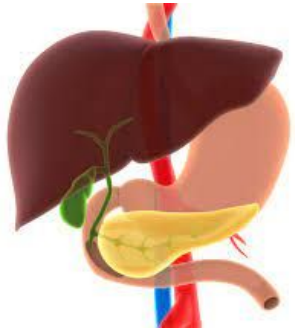
বঙ্গবন্ধু শেখ
মুজিব মেডিকেল
বিশ্ববিদ্যালয়



-Liver cancer awareness month 2021-

What we do for treating hepatocellular carcinoma in BSMMU?

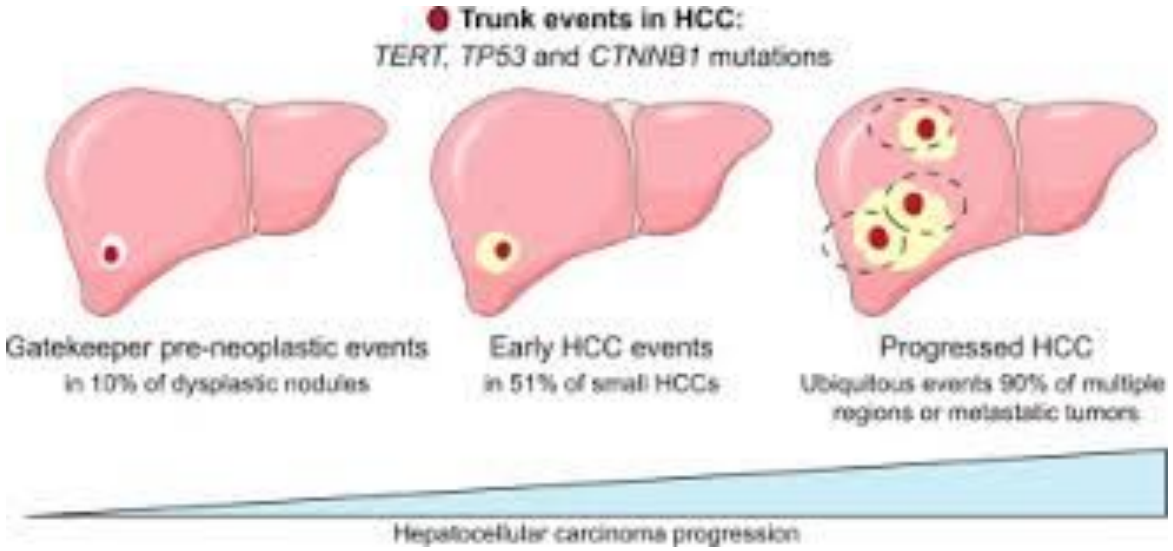
-Hepatobiliary and Liver Transplant Surgery-

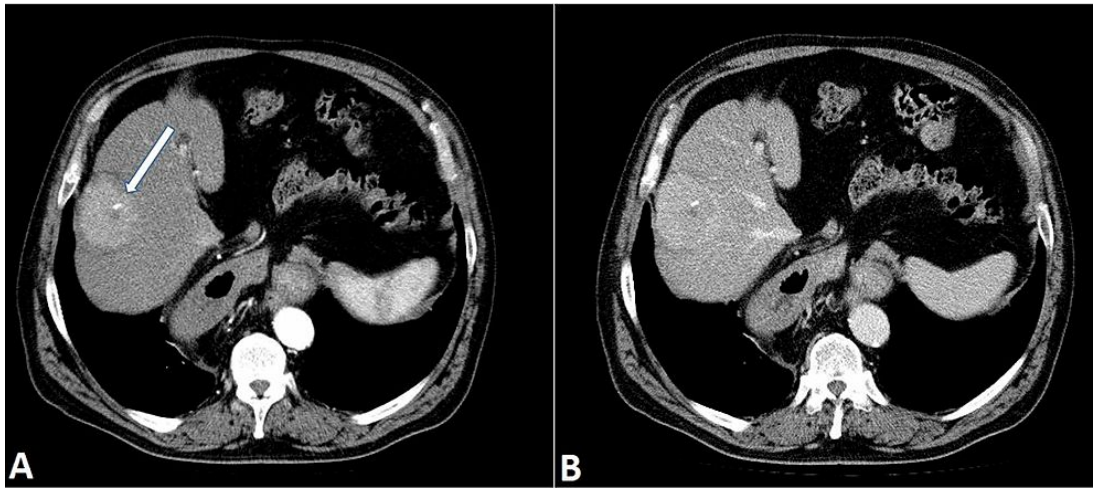


Dr. Bidhan C Das, *MBBS, FCPS, PhD*
Professor, Hepatobiliary and Liver Transplant Surgery
BSMMU

Why people awareness is required for treating HCC?

Liver cancer is treatable and sometimes even curable when it is caught earlier.





The BCLC staging system

number and size of tumors (T), the performance status (PS) and the Child-Pugh (CTP) score .

Stage 0 : T <2 cm, PS 0, CTP-A
Stage A : T-single <5 cm, or T-3 , <3cm. PS 0, CTP A or B } **Early stage**

Stage B : T-multiple, PS 0, CTP, A or B

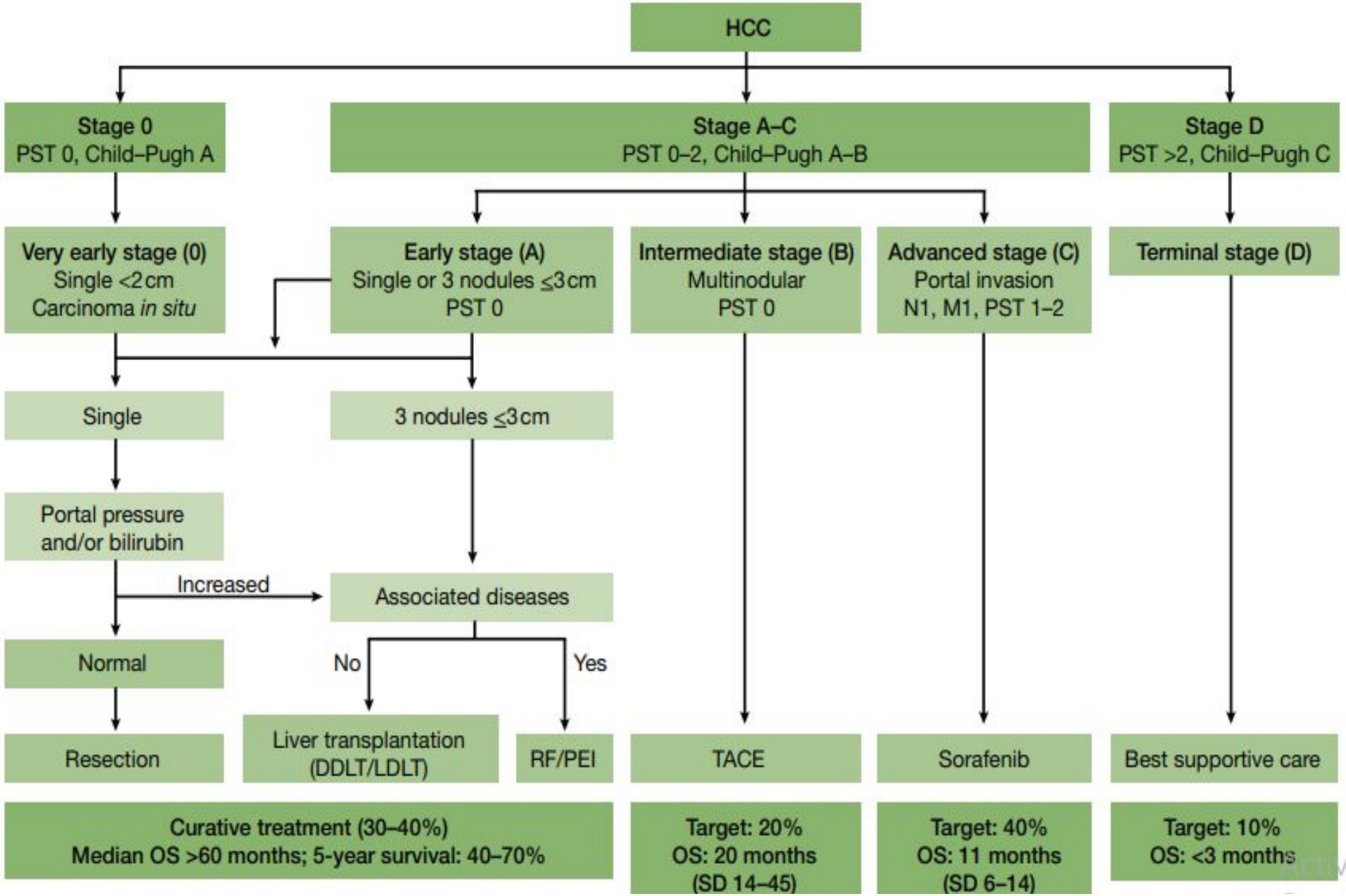
Stage C : T-spread to vessels, LNs, organs, PS 1 or 2, CTP A or B } **Advance stage**

