PUNE SOCIETY GASTROENTEROLOGY MEET

GIANT RENAL PSEUDOCYST

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DEPARTMENT OF MEDICAL GASTROENTEROLOGY
DR. D. Y PATIL MEDICAL COLLEGE & HOSPITAL

History

- A 45 year old gentleman was referred to our department with clinical symptoms of

- Patient is chronic alcoholic for past 20 years.

DPU

Examination

- Conscious, oriented
- BMI- 17.2
- PR- 112/min
- RR- 26/min
- BP- 100/60mmHg
- Pallor+
- B/L Pedal edema +

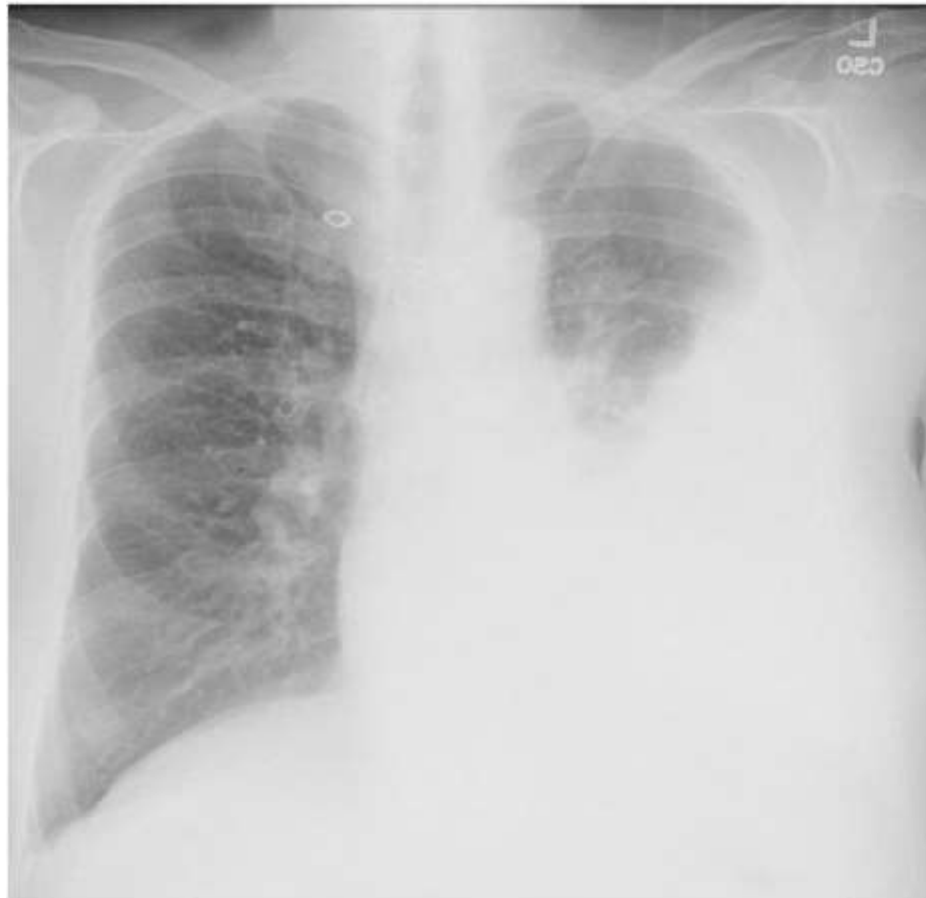
Systemic Examination

- Per Abdomen
  - On inspection fullness seen in left side of abdomen
  - Lump palpable in left hypochondrium
  - On deep palpation tenderness on left side.
- Respiratory System
  - Breath sounds absent on left side
- CVS and CNS - NAD

Investigations

Complete blood count	Liver function test		
Hemoglobin- 11.4	TB- 0.6mg/dl D>I	Calcium- 8.9	Serum amylase- 890 IU/L
WBC- 11,400	ALT- 32	Triglycerides- 107	Serum Lipase- 563IU/L
Platelets- 3.1 lacs	AST-23	Sr iPTH- 34	
	ALP- 74	Urea- 34	
	GGT- 156	Creat- 0.9	

Investigations



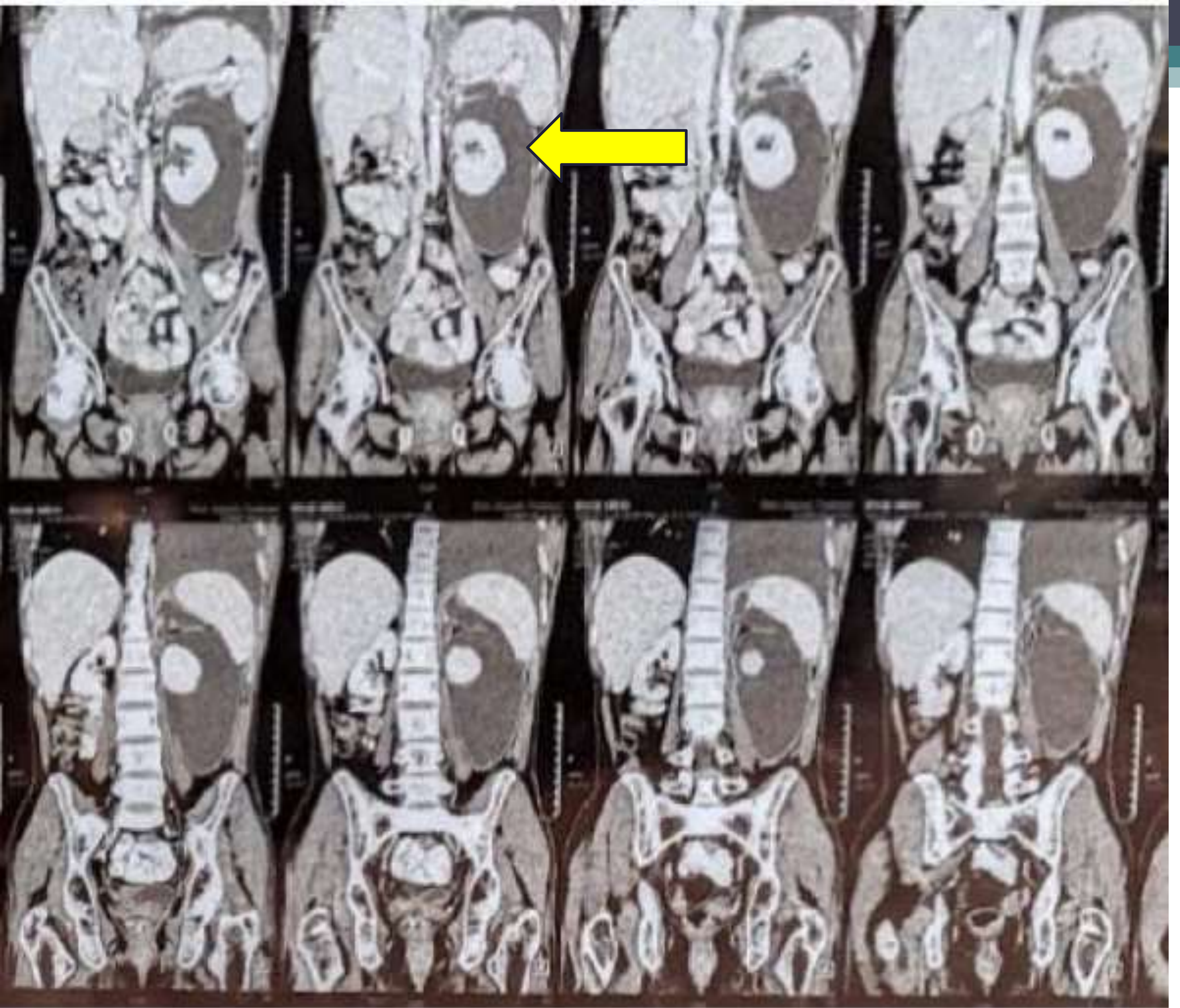
DPU

Following this, pleural fluid amylase & lipase were sent.

Pleural fluid amylase was elevated – >10,000IU/L

CT Abdomen

- A large cysts 14.8 X 9.8 X 9.4 cm (volume 718 cc) seen involving the left side retroperitoneum located posterior to the tail of pancreas, medial & inferior to splenic hilum & lateral to adrenal gland & surrounding the left kidney.
- Pancreas- atrophic with multiple calcific foci in it S/O chronic pancreatitis.



COURSE IN HOSPITAL

DPU

Intercostal drainage done immediately in view of worsening breathlessness

Patient had daily output of pleural fluid- >1000ml/day.

Patient was initiated on medical management- Octreotide and was observed.

COURSE IN HOSPITAL

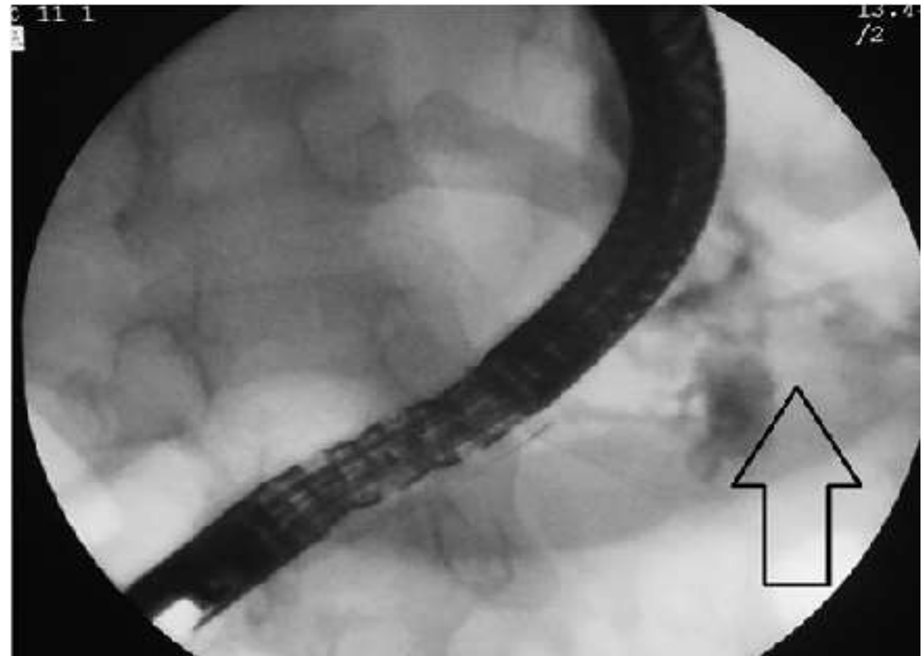
DPU

Despite medical management and ICD, patient had persistent tachypnea and ICD output >1lit/day.

Patient was taken up for ERCP after 7 days of medical treatment.

Patient was continued with medical management.

ERCP



Pancreatogram- PD – 6mm; prominent sde branches, narrowing in head just proximal to genu. Contrast leak in tail region with contrast flowing in downward direction .
Pancreatic sphincterotomy done.
7 French, 10cm single pigtail plastic stent placed in PD

- Post ERCP- Patient couldn’t be wean out of ventilator.
- Shifted to ICU for two days.
- He was shifted to ward after gaining consciousness.

COURSE IN HOSPITAL

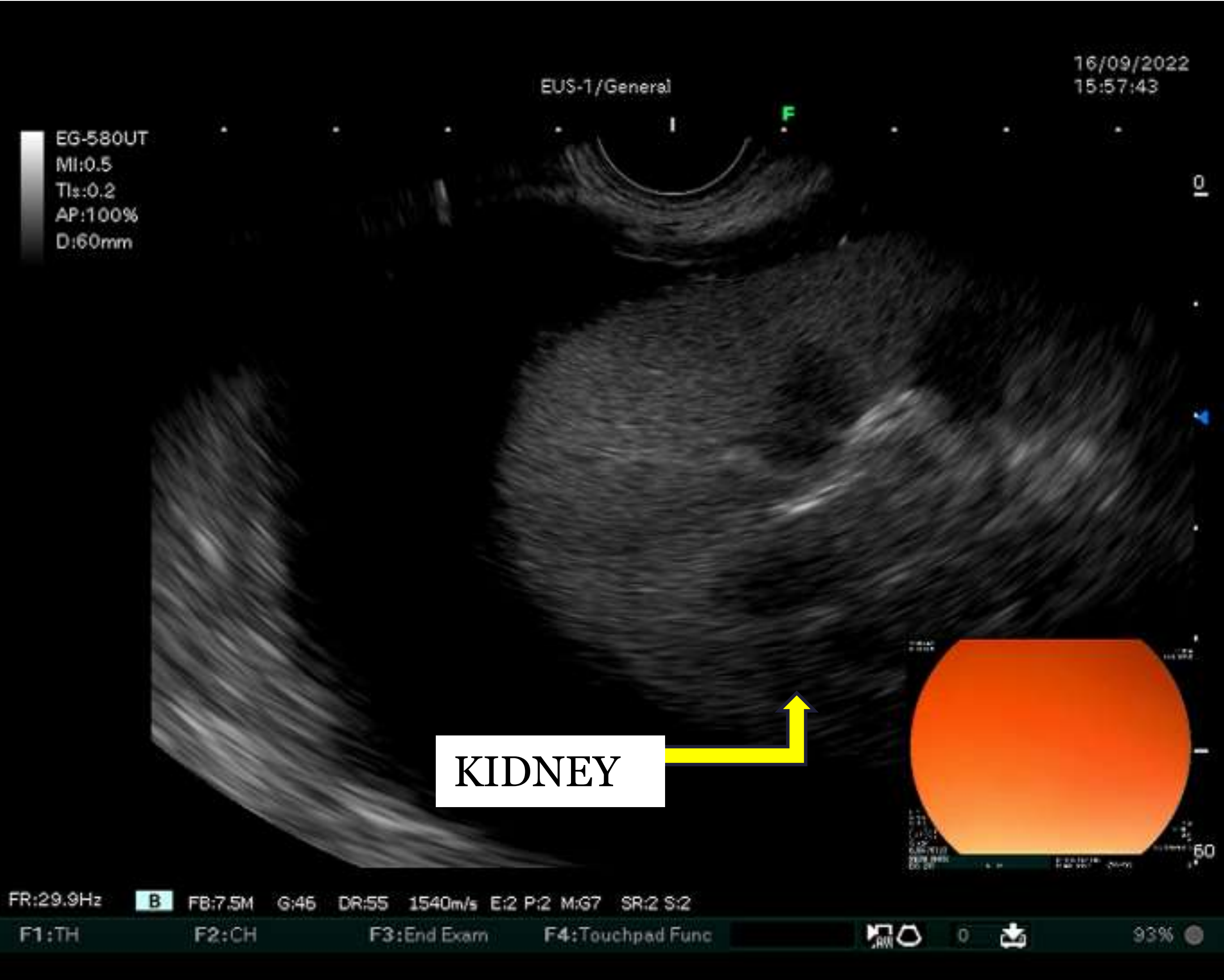
DPU

Post ERCP, on 3rd day patient developed fever. Antibiotics were started. Cultures sent.

