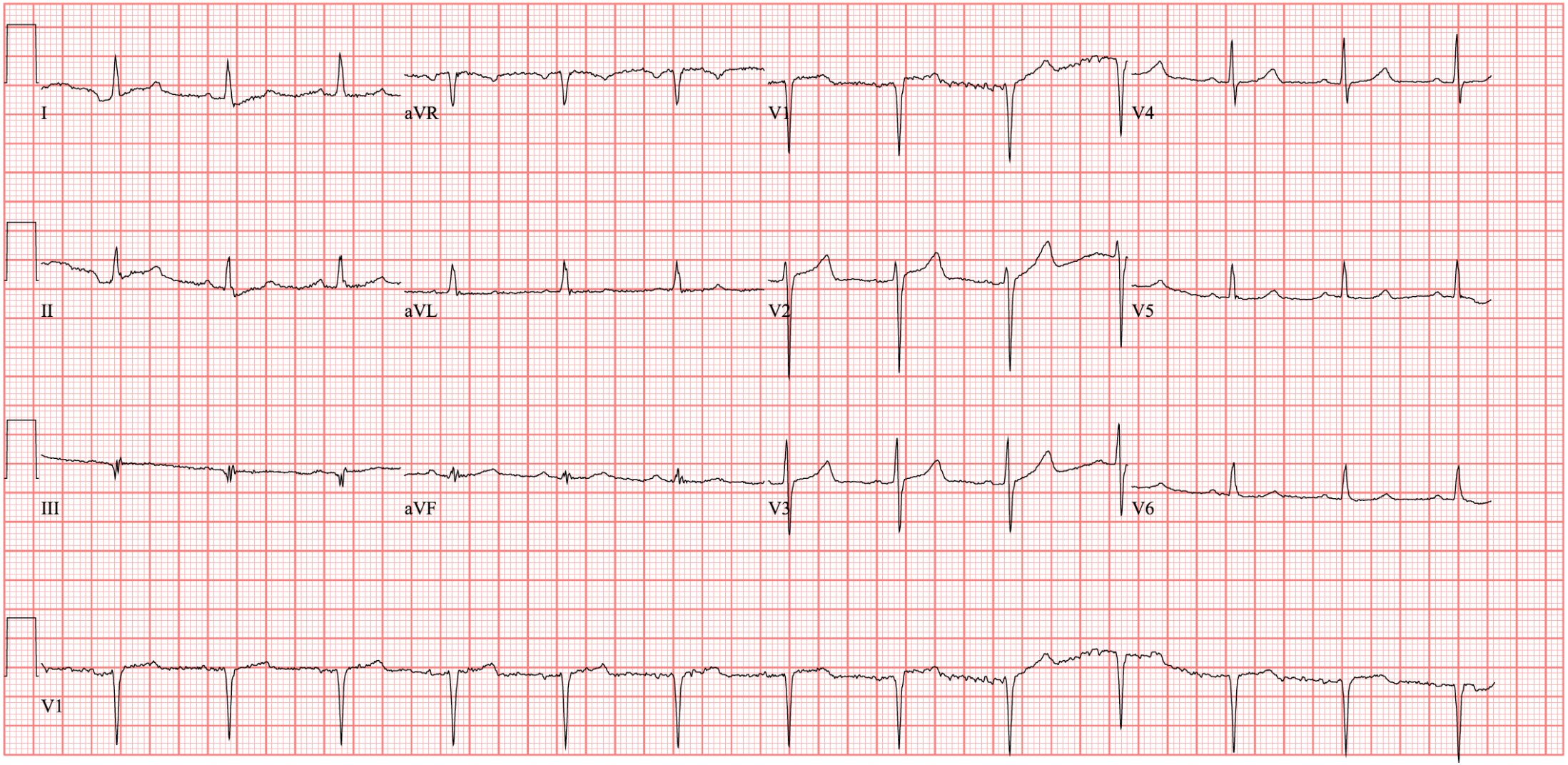
- Presents to the Emergency Department with 2 episodes of haematemesis
- Initial assessment:
  - Appeared well, comfortable
  - Stigmata of CLD
  - RR 20/min, HR 86bpm, BP 109/74mmHg
- Initial Investigations:
  - Hb 118, Plts 89, PT 17, Urea 5.9, Bili 31, Creatinine 60
- Glasgow-Blatchford Score 6

Admission

- Plan in ED:
  - Fluid resuscitation
  - Cross match
  - Admit for inpatient OGD
  - ECG