Stage D : Any T Child-Pugh C, PS 3 or 4

BCLC- HCC stage at presentation in Bangladesh

BCLC stage	N	(%)
0	0	0
A	04	(9.1)
B	20	(45.5)
C	18	(40.9)
D	02	(4.5)
Total	44	(100)

M. Al-Amin Shawon, et al. Epidemiology, clinical features, and impact on food habits on the risk of hepatocellularcarcinoma: A case-control study in Bangladesh
https://doi.org/10.1371/journal.pone.0232121 April 27, 2020


HCC
Stage 0
PST 0, Child–Pugh A
Stage A–C
PST 0–2, Child–Pugh A–B
Stage D
PST >2, Child–Pugh C
Very early stage (0)
Single <2 cm
Carcinoma in situ
Early stage (A)
Single or 3 nodules ≤3 cm
PST 0
Intermediate stage (B)
Multinodular
PST 0
Advanced stage (C)
Portal invasion
N1, M1, PST 1–2
Terminal stage (D)
Single
3 nodules ≤3 cm
Portal pressure
and/or bilirubin
Increased
Associated diseases
Normal
No
Yes
Resection
Liver transplantation
(DDLT/LDLT)
RF/PEI
TACE
Sorafenib
Best supportive care
Curative treatment (30–40%)
Median OS >60 months; 5-year survival: 40–70%
Target: 20%
OS: 20 months
(SD 14–45)
Target: 40%
OS: 11 months
(SD 6–14)
Target: 10%
OS: <3 months

Modalities of treatment

Liver resection
Liver transplantation

} **Early Liver cancer**

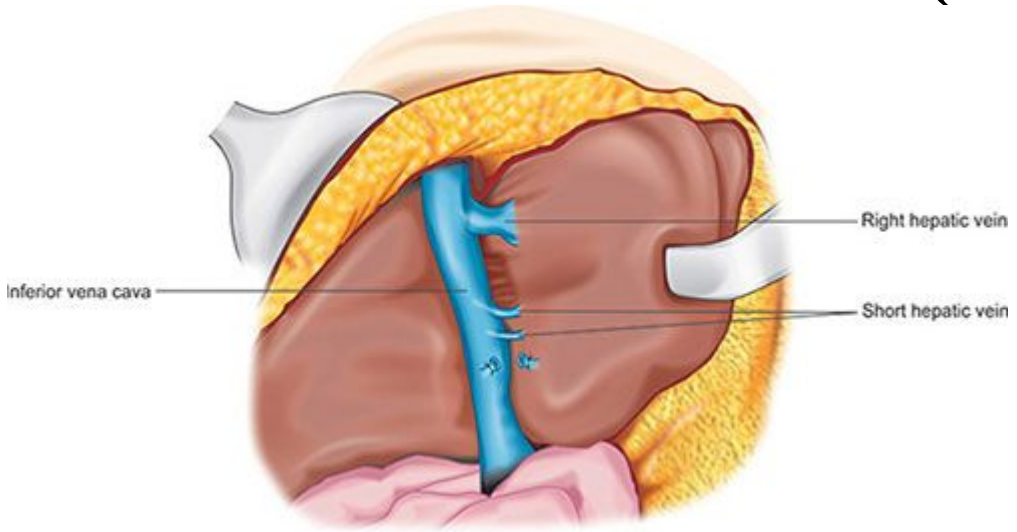
TACE (Transarterial chemoembolization)
TARE (Transarterial radioembolization)
IRE (irreversible electroporation)
RFA
Microwave coagulation (MCT)
Chemotherapy
Hepatic artery ligation
Percutaneous ethanol injection.

} **Advance Liver cancer**

Sandwich therapy for advance liver cancer (BSMMU protocol)



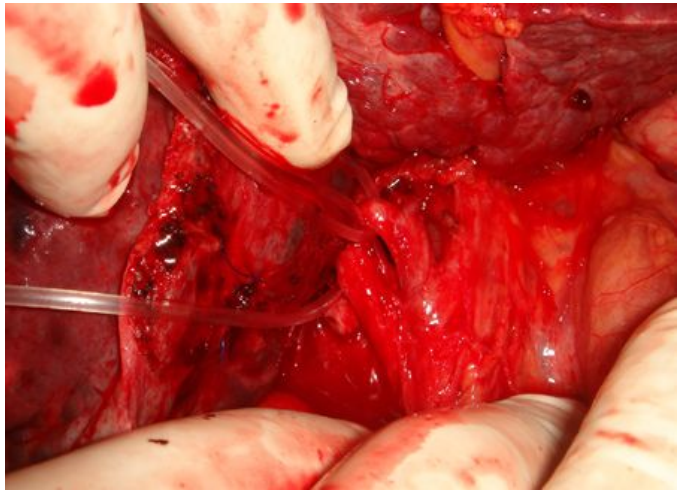
Laparotomy



Extensive mobilization of the involved lobe



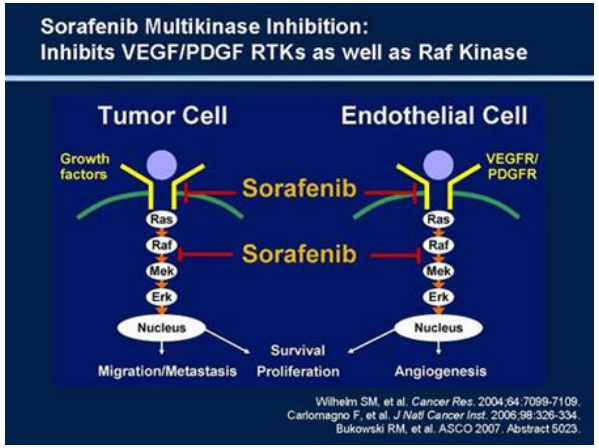
High frequency diathermy coagulation



Hepatic artery ligation.



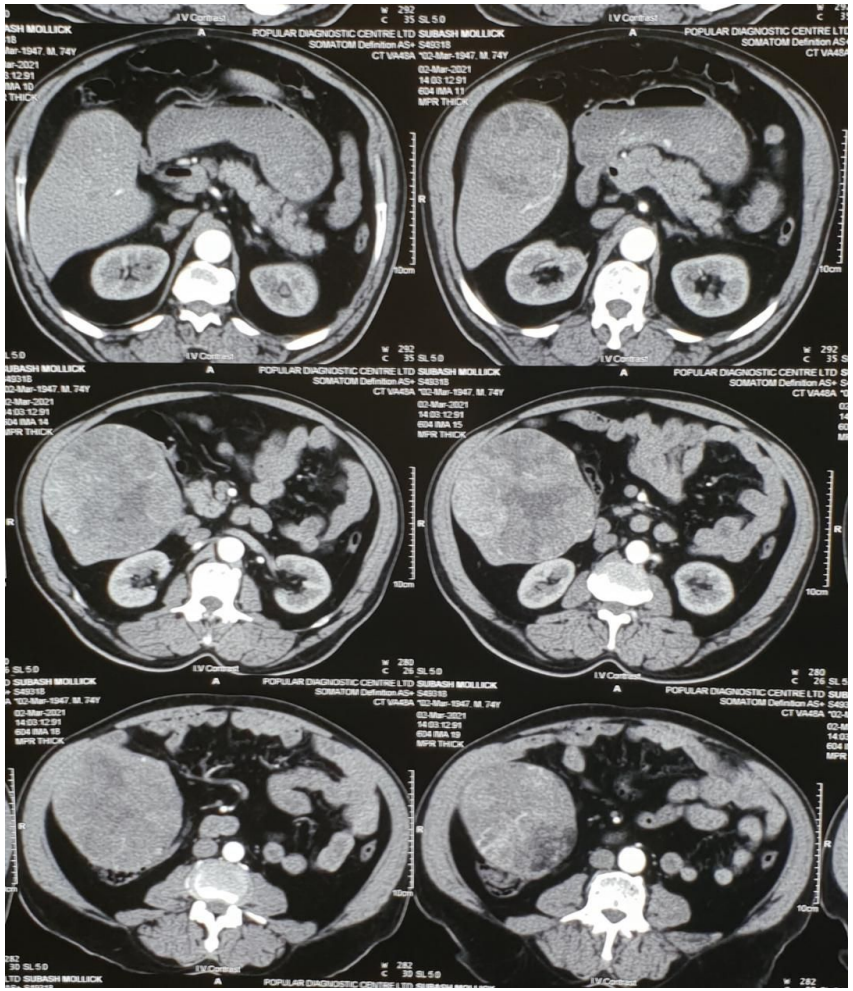
Per-operative ethanol injection.