ICD drain output of 500-600 ml / day.

Patient was continued with medical management.

Endoscopic Ultrasound



A large cystic collection of approx. size 10x 6 cm seen around the left kidney (subcapsular) with no debris

16/09/2022
15:13:44

EUS-1/General

+ 7.2
EG-580UT
MI:0.5
TIs:0.1
AP:100%
D:60mm
– 7.2
cm/s

F

0

60

C 4.0M G:35 WF:1 P:2 M:VD1 FC:4 CB:4
FR:17.8Hz B FB:7.5M G:46 DR:55 1540m/s E:2 P:2 M:G7 SR:2 S:2 78/ 78

F1:TH F2:CH F3:End Exam F4:Touchpad Func 0 93%

COURSE IN HOSPITAL

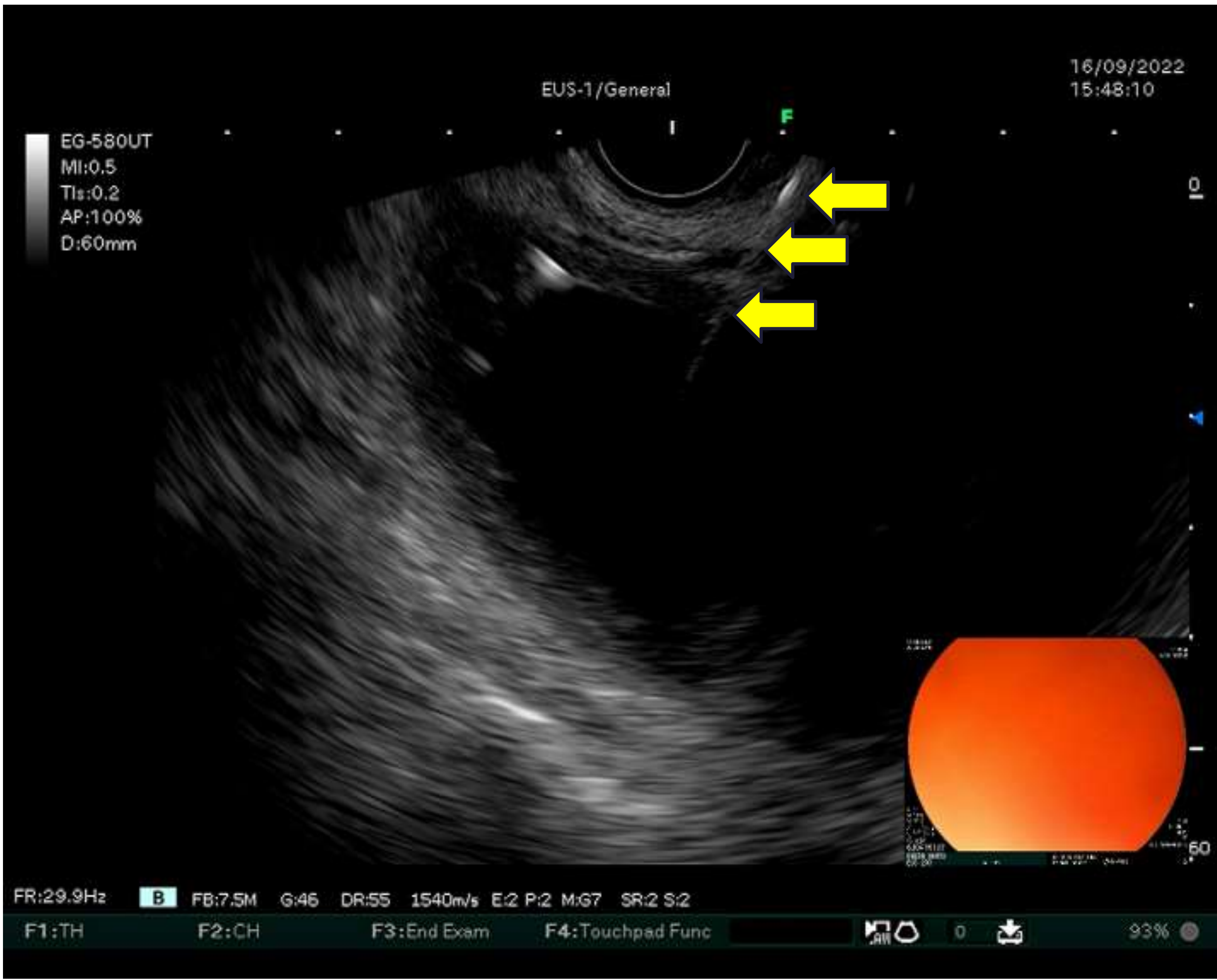
DPU

Despite ICD drainage and PD stenting, patient was symptomatic.

ICD drain output increased to 700-800 ml/day

Patient was planned for EUS guided Cystogastrostomy after 10 days of ERCP.

EUS Guided Drainage



16/09/2022
03:17:15PM

1/100
Lv+3 AUTO

S1:F/T
S2:FICE
S3:IRIS

3.8 13.9 12.4

EG-580UT
6U047K122

HT NR
SE

EUS THERAPEUTIC

UMESH BHUSE
EUS 200

M 54

DY PATIL HOSP. PUNE
DR. AMOL DAHALE

BL-7000

0

16/09/2022
03:44:49PM

1/100
Lv+3 AUTO

S1:F/T
S2:FICE
S3:IRIS
3.8 13.9 12.4
EG-580UT
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HT NR
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EUS THERAPEUTIC

UMESH BHUSE
EUS 200
M 54
DY PATIL HOSP. PUNE
DR. AMOL DAHALE
BL-7000
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16/09/2022
03:45:30PM
1/100
Lv+3 AUTO
S1:F/T
S2:FICE
S3:IRIS
3.8
13.9
12.4
EG-580UT
6U047K122
HT NR
SE
EUS THERAPEUTIC
UMESH BHUSE
EUS 200
M 54
DY PATIL HOSP.PUNE
DR.AMOL DAHALE
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16/09/2022
03:51:40PM

1/100
Lv+3 AUTO

7 FRENCH
10 CM
DOUBLE
PIGTAIL
PLASTIC
STENT

S1:F/T
S2:FICE
S3:IRIS

3.8
13.9
12.4

EG-580UT
6U047K122

HT NR
SE
EUS THERAPEUTIC

UMESH BHUSE
EUS 200
M 54

DY PATIL HOSP. PUNE
DR. AMOL DAHALE
BL-7000
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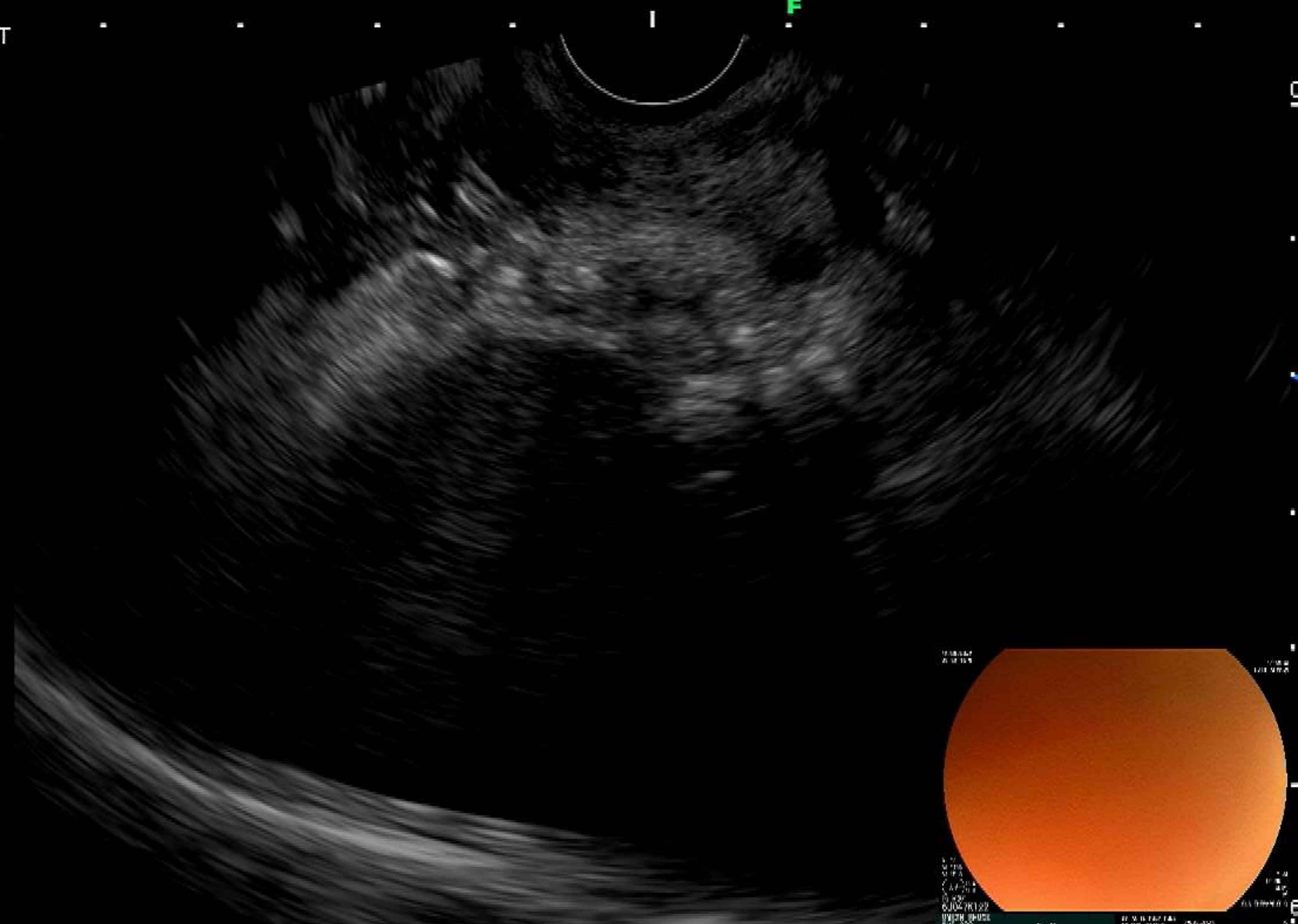