- Carvedilol and dalteparin withheld

ECG in ED

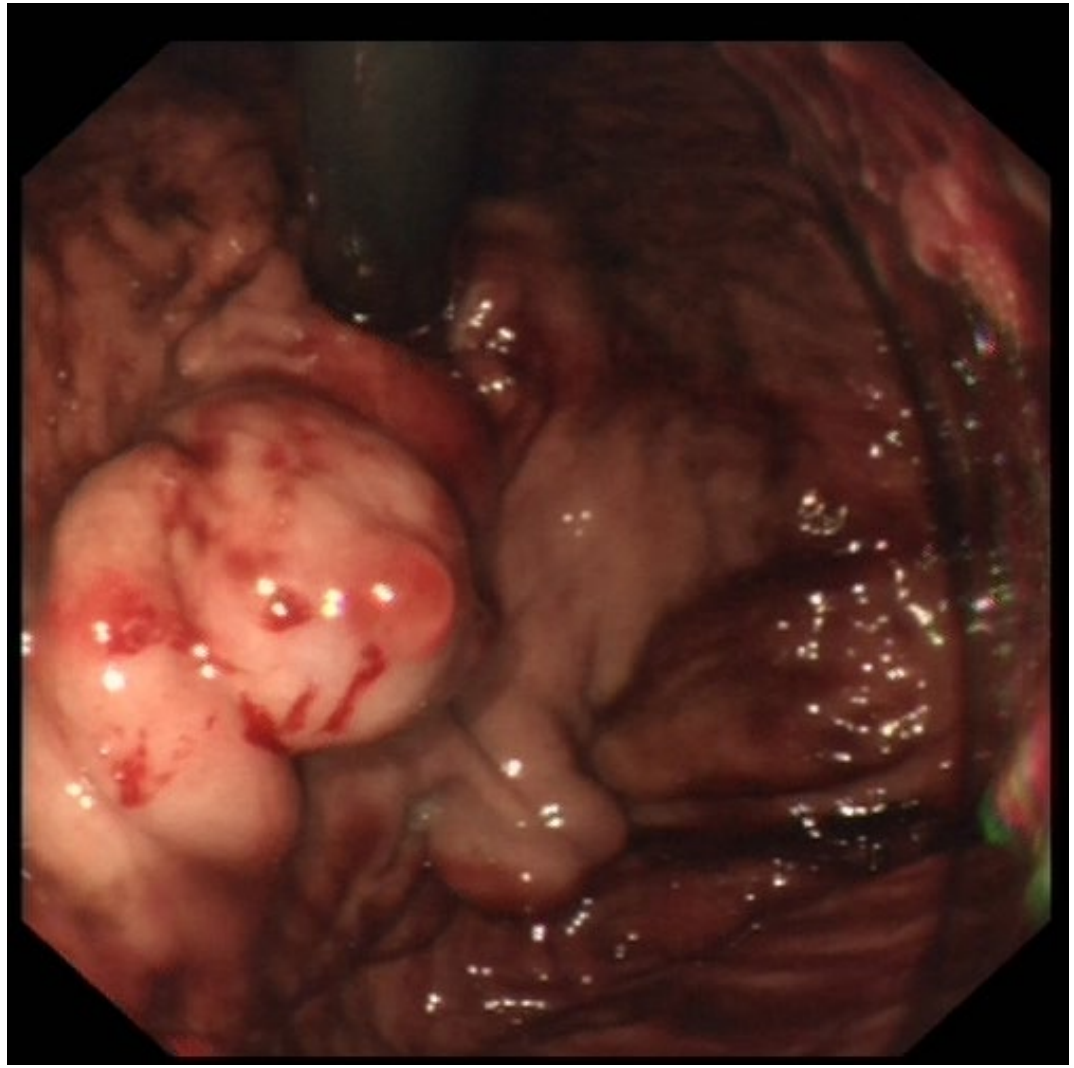


Admission – Emergency Department

- Further haematemesis and now melaena whilst still in ED – Transferred to resus and re-assessed:
  - Haemodynamically stable – BP 140/90mmHg, HR 100bpm
  - Now clammy and pale
- IV Terlipressin 2mg and IV Co-amoxiclav administered
- Given 2 units PRCs
- Discussed with on-call haematologist – Vit K 10mg & 2 pools platelets
- Discussed with on-call Gastroenterology consultant - plan for emergency OGD in Endoscopy Unit

Admission – Endoscopy

- Transferred directly from ED Resus to Endoscopy Unit
- OGD – Well covered grade 1 varix in oesophagus. Fresh and altered blood in stomach with large gastric fundal varices, one with erosion present. Injected with thrombin.
- Haemostasis achieved