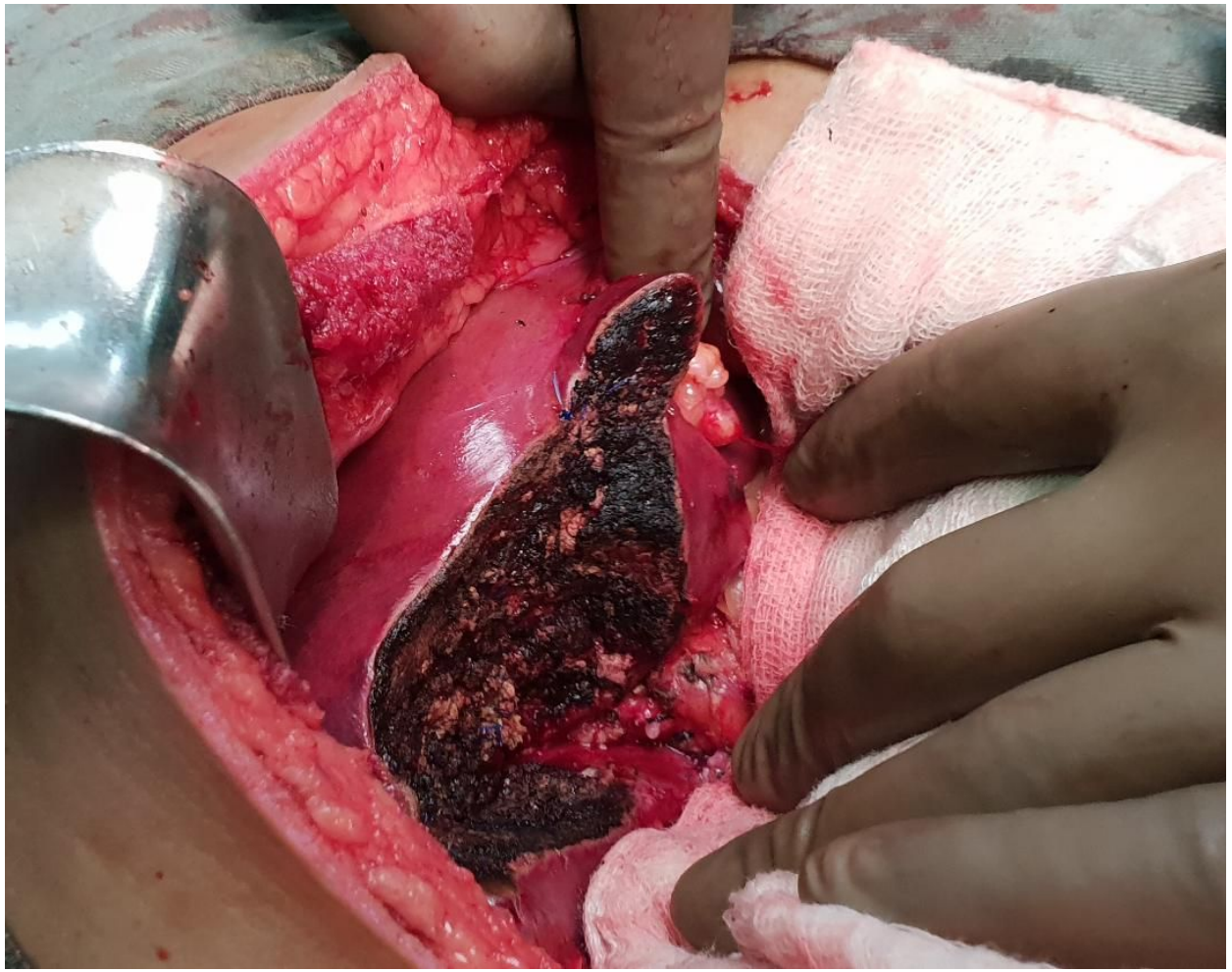


Chemotherapy

Case 1

47 year-old lady, HCC S6, T: 8×7.5cm, exophytic growth, PS0, CP-A, BCLC stage A





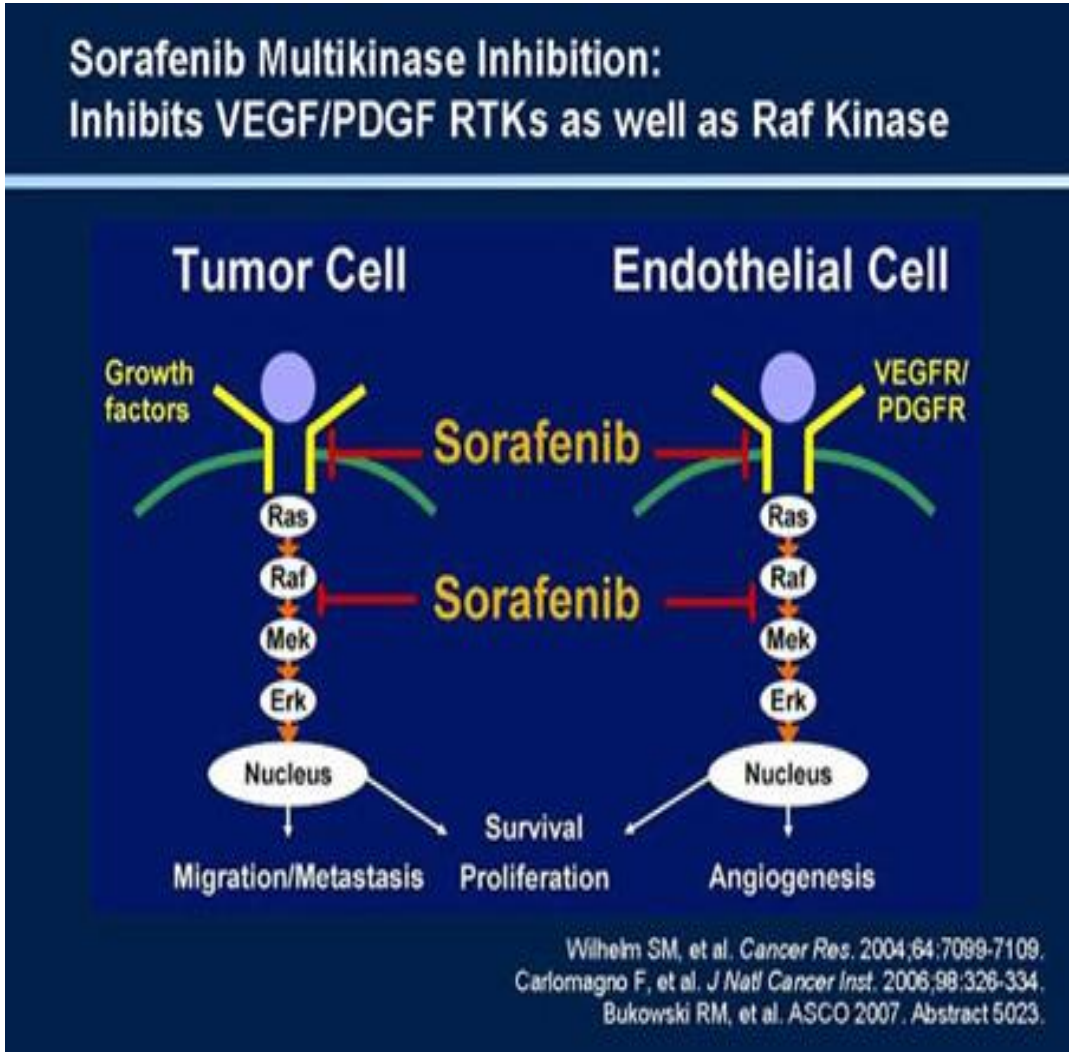
Case 2

54 year-old man
HCC: T 12× 11 cm, PS:0, CP: A, portal vein invasion (+), BCLC stage C.
Cardiac dysfunction (EF 42%).

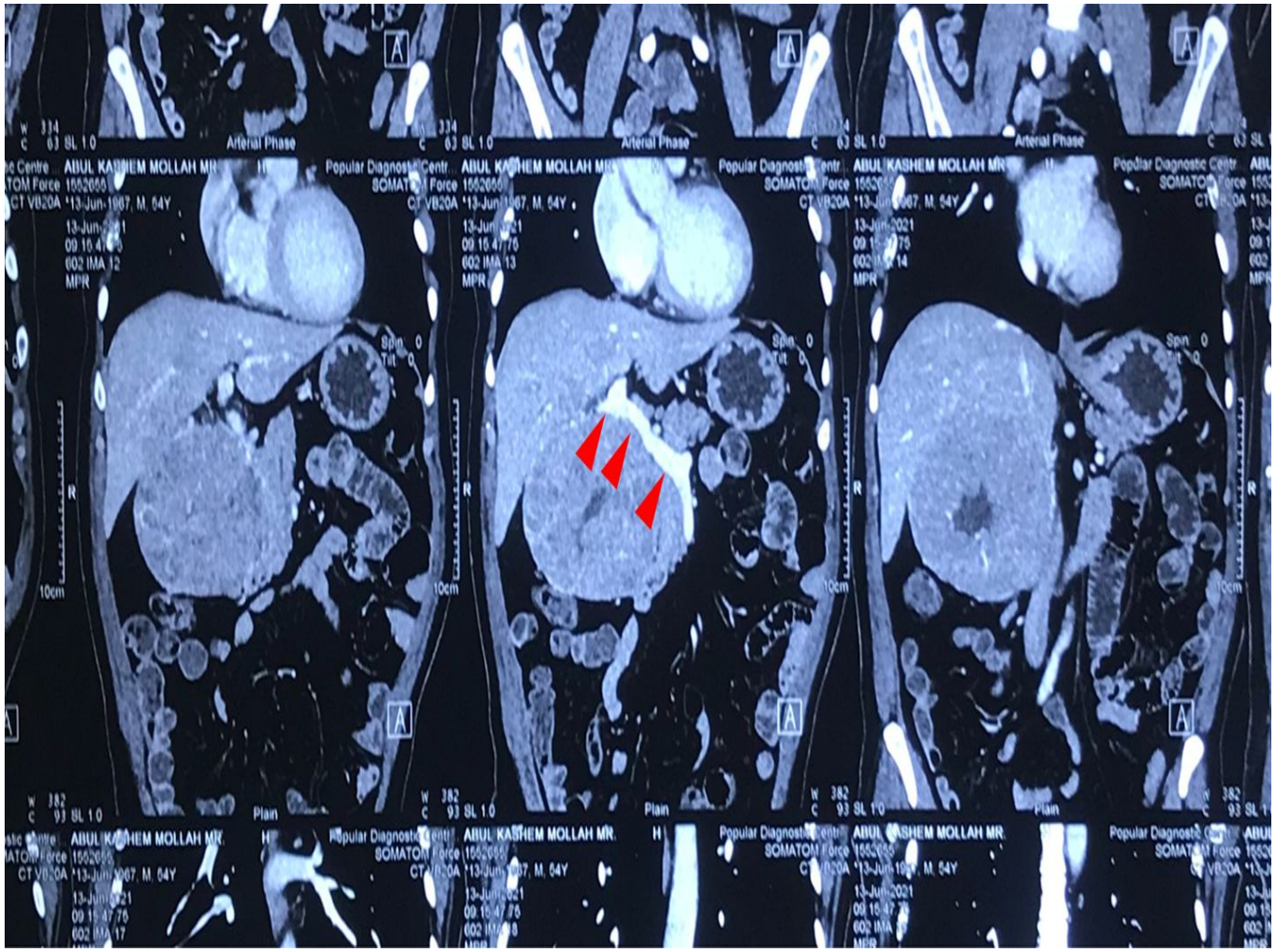
Started Sorafinib (200mg) bid.
One month after patient developed renal dysfunction). Chemo is stopped.

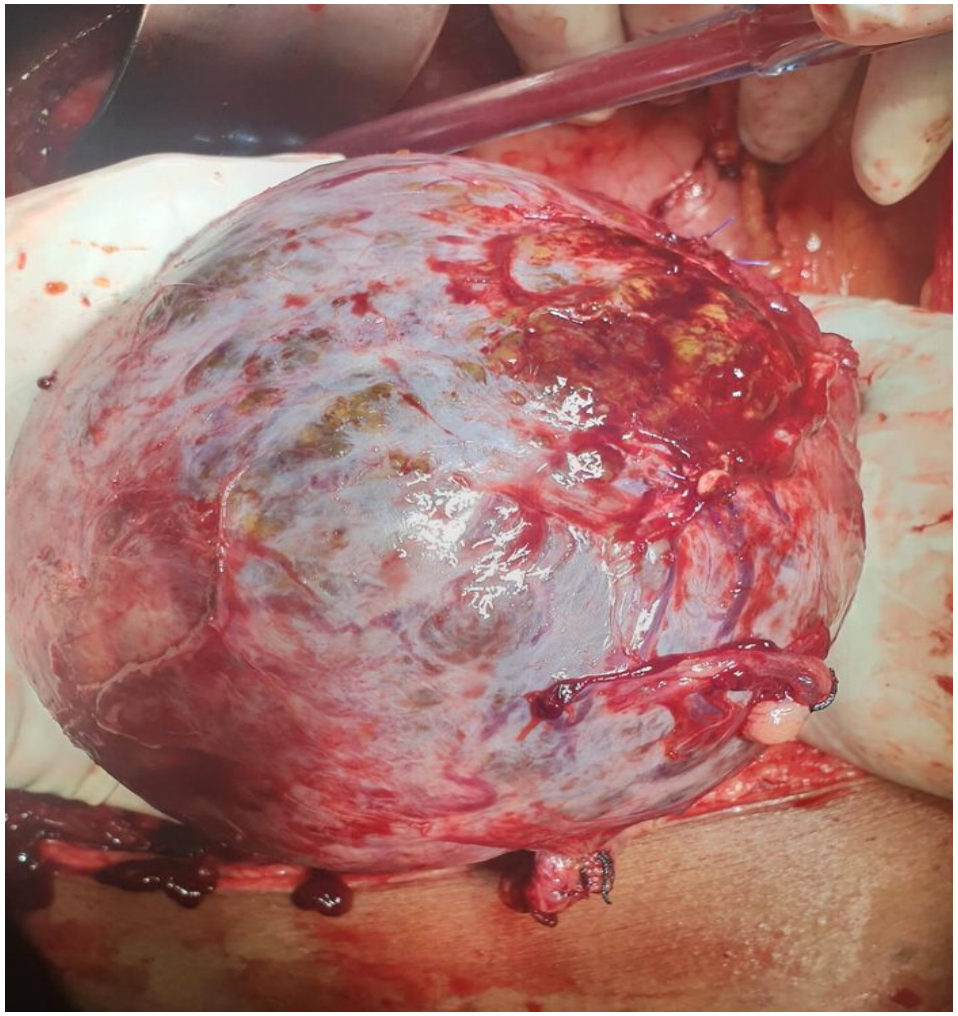
After repeated exhausted counselling, keeping ICU ready, we excised the tumor.

Patient survived the operation, but he developed biliary leakage from cut surface which are now managing.



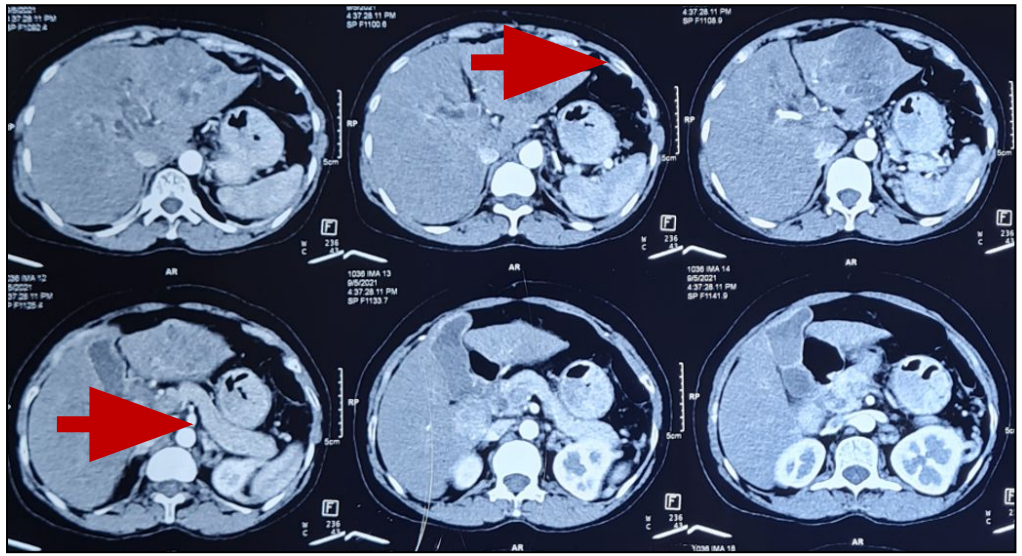
Case 2

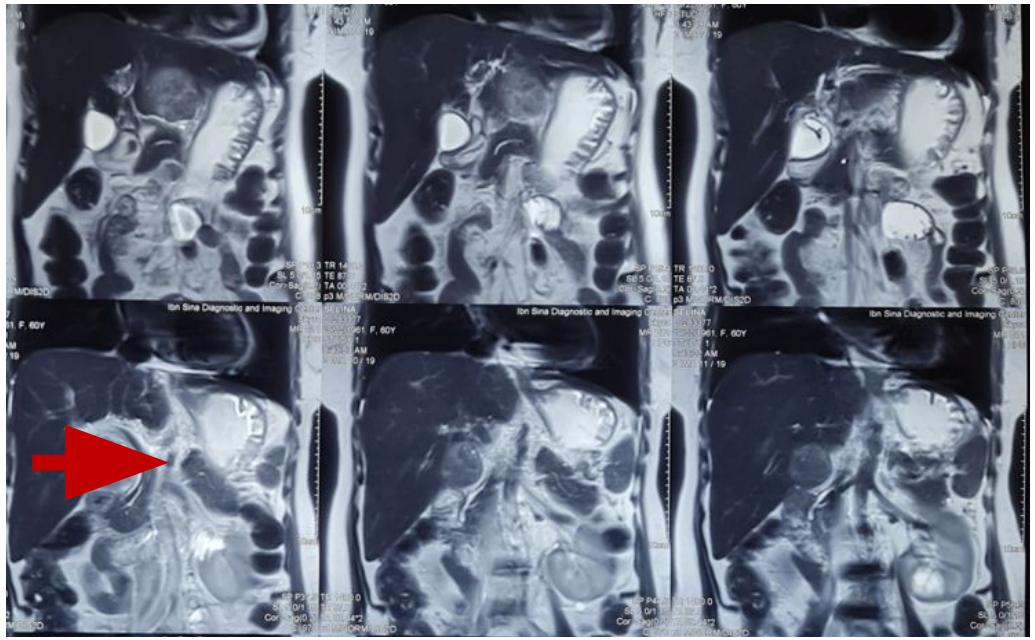

Arterial Phase
Plain
ABUL KASHEM MOLLAH MR.
Popular Diagnostic Centr...
10cm



Case 3







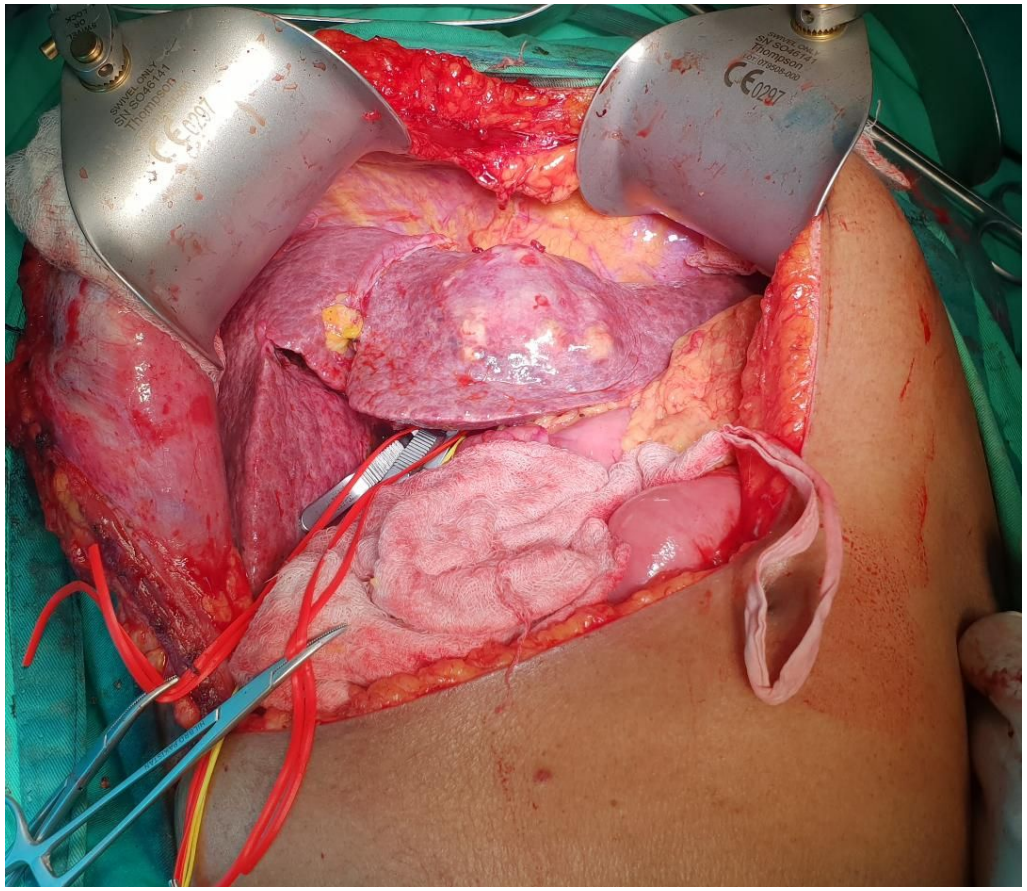
HBsAg (-), HCV (-)
A-fetoprotein 588
T >5cm, multifocal (S2,3,1)
PS: 0, CP: B
BCLC stage (B-C): (TACE)

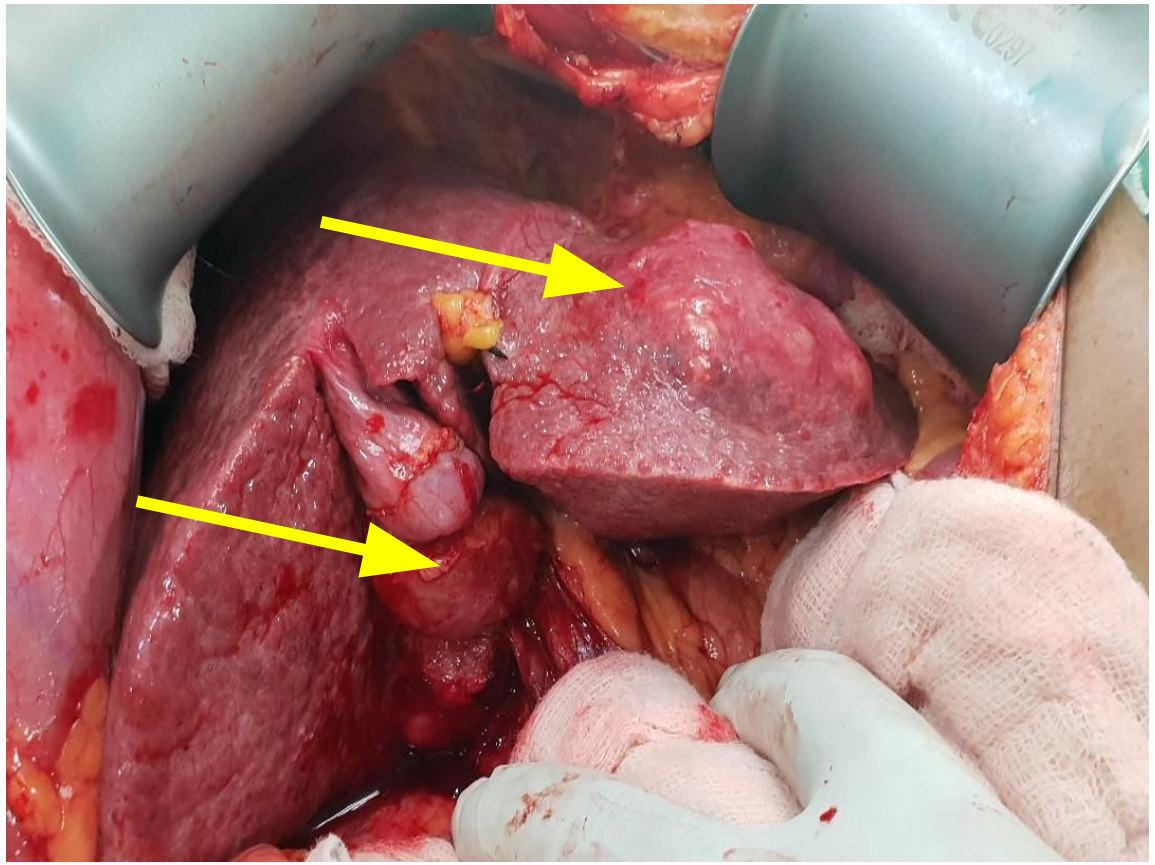
BSMMU- Sandwich protocol

Case 3

Laparotomy

60 year-old F (HCC)

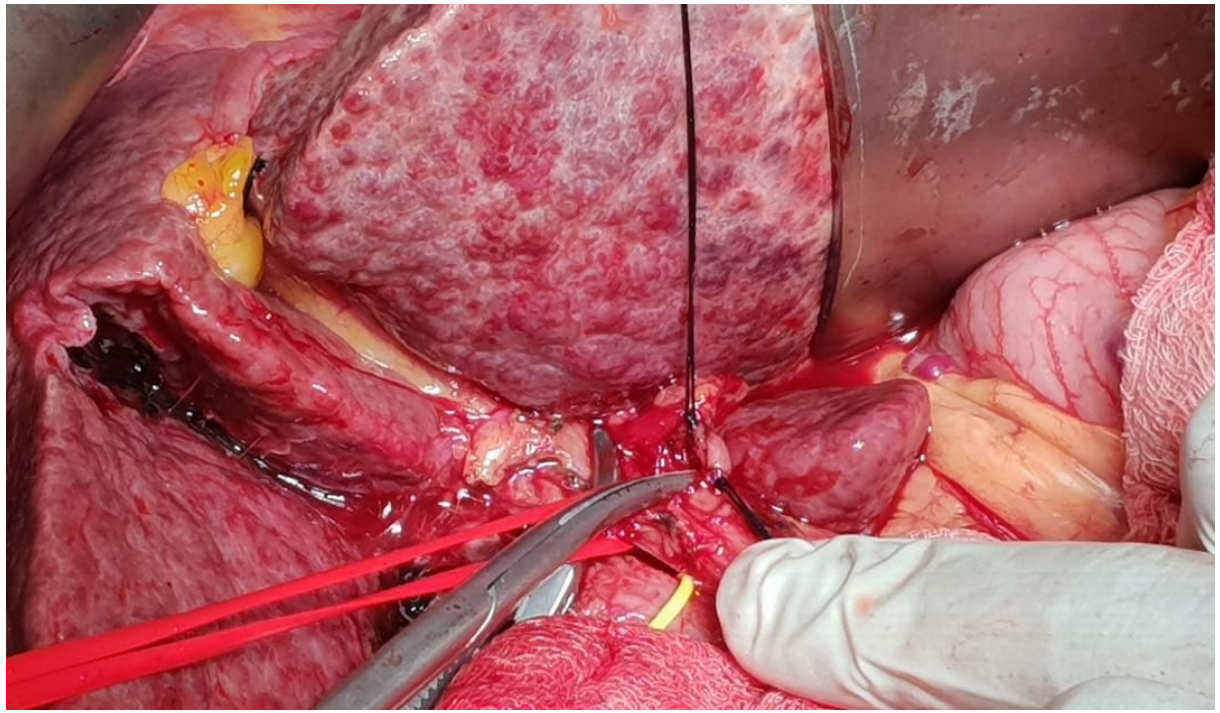


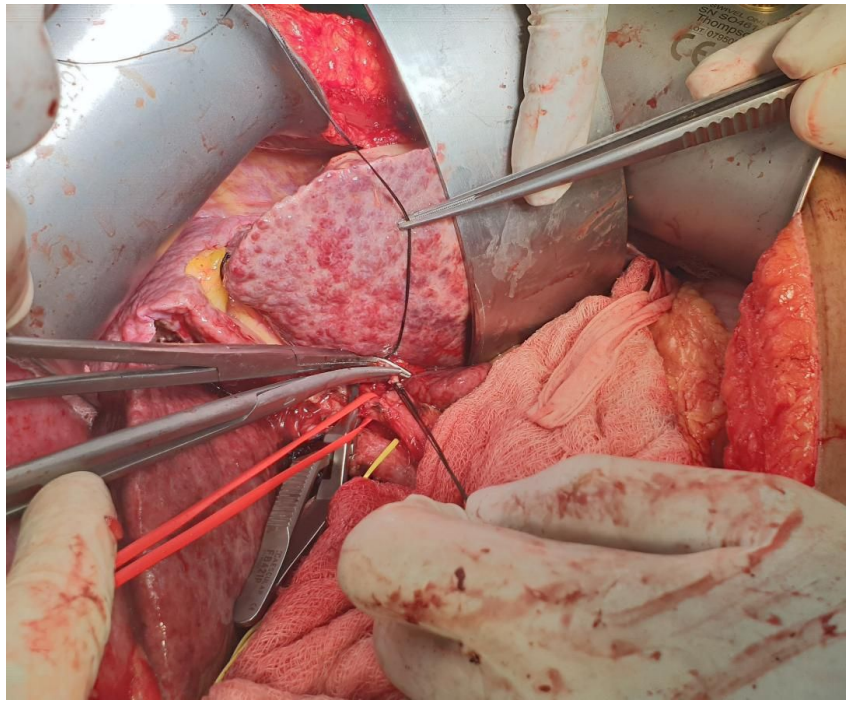


Tumor : S2,3 [7.1×5.9] cm, S1 [4.9×3.0] cm
Liver is grossly cirrhotic

Case 3

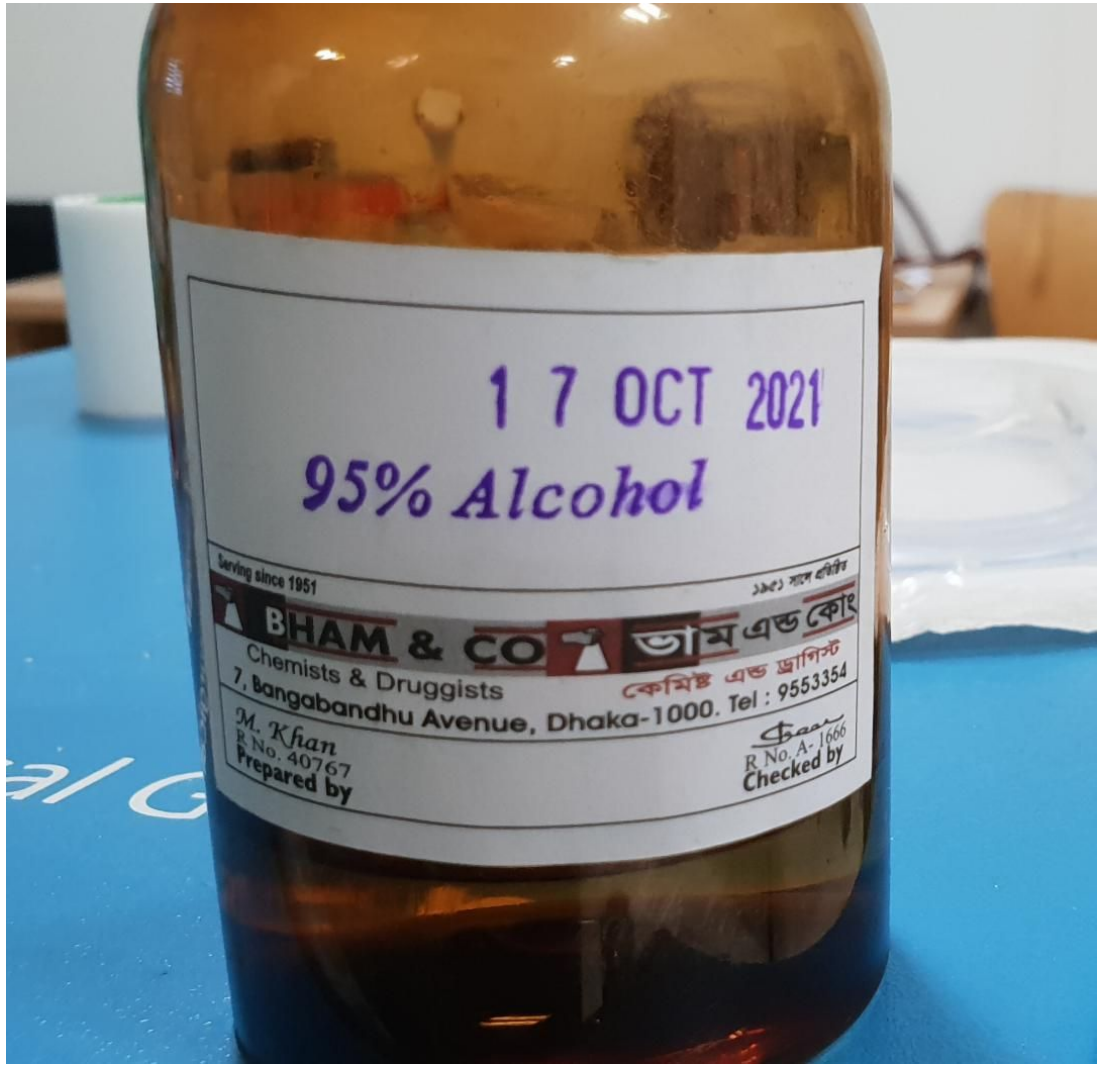
60 year-old F (HCC)

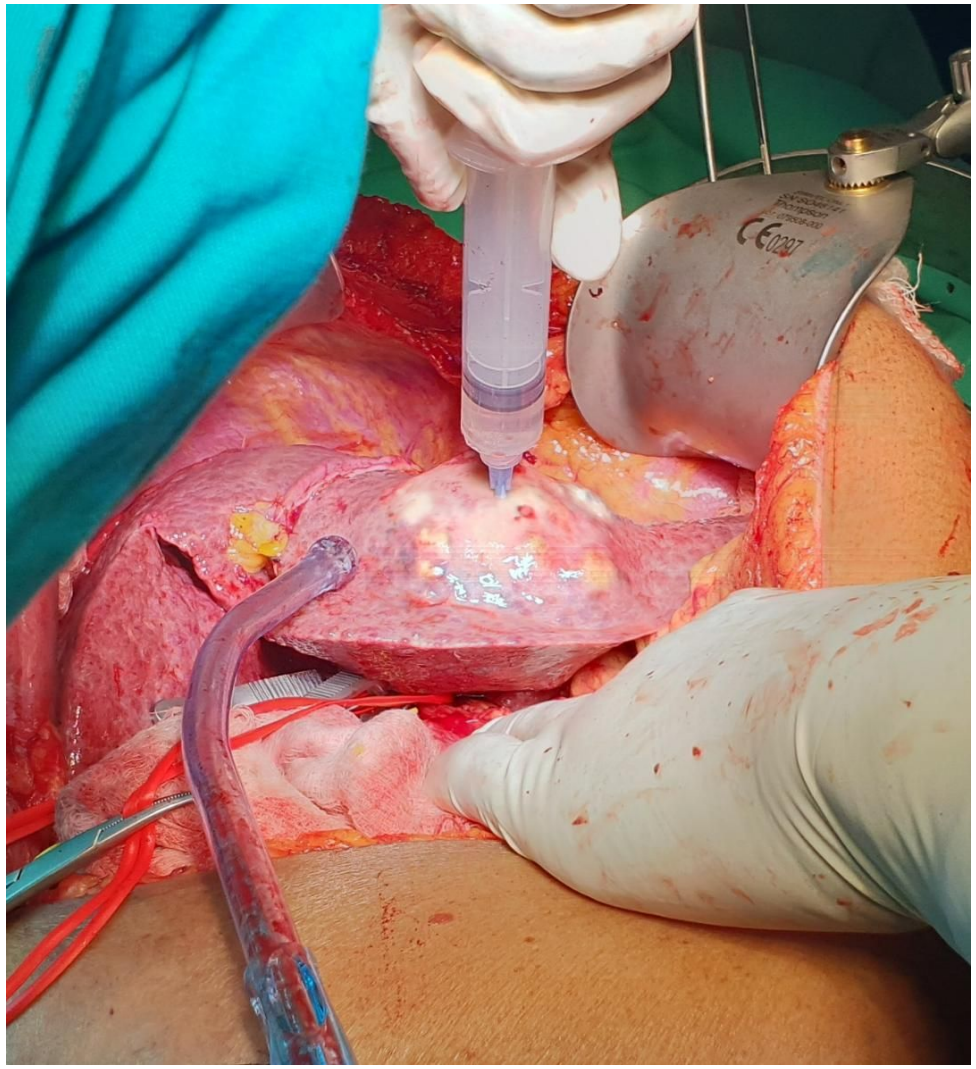




Hepatic artery ligation (left and middle HA)

Case 3





Alcohol infiltration

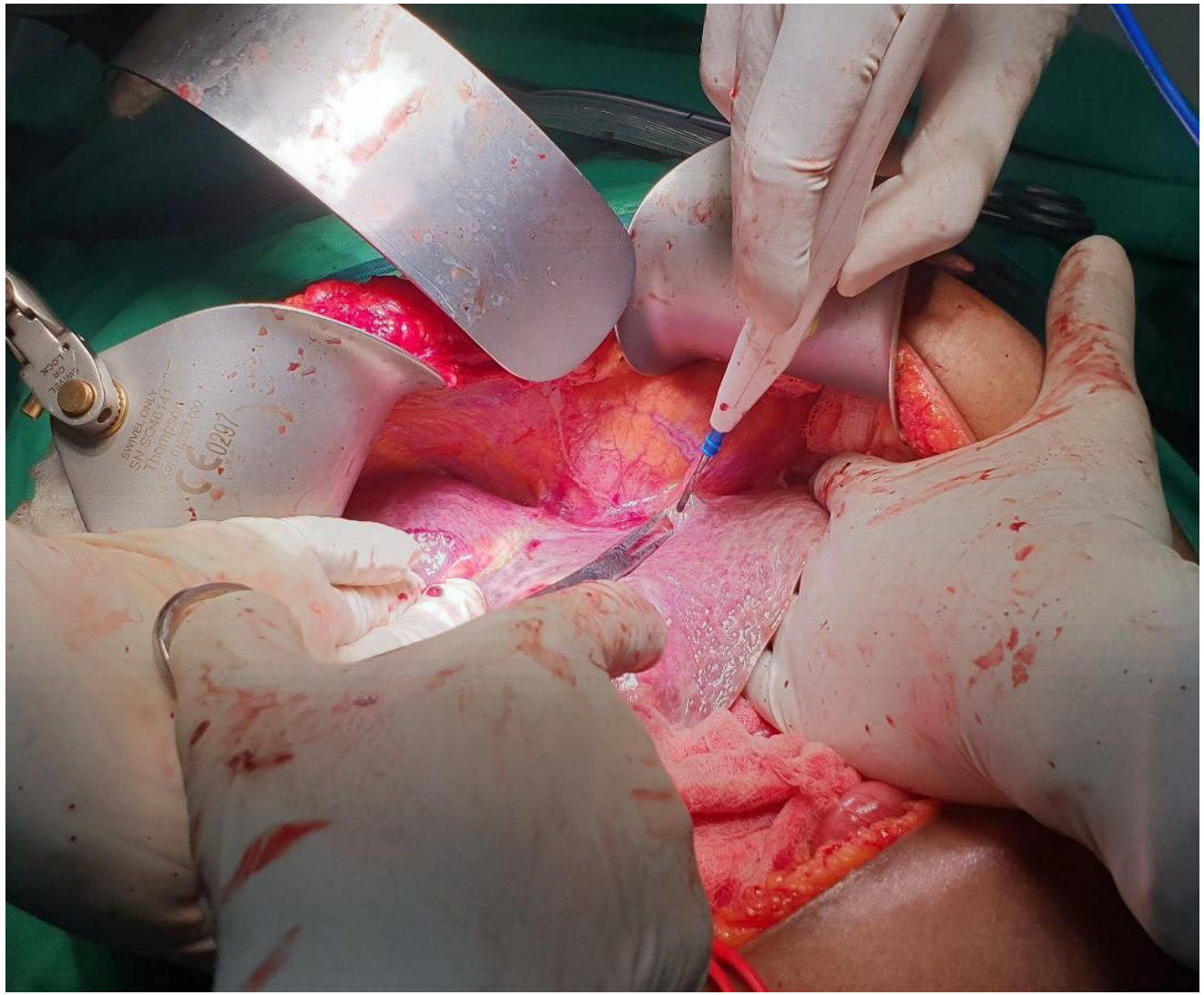
Case 3





High frequency diathermy burn

Case 3



Extensive mobilization of left lobe

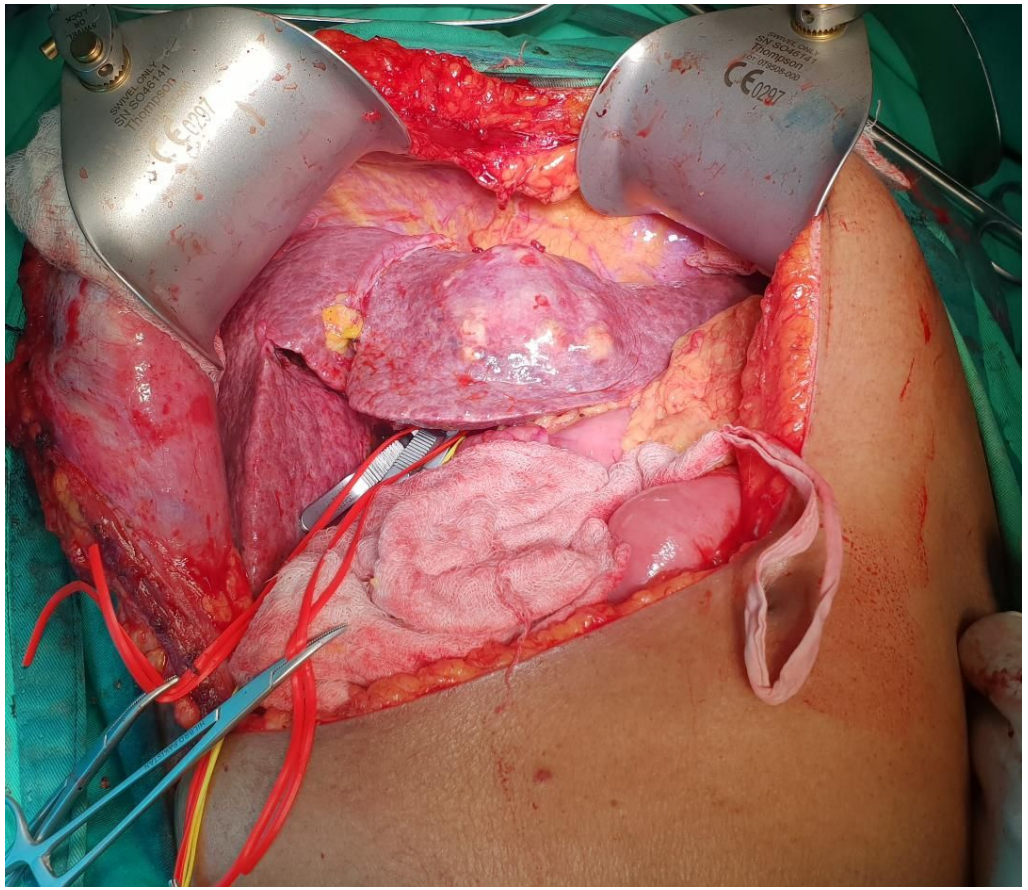
Case 3



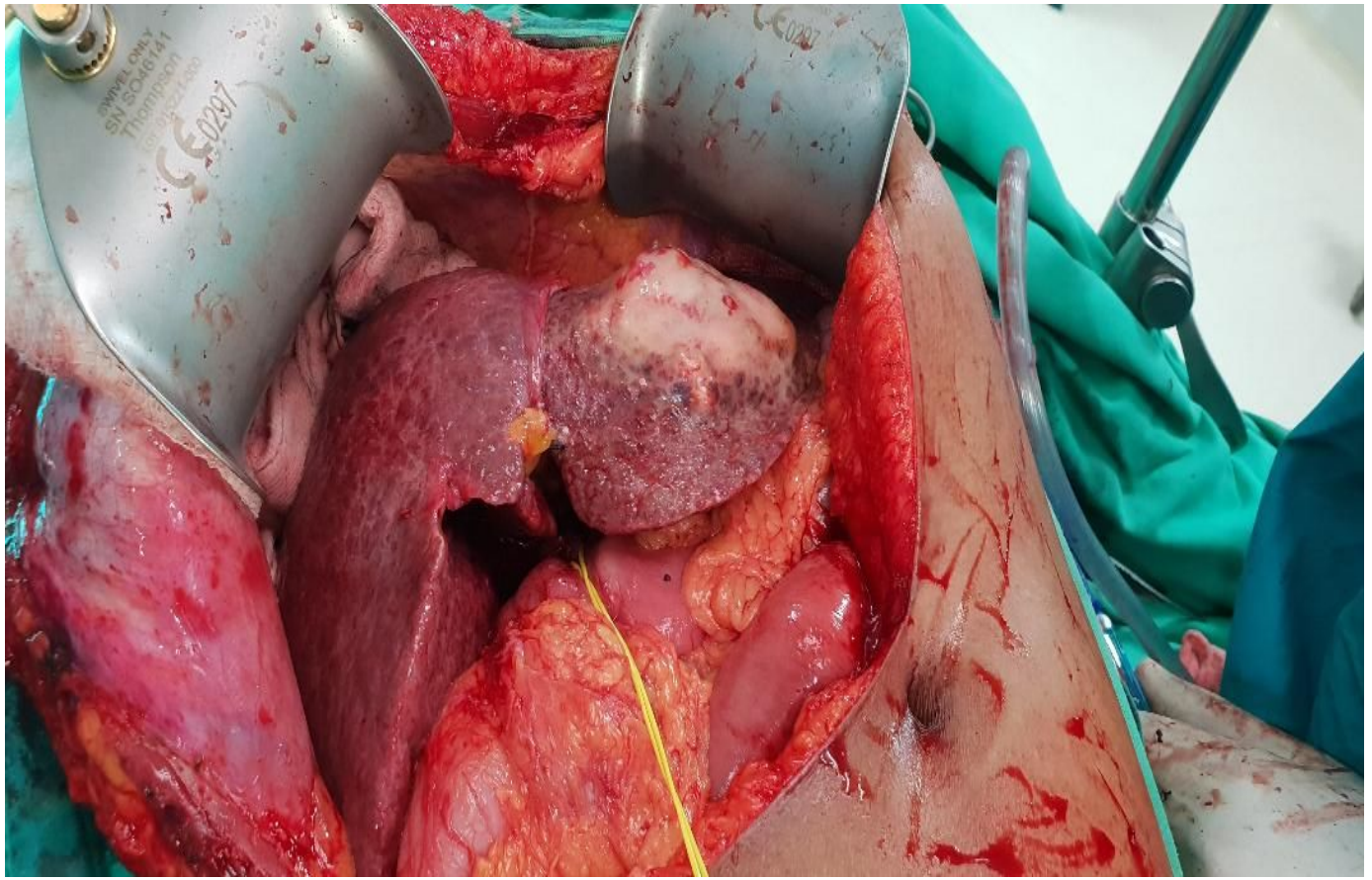
Caudate lobe tumor deal

Case 3

Before Sandwich



After Sandwich



Case 3

Postoperative course of the patient

No per-operative event during injection of alcohol and diathermy burn.

Post operative vitals are stable.

Tolerating food well.

Well controlled pain by usual analgesic
She had fever for POD 1 and 2 controlled by paracetamol.

Parameters	POD 1	POD3	POD 5
WBC			
T-bil			
SGPT			
SGOT			
PT			
INR			
Creatinine			

After oncological consultation
Planning for discharge

Management of Liver disease

(2018 Jan to September 2021)

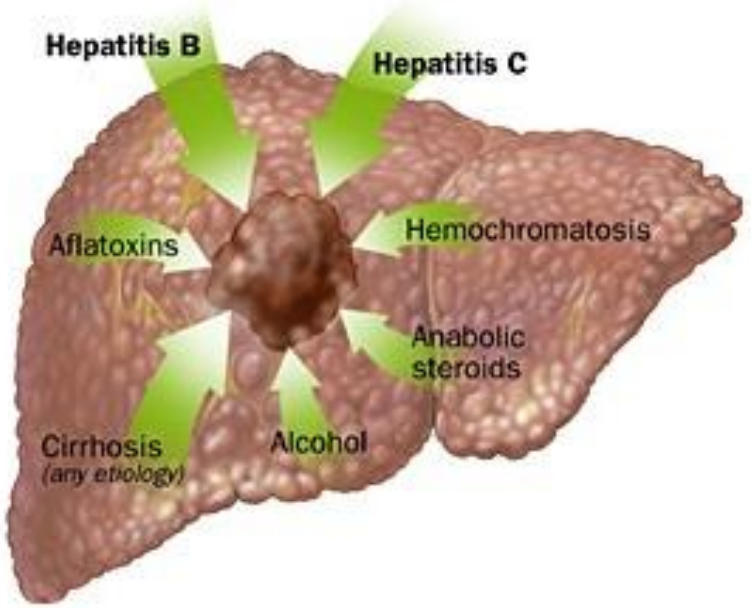
Diseases	Number	(%)
HCC	21	15%
Hepatoblastoma	05	
Liver mets	12	
Carcinoma GB	38	
Hilar carcinoma	04	
Hemangioma	02	
Hepatolithiasis	17	
Hydatid cyst	14	
Simple liver cyst	10	
Liver abscess	16	
Total	139	100