EUS-1/General
16/09/2022
15:57:24
EG-580UT
MI:0.5
TIs:0.2
AP:100%
D:60mm
F
0
60
FR:29.9Hz
B
FB:7.5M
G:46
DR:55
1540m/s
E:2 P:2
M:G7
SR:2 S:2
F1:TH
F2:CH
F3:End Exam
F4:Touchpad Func
0
93%

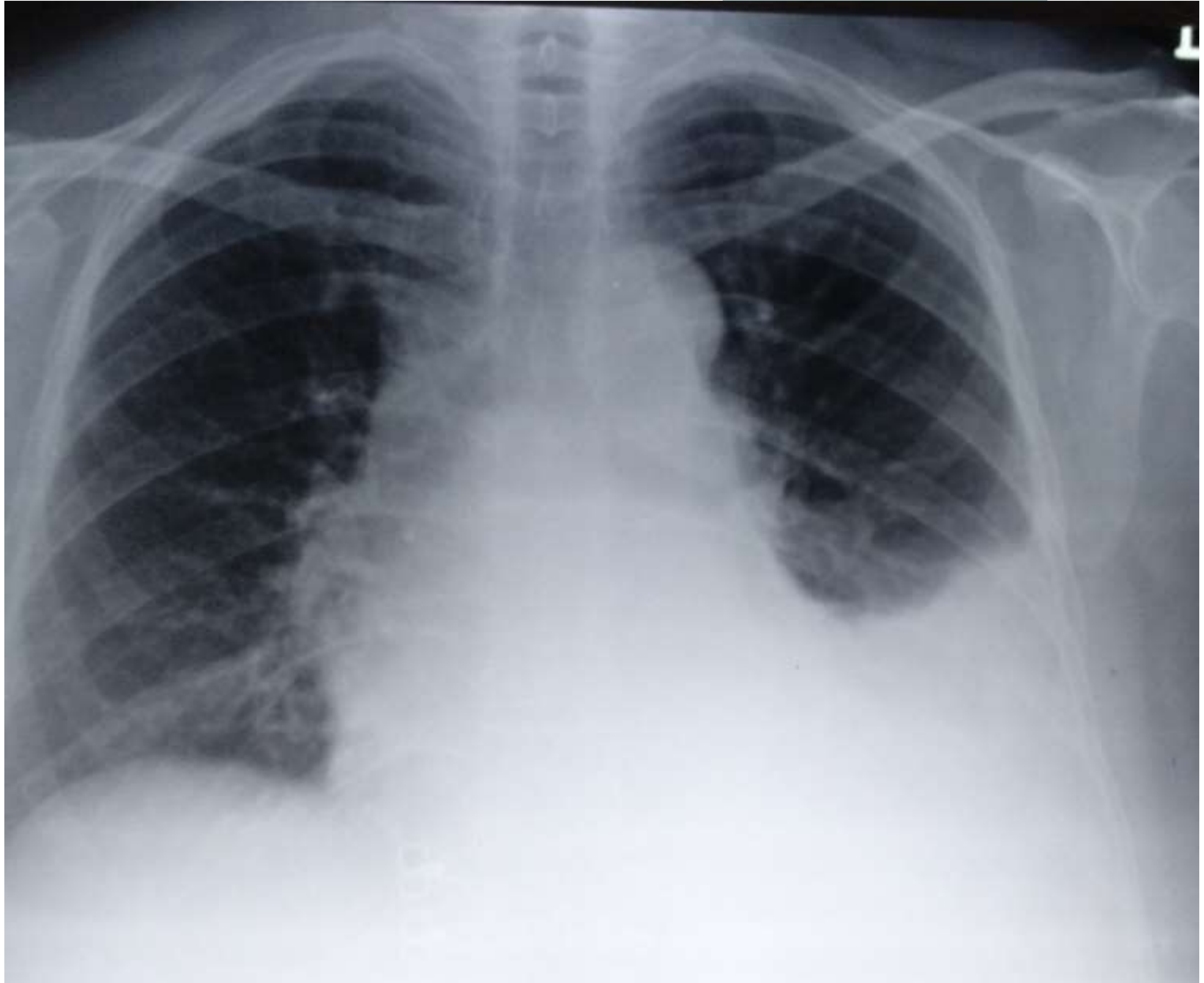
COURSE IN HOSPITAL

DPU

Post Cystogastrostomy, patient was shifted to ward.

