

Gender: Male

Age: 47

MRN: 611098

Diagnosis: Hepatocellular Carcinoma

History and Physical:

Patient:

I have been feeling low-grade fever for the past month.

Doctor:

Thank you for sharing that. Let's review your history. You were diagnosed with HCV in 2011 and have been through treatment. You took interferon therapy for one year and later started DAAs in 2016. You achieved a sustained virologic response (SVR), and your last PCR on 3rd October 2020 showed that HCV was not detected.

Patient:

Yes, thats right.

Doctor:

Good. Now, in terms of decompensations, you've reported no hematemesis, ascites, hepatic encephalopathy (PSE), jaundice, or melena. Thats a good sign.

Patient:

Ive never had those issues, thankfully.

Doctor:

Glad to hear. Now, I understand that you've lost about 7 kg in the last month. Can you share more about that?

Patient:

Yes, I noticed my weight dropping recently, but I didnt keep track of it properly.

Doctor:

Okay, thats important information. Lets move on to the scans. You had an ultrasound of your abdomen on 19th April 2021 from DHQ Sahiwal, which showed a focal solid lesion with well-defined margins in segment 4 of the liver, measuring 3.9 x 3.9 cm. There was no ascites.

Patient:

Yes, I remember that.

Doctor:

On the CT scan from Chughtai on 7th May 2021, it showed a non-cirrhotic liver with a focal arterialized hepatic lesion in segment 7, measuring 3.9 x 4.3 cm, along with sub-centimeter lymph nodes at the porta hepatis. The spleen was normal, and there was no ascites.

Patient:

I see.

Doctor:

Lets review your lab results from 6th May 2021:

Hemoglobin (HB): 14.3

Total Leukocyte Count (TLC): 7.1

Platelets (PLT): 161

Total Bilirubin (T-BIL): 0.9

Direct Bilirubin (D-BIL): 0.3

ALT: 56, AST: 40

Alkaline Phosphatase (ALP): 80

Albumin: 4.3

Creatinine: 0.6

Sodium (Na<sup>+</sup>):

Potassium (K<sup>+</sup>):

INR: 1.2

AFP (Alpha-Fetoprotein): 5.4

Patient:

Okay.

Doctor:

I also see your anti-HCV test from 19th April 2021 came back negative, which is a good result.

Patient:

That's reassuring.

Doctor:

We'll need to keep an eye on your condition. We discussed your case with the multidisciplinary team (MDT) on 18th May 2021. You were advised to submit the CD of your CT scan for further evaluation.

Patient:

Yes, I did that.

Follow-up Visit on 12th July 2021

Patient:

I haven't had any new symptoms since our last visit, but I'm still feeling the effects of the weight loss.

Doctor:

Understood. Looking at your history again, you had an SVR with your HCV treatment. Your last PCR from 3rd October 2020 was negative.

Patient:

Yes, I haven't had any viral issues since.

Doctor:

That's good news. Your CT scan from 7th May 2021 still shows a non-cirrhotic liver with an arterialized hepatic lesion in segment 7, measuring 3.9 x 4.3 cm.

Patient:

Yes, that lesion is still there.

Doctor:

In addition, your MRI on 18th May 2021 showed a non-cirrhotic liver and a hepatic lesion in segment 7, measuring 4.8 x 3.7 cm. This lesion demonstrates diffusion restriction and shows intense arterial phase enhancement with contrast washout in the venous phase.

Patient:

So, what does that mean for me?

Doctor:

Its an indication of possible hepatocellular carcinoma (HCC), especially given its behavior on the MRI. The lesion is abutting the right hepatic vein branches but shows no evidence of venous invasion. The portal vein is patent, and theres no significant biliary dilation.

Patient:

Whats the next step?

Doctor:

We will continue monitoring it. Your lab results on 5th July 2021 showed:

Hemoglobin (HB): 13.3

Total Leukocyte Count (TLC): 8.3

Platelets (PLT): 431

Total Bilirubin (T-BIL): 0.43

Direct Bilirubin (D-BIL): 0.13

ALT: 24, AST: 21

Alkaline Phosphatase (ALP): 116

Albumin: 4.1

Creatinine: 0.64

Sodium (Na<sup>+</sup>): 139

Potassium (K<sup>+</sup>): 4.2

INR: 0.9

AFP: 5.4

Your MELD-Na score is 6, and your Child-Pugh class is 5/A, which indicates relatively preserved liver function.

Patient:

I see.

Doctor:

Your liver biopsy from 6th July 2021 showed moderate steatosis (33-66%), with a METAVIR score of A1/A3 for activity and F1/F4 for fibrosis. We also did a Fibroscan on 6th July 2021, which showed no fibrosis (F0) and no steatosis (S0).

Patient:

So, whats the diagnosis now?

Doctor:

The lesion is consistent with HCC, and its being monitored carefully. Youve already had TACE (Transarterial Chemoembolization) done on 21st June 2021 to treat the lesion.

Patient:

Will I need more treatment?

Doctor:

We'll continue to monitor your condition. The MDT will discuss your case further, and we may consider additional treatment options if needed.

Patient:

Okay, thank you for the update, doctor.

Doctor:

You're welcome. Let's keep track of your condition, and we'll decide on the next steps together.

Patient:

Hello, doctor. Im here for my follow-up visit after my wedge resection surgery.

Doctor:

Hi! Good to see you. How have you been since your last visit?

Patient:

I've been okay, but I've been feeling some weakness for the past month, and I've also been experiencing some dyspepsia.

Doctor:

Alright, let's go over your recent medical information and make sure everything is on track. As you know, you had surgery for a solitary HCC in segment VII of the liver back in August 2021. How have you been recovering since?

Patient:

The recovery was uneventful until I was diagnosed with mild COVID-19 on August 14, 2021, and was shifted to HPTC. I was discharged from there on August 17, 2021.

Doctor:

I see. And how is your breathing now? Any shortness of breath?

Patient:

Yes, I still experience some shortness of breath on exertion.

Doctor:

Noted. Let's go over your latest imaging results. You had a USG of the abdomen on August 12, 2021, which showed a collection in segