Introduction The liver plays the key role in haemostasis both primary and secondary. Pulmonary embolism (PE) has been observed in patients with cirrhosis despite associated coagulopathy. The radiologic pattern and risk factors of PE in patients with cirrhosis are poorly characterised.

Aims/Background To study the radiologic pattern and possible risk factors of PE in cirrhotic patients.

Method Retrospective cohort data of patients with PE and cirrhosis in a single center from was collected from our HIPE (Hospital Inpatient Enquiry) department between 2002–2012. Patients with active malignancy, recent (within 90 days) fracture or surgery or pregnancy were excluded. Clinical variables included severity of cirrhosis, symptoms of PE and laboratory tests and radiologic patterns were studied.

Results Ten cirrhotic patients, M:F 1:1 with average age 59 years old, had PE during this period. Dyspnea was the predominant symptom in 90% of patients while chest pain or haemoptysis was present in only 20% and 10% respectively. The average platelet count and INR was 126 and 1.4 respectively. Sixty per cent had bilateral radiologic findings, 30% had PE in the right side while only 10% had left sided PE. Lower lobes emboli were significantly more common than upper lobe PEs (p=0.03). Pleural effusion was present on the ipsilateral side of PE in 60% while the rest did not have pleural effusion.

Conclusion PE tends to occur bilaterally and mainly in lower lobes, particularly the right if unilateral. The presence of a measurable coagulopathy in a cirrhotic patient does not absolutely protect against PE.