Therefore people awareness is really needed for preventing HCC or catching HCC at an earlier basis.



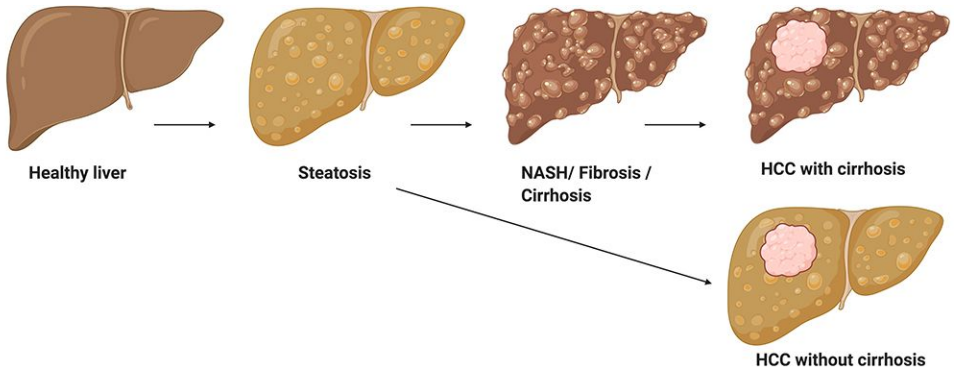
People awareness



Hepatitis B Virus

Hepatitis C Virus

Fatty liver



	NAFLD Progression				HCC		
	Biomarkers of NAFLD and HCC risk	Biomarkers of NAFLD progression			Biomarkers of HCC development		
		Simple fibrosis scores	Collagen biomarkers	Imaging	Abdominal US	AFP	
Biomarkers currently used in clinical practice		FIB4 score	ELF panel PIIINP, hyaluronic acid, TIMP1	FibroScan MRE	6 monthly abdominal US +/- AFP In patients with cirrhosis or advanced fibrosis		
Biomarkers under development	SNPs	Cell free DNA	Collagen biomarkers	Cell free RNA	GALAD score	ITIH4	
	PNPLA3 TM6SF2 MBOAT7	Methylation of PPARγ	PRO-C3 ADAPT score FIBC3 score	miRNAs lncRNAs	Gender Age AFP AFP-L3 DCP		

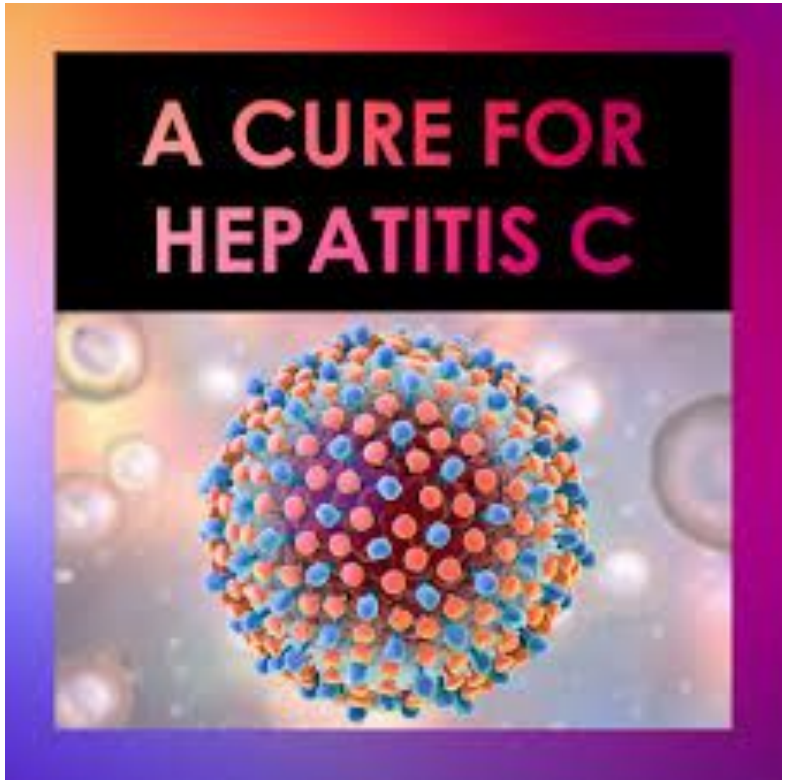


People awareness





People awareness





Sofosbuvir +Velpatasvir



People awareness







People awareness









People awareness







People awareness









Lets we take care of our liver

Thank
You