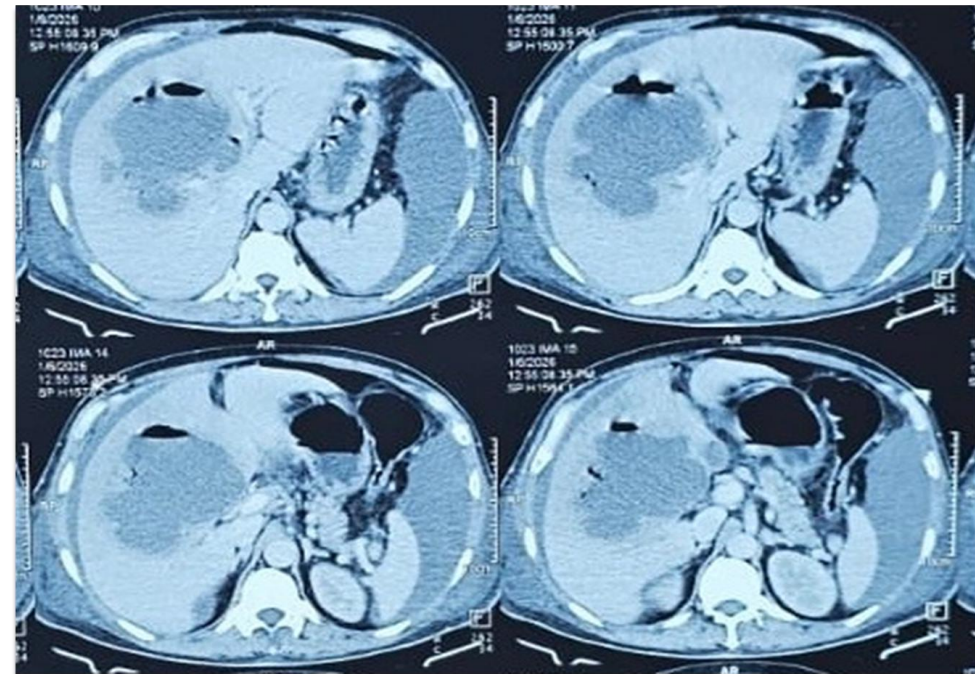


Miracle of Interventional radiology-A case presentation

Dr. Bithika Sarker
Medical Officer
AWMCH



Particulars of the patient

- Age: 47 Yrs.
- Gender: Male
- Date of Admission: 03rd January 2026
- Place of admission: AWMCH, ICU
- Admitted under: Prof. Dr. Sardar Mohammad Rezaul Islam



History

Chief complaints

- Right upper abdominal pain for 10 days.
- Fever for 7 days.
- Abdominal distension.

Personal history

- Chronic alcoholic for past 15 years.
- Drug abuser (YABA)

General Examination

- Appearance: Ill looking
- Consciousness: Conscious oriented to time place and person
- Anaemia: Pallor and Moderately anaemic
- Jaundice: Mild Icterus noted
- Cyanosis: No central or peripheral cyanosis

General Examination (cont.)

- Edema: Bilateral pitting pedal edema present
- Dehydration: Moderately dehydrated
- Vital signs
 - Temperature: 100
 - Pulse: 99 bpm
 - Respiratory rate: 32 breaths per minute

Local Examination

Abdominal examination

- **Inspection:**
Abdominal distension
- **Palpation:**
Tenderness over the right upper quadrant, Enlarged and tender liver
- **Percussion:**
Shifting dullness- present
Fluid thrill –present
- **Auscultation:**
Bowel sound-absent



Respiratory system

- ▶ **Inspection:** Respiratory distress.
- ▶ **Palpation:** Chest expansion reduced, Vocal fremitus increased.
- ▶ **Percussion:** Dull over the affected area
- ▶ **Auscultation:** Bronchial breath sounds and crepitus present.
- ▶ Cardiovascular and neurological examination were unremarkable



A close-up photograph of a person wearing a white lab coat, holding a black pen and writing on a white notepad. The person's hands and the notepad are the primary focus, with the background being a plain, light-colored wall.

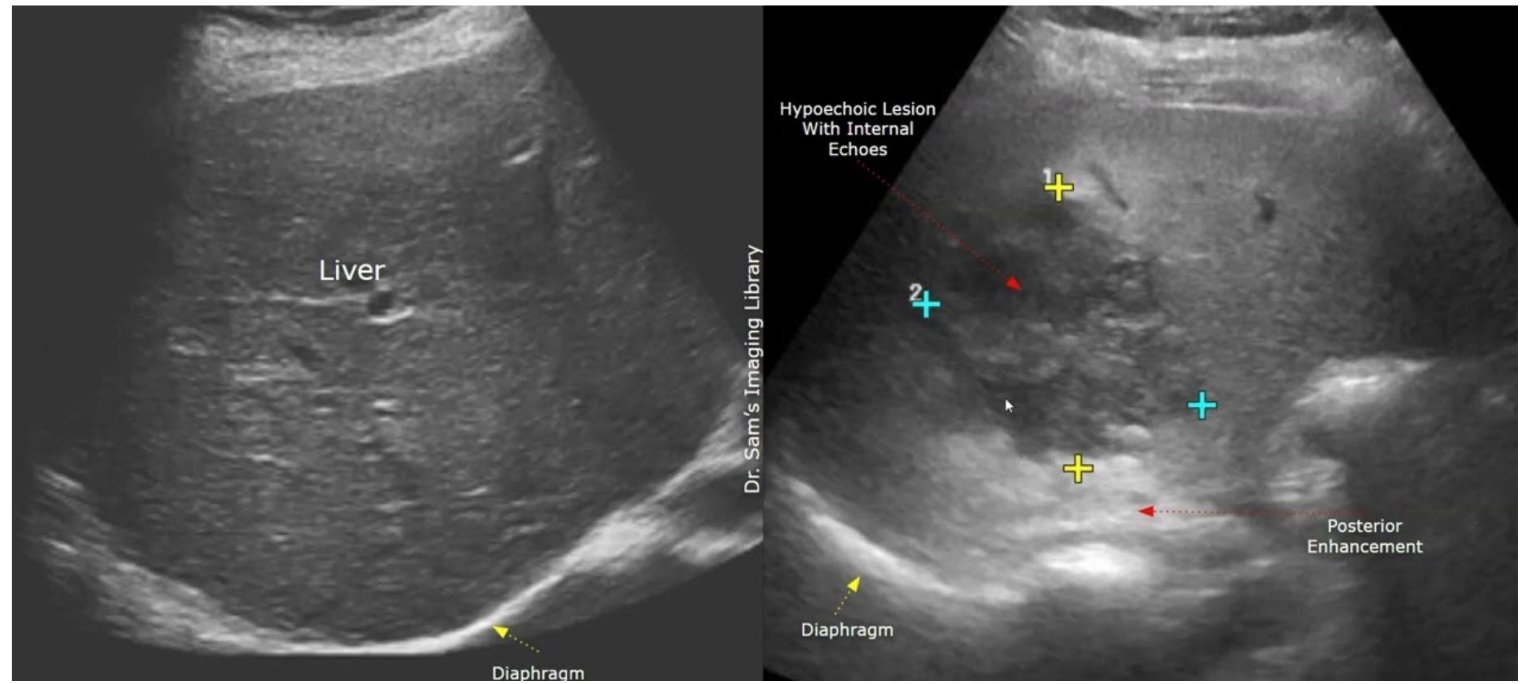
Provisional diagnosis

Left lobar pneumonia with
ascites with AKI with chronic
alcoholism and YABA abuse

Imaging

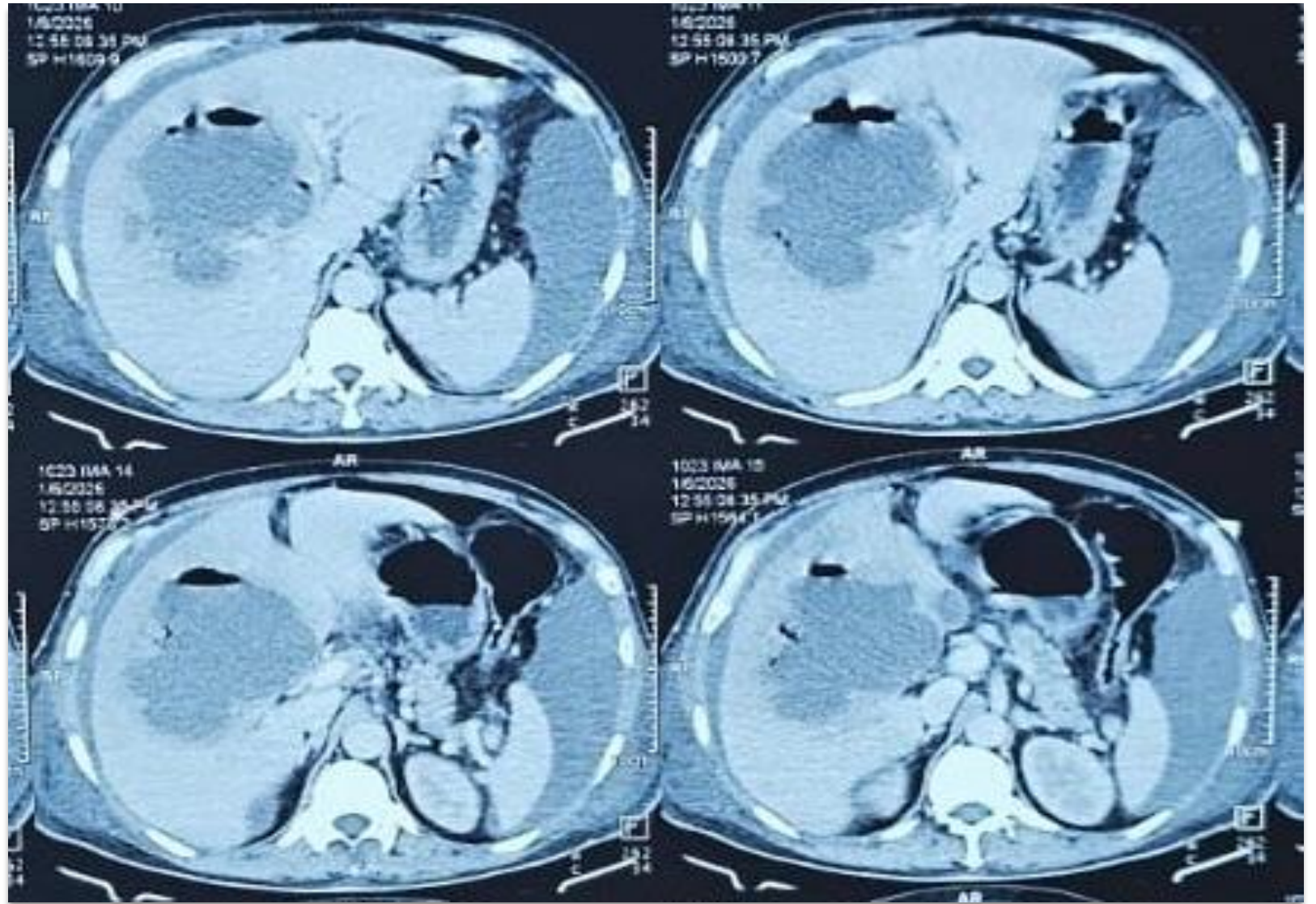


USG Whole Abdomen (04-01-26)

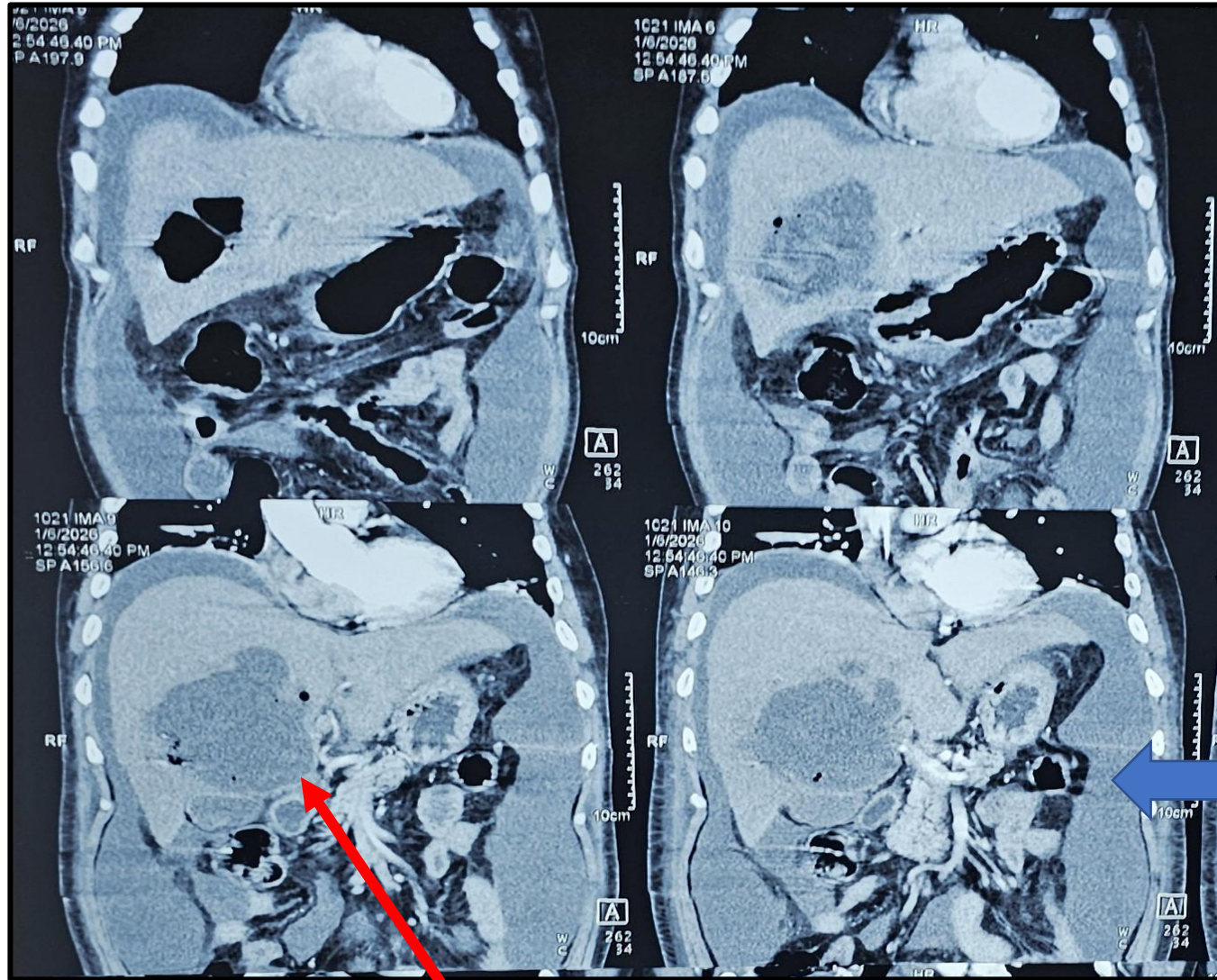


Organ	Findings
Liver	11.7 × 10.6 cm cystic mass (abscess)
Ascites	Significant
Kidneys	Bilateral parenchymal disease
Pleura	Moderate right pleural effusion

CT scan whole
abdomen



Huge liver abscess right lobe of the liver on CT scan



Ascites

Possible burst into peritoneal cavity

Investigations



Haematological profile(serial)

Date	Hb (g/dL)	WBC ($\times 10^3/\mu\text{L}$)	Neut (%)	Platelet ($\times 10^3/\mu\text{L}$)	ESR (mm/hr)
03-01-26	10.2	26.30	95.4	397	96
07-01-26	8.9	26.18	90.3	407	81
10-01-26	10.4	19.44	87.8	509	40

Renal & Electrolyte Profile

Date	Na	K	Creatinine	CRP	Albumin	Remarks
04-01-26	124	5.45	2.13	238.23	19.43 g/L	AKI + Severe sepsis
05-01-26	130	3.69	1.43	—	—	Improving renal function
06-01-26	134	4.56	1.02	—	—	Near normalization
07-01-26	137	3.46	0.6	16.14	22.51 g/L	Marked improvement
10-01-26	140	3.33	0.62	—	25.31 g/L	Stable

Arterial Blood Gas (ABG)

Date	pH	pCO ₂	pO ₂	HCO ₃	Lactate	O ₂ Sat	Interpretation
04-01-26	7.49	22.7	89.2	17.1	1.1	97.5%	Respiratory alkalosis
06-01-26	7.426	32.5	63.9	21.0	2.2	92.7%	Hypoxemia (Pneumonia)

Sepsis & Infection Markers

Test	Date	Result	Interpretation
CRP	04-01-26	238.23 mg/L	Severe infection
Procalcitonin	05-01-26	35.51 ng/ml	Severe sepsis/septic shock
ESR	03-01-26	96 mm/hr	Markedly elevated

Coagulation profile

Date	PT	INR	APTT	Interpretation
04-01-26	15 sec	1.25	30 sec	Mild prolongation
07-01-26	14 sec	1.168	—	Improved

Cardiac Evaluation

Test	Finding
ECG	HR 114 bpm, old AMI
Troponin-I	Normal
Echo-2D	EF 47%, mild LV systolic dysfunction, antero-septal hypokinesia

Microbiology (Pus C/S – 10/01/26)

Sensitive: Amoxiclav, Amikacin,
Gentamicin, Cefuroxime,
Piperacillin-Tazobactam,
Ceftriaxone, Ciprofloxacin,
Levofloxacin, Cefepime,
Aztreonam

Resistant: Cotrimoxazole,
Doxycycline, Cefixime

Intermediate: Meropenem



Organism

Klebsiella species

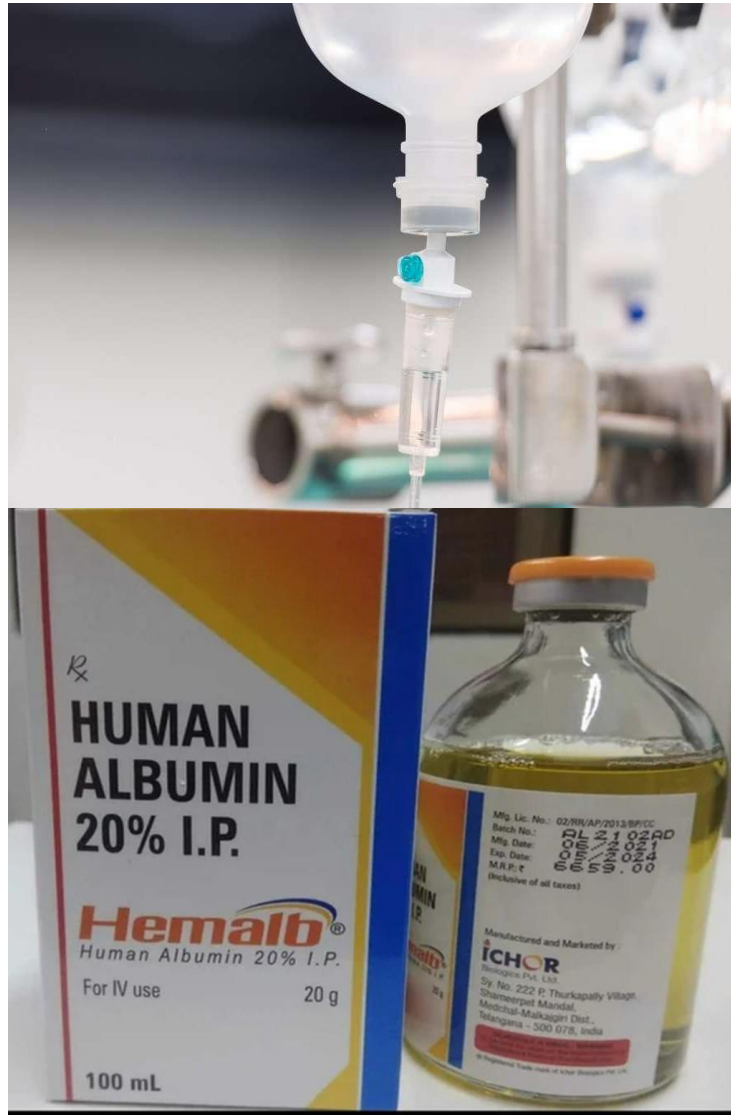
Confirmatory diagnosis

- Pyogenic Liver Abscess (spontaneous rupture)
- Ascites/Pyoperitoneum
- AKI
- Left Sided Pneumonia
- Old AMI
- Hypoalbuminemia
- DM
- Alcoholic
- Drug Abuse



Treatment given

- Oxygen therapy
- NPO
- IV fluid
- Parenteral nutrition
- IV antibiotic-Tazobactem
Piperacillin, Moxifloxacin ,
metronidazole (Empirical)



Treatment given (cont.)

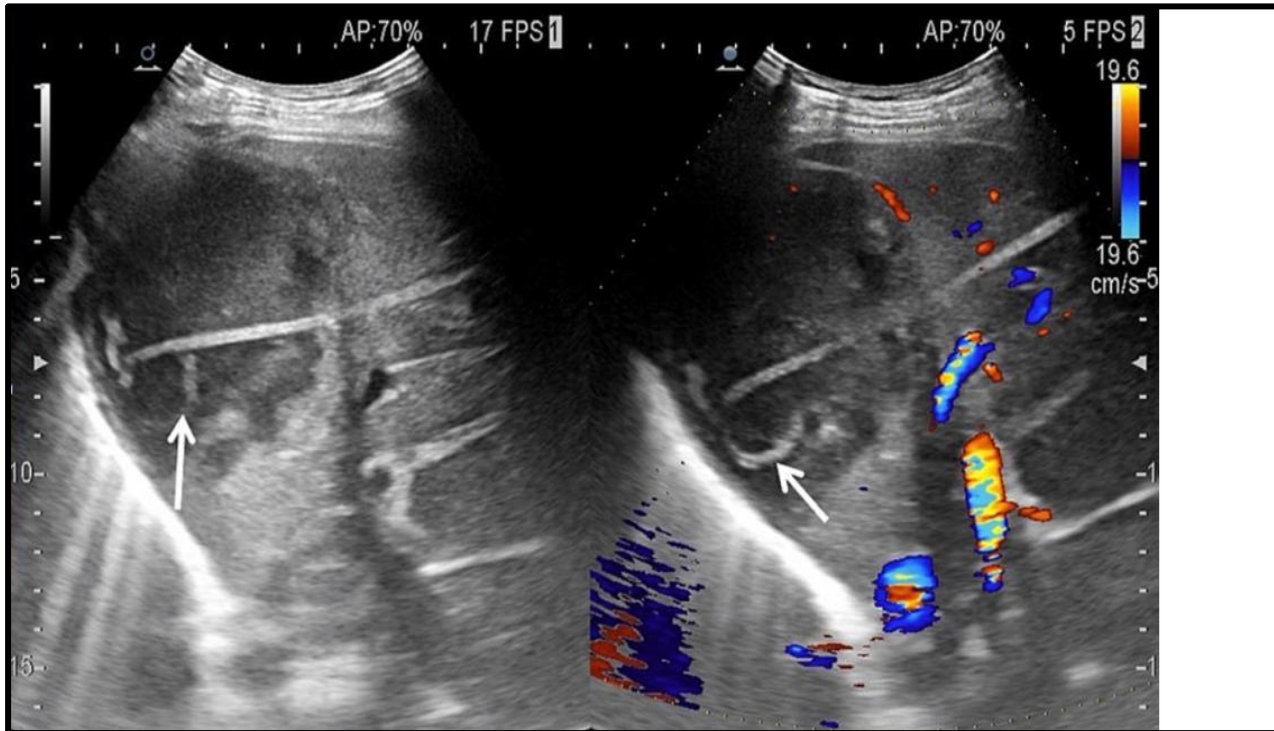
- IV albumin,
- Blood transfusion
- Frusemide/ spironolactone
- Glucose, Insulin therapy
- Radiological Intervention treatment

Radiological Intervention treatment by **Prof. Bishwajit Bhowmik** (Chairman, Int. Rad, BMU) done in Green life hospital



- Insertion of one Pigtail catheter in the liver
(drained about 2100 ml pus)
- Insertion of 2nd pigtail catheter in the upper abdomen
(2700 ml purulent ascitic fluid)

Position of 2 pigtail catheter (1 shown by red arrow)



Radiological Intervention treatment by **Prof. Bishwajit Bhowmik** (Chairman, Int. Rad, BMU done in Green life hospital)



- Insertion of third pigtail catheter in pelvis after 7 days (700 ml pus)
- Sono guided aspiration of pleural fluid from both pleural cavity(800ml serous fluid) on 16th day

Position of 3rd pigtail catheter
(shown by red arrow)



Hospital Course & Outcome



- The total duration of hospital stay was 3 weeks. 2 wks in (ICU & HDU)
- Pneumonia and AKI resolved in first week
- The patient showed significant clinical improvement after drainage of liver abscess and infected ascites
- Hepatic abscess resolved
- There was residual pus in the pelvis on repeat USG 10th day-a third pigtail was catheter inserted in the pelvis on left side

Hospital Course & Outcome



- Bilateral Pleural effusion detected on both lung on 16th day
- Sono-guided aspiration of pleural fluid was done by Prof Bhowmik
- He was sent to Prof Bhowmik 4 times for multiple Intervention procedure

Discharge & Follow-up

- Patient was discharged on 21st day of admission. He was referred for follow-up evaluation to rule out underlying chronic liver disease or cirrhosis
- He was seen in the OPD was under treatment of Prof. Akhmad

Conclusion

This is an excellent example of radiological drainage of liver abscess and pyo-peritoneum.

In absence of intervention radiology patient would require open drainage of liver abscess and peritoneal toilet by laparotomy.

In that case patient might not survive with pneumonia and ischemic cardiomyopathy old MI (47% EF).

Cordial thanks to **Prof Bishawjit Bhowmik and his team and our ICU team** for their excellent service.

Thank You