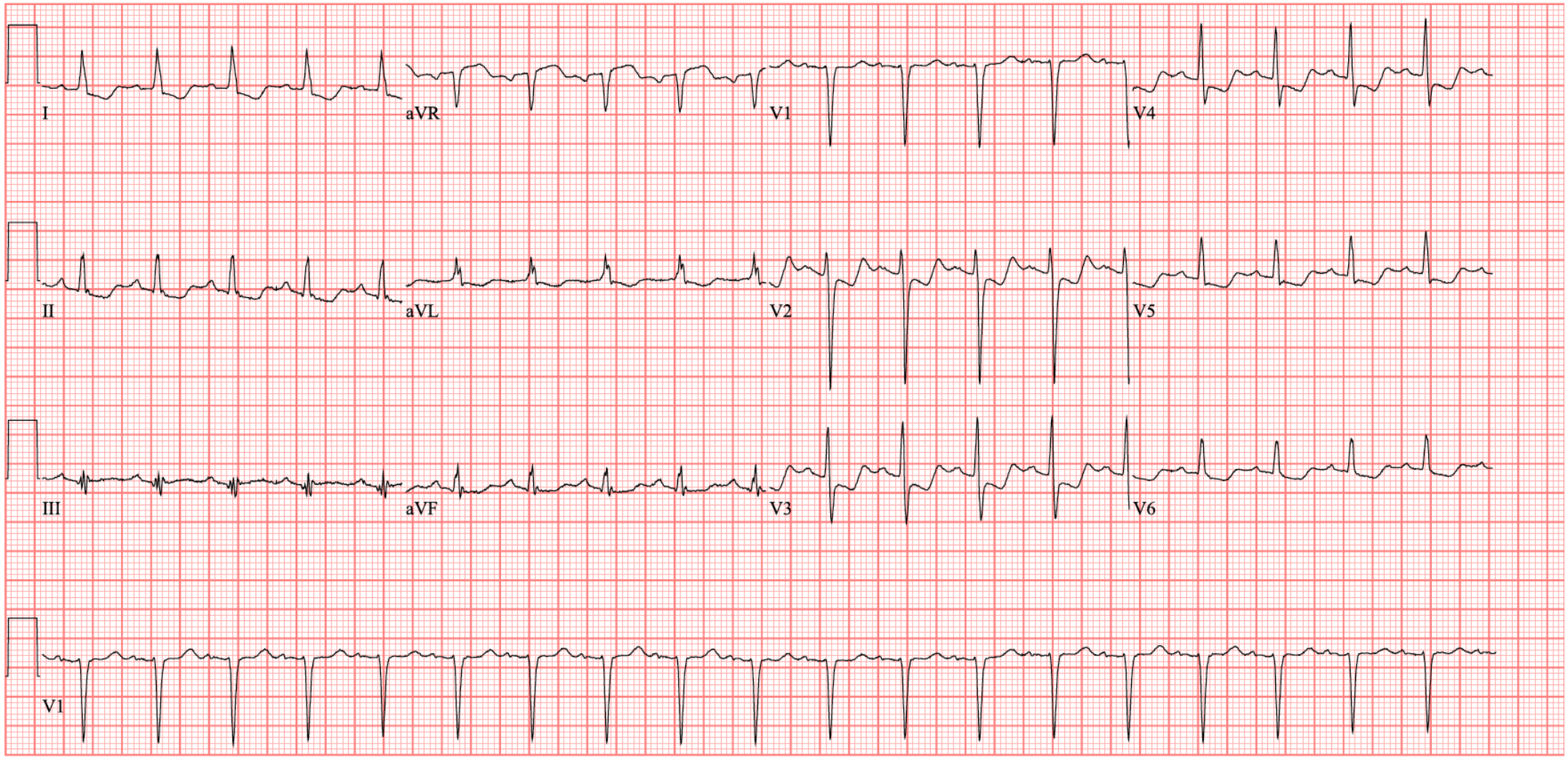


Admission – HDU

- Plan post OGD:
  - HDU for monitoring
  - Continue Terlipressin and antibiotics
  - Target Hb >70

- Further small episodes of melena overnight
- Following morning develops central chest pain

ECG in HDU



Admission – HDU

- Troponin 25 -> 2418 (Normal <34)

- Discussed with Cardiology Registrar:
  - Likely Type-2 myocardial infarction
  - Thought to be terlipressin induced ischaemia exacerbated by anaemia in context of variceal bleed
- Terlipressin discontinued

- Chest pain subsided and ECG normalised

Admission – HDU

- Given risk of re-bleeding, ischaemia from terlipressin and need for on going anticoagulation for PVT more definitive treatment sought

- Discussed with Interventional Radiology –TIPS not felt to be technically feasible due to PVT but BRTO possible

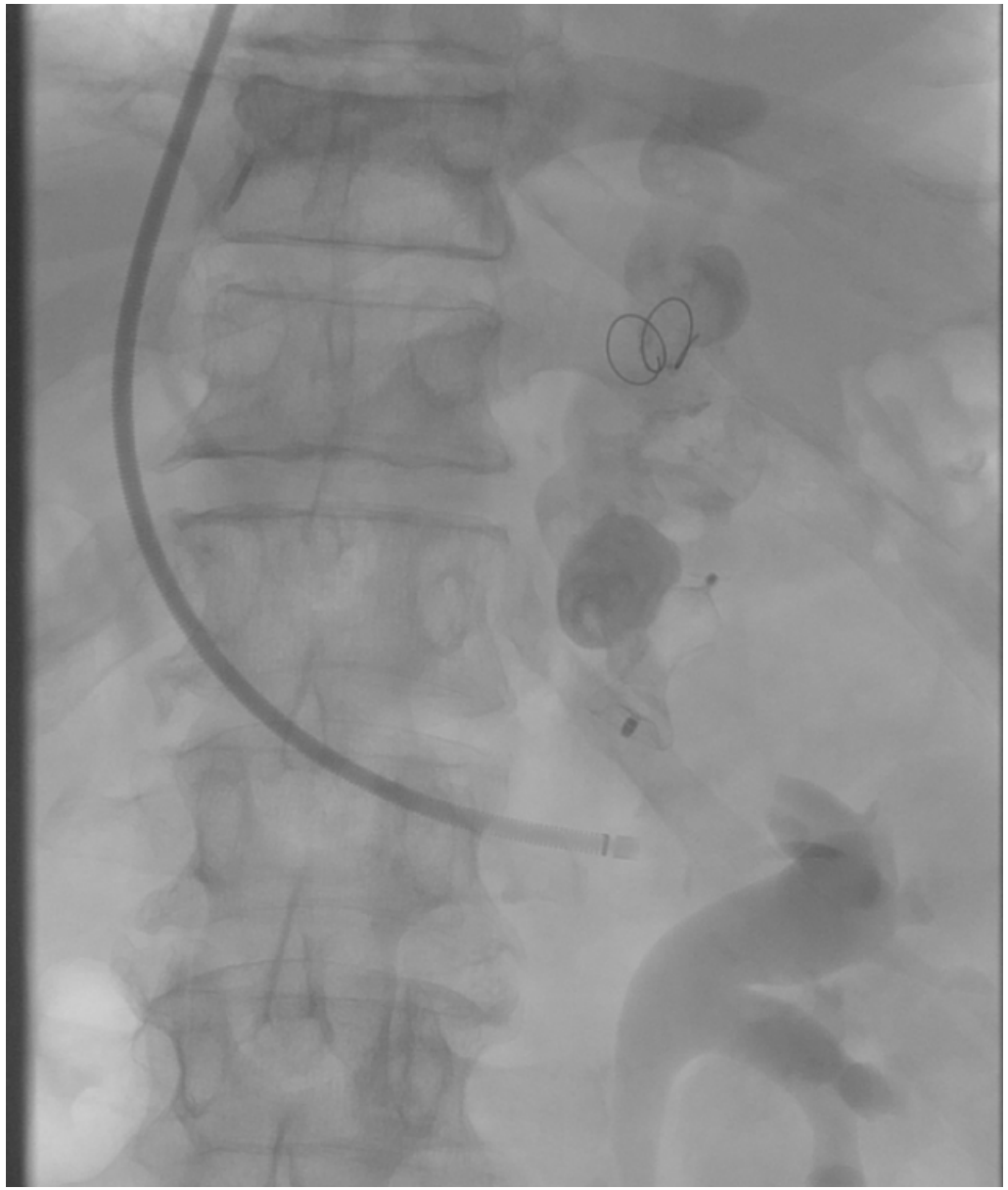
Admission – HDU

- Listed for BRTO procedure 48 hours later on day 3 of admission
- No further bleeding witnessed

- Initial scheduled procedure cancelled due to COVID-19 affecting staffing in Interventional Radiology Department

- Procedure rescheduled and performed on day 8 of admission

BRTO



Admission – Ward

- BRTO successful with no complications
- Observed in HDU for 24hr then stepped down to ward

- Dalteparin and Carvedilol re-started the following day
- Remained well and discharged 48 hours later

Follow Up

- Remains well with on going hepatology clinic follow up
- Planned for RFA to treat recurrent HCC

Summary

- 70M, NAFLD cirrhosis, recurrent HCC – awaiting RFA
- On Dalteparin for non-occlusive PVT
- Admission with gastric variceal bleed – endoscopically treated with thrombin injection
- Terlipressin induced complication – myocardial ischaemia
- BRTO arranged for more definitive treatment
- Procedural delay due to COVID19
- Successful BRTO with no complications
- Patient remains well and awaits treatment for HCC