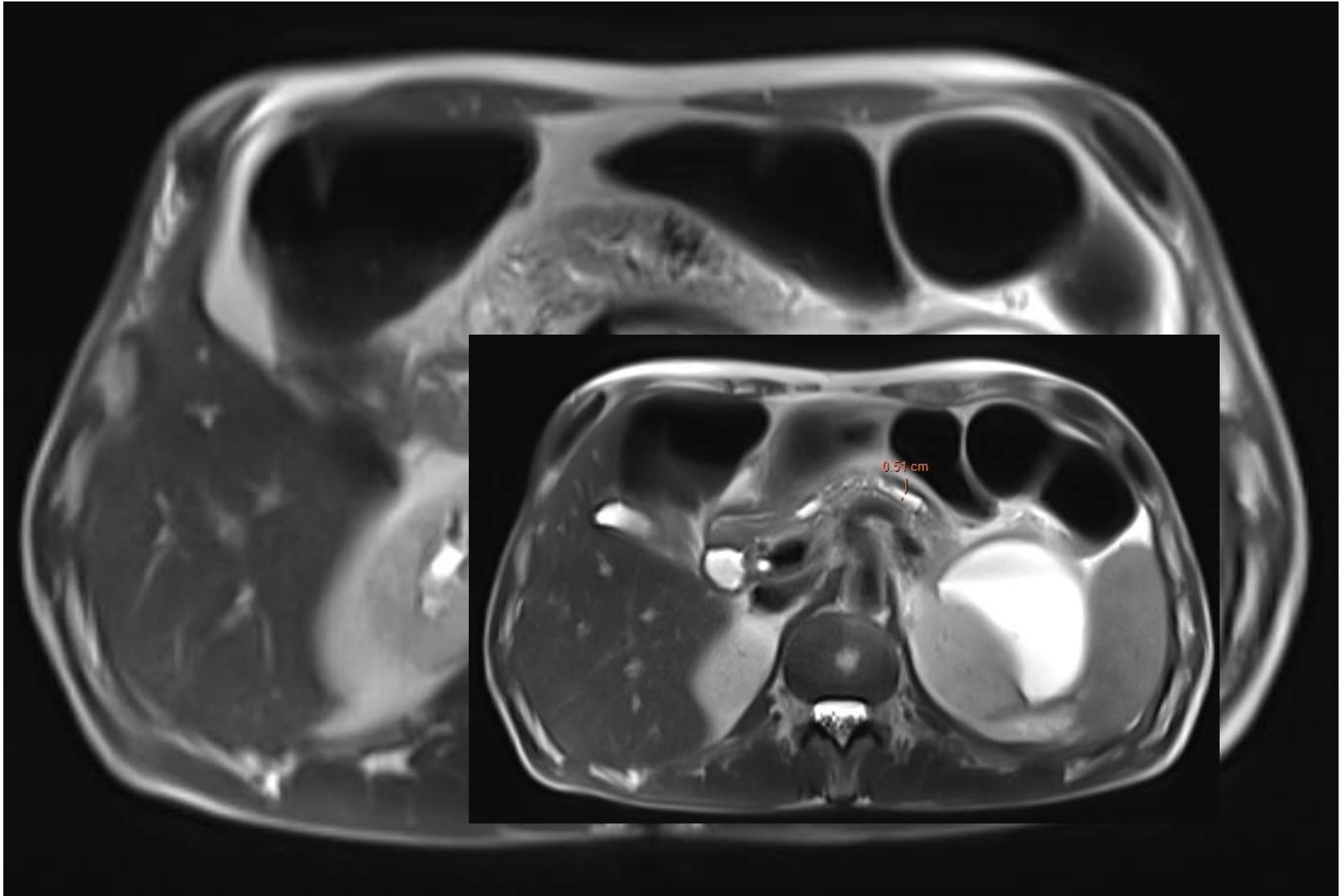
ICD drain output decreased < 400ml/day

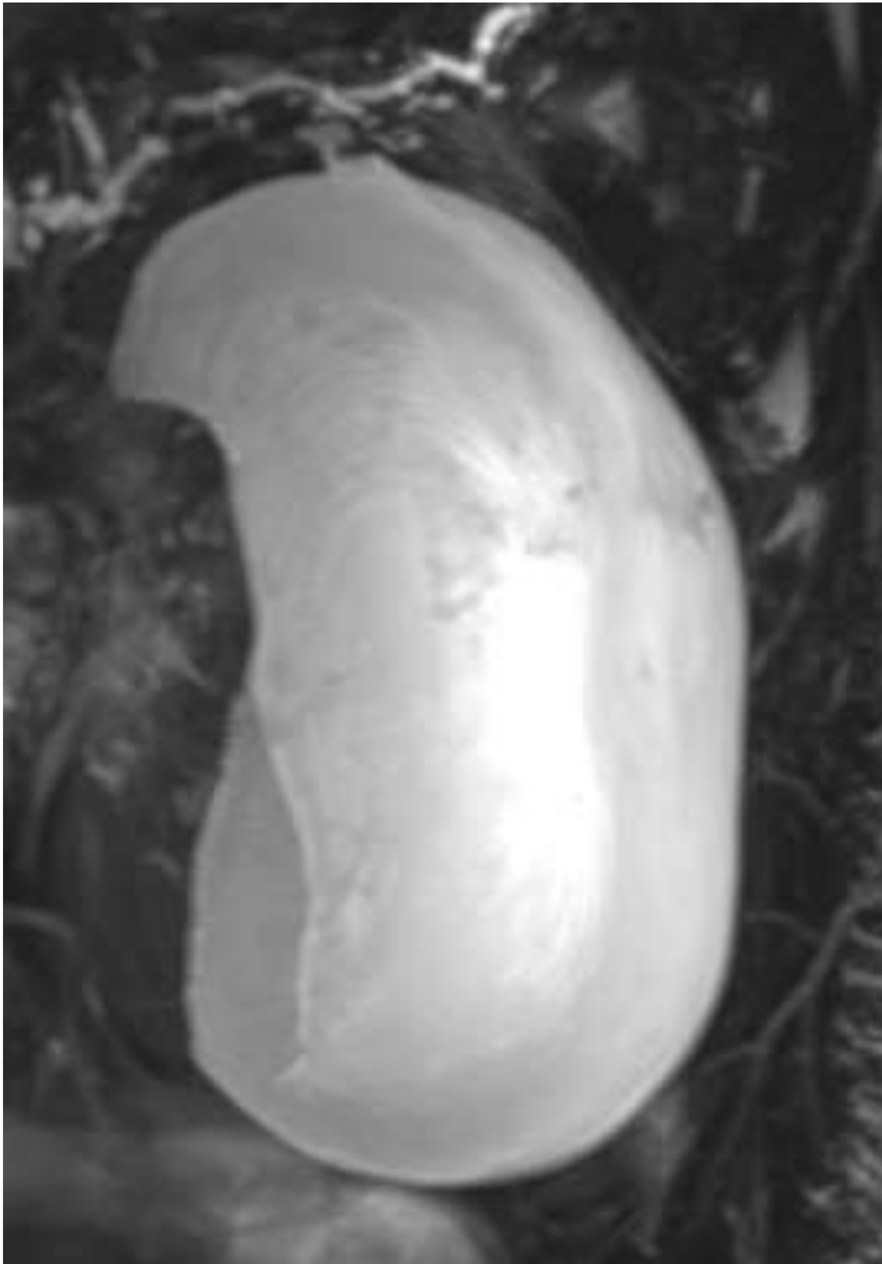
Patient was continued with antibiotics and medical management.



MRI Abdomen

- A repeat imaging was performed.
- A well defined thin walled (2mm thickness) ,fluid intensity lesion measuring 11.9x7.2x6.2 cm is noted in perinephric space of left kidney ,compressing and displacing left kidney anteromedially.
- Communication of dilated side branch of pancreatic duct in distal body noted with this perinephric fluid collection-suggestive of fistulous communication.


0.51 cm



Pancreas appears atrophic. Pancreatic duct appears dilated in entire extent (5mm) caliber with dilatation of side branches. Multiple parenchymal parenchymal calfic foci seen on USG are not appreciated on MRI.A well defined thin walled (2mm thickness) ,fluid intensity lesion measuring 11.9x7.2x6.2 cm(CCXAPXTR) is noted in perinephric space of left kidney ,compressing and displacing left kidney anteromedially.
Communication of dilated side branch of pancreatic duct in distal body noted with this perinephric fluid collection-suggestive of fistulous communication .Mild peripancreatic hyperintense fluid noted adjacent to distal body and tail of pancreas.

- ICD removed after 7 days of cystogastrostomy after the drain output reduced to <100ml/day.
- Patient became asymptomatic.
- CXR showed no to minimal pleural effusion.
- Limb and chest physiotherapy continued.
- Patient was discharged after 28 days of hospital stay.

DPU

Patient followed up after 3 months.

- Patient was asymptomatic.
- Chest X Ray – Lung shadows normal on both side.
- USG showed less than 50cc of pancreatic fluid.
- PD Stent and Cystogastrostomy stents removed.

Cyst

Pseudocyst

Retention Cyst

Mechanisms of cyst formation

- Kubota et al. explained that cyst formation is associated with left sided portal hypertension which was associated with inflammatory process due to compression of diffuse enlargement of pancreatic parenchyma
- Matsubayashi et al. explained that severe stricture of the main pancreatic duct causes the inflammatory process leading to stasis of the pancreatic juice upstream and resulting in cyst formation.
- Sohn et al explained that pancreatic duct disruption leading to leakage of pancreatic juice caused formation of cyst.
- In our study we hypothesised that formation of cyst was due to active inflammatory process which was associated with elevated serum IgG4 levels.

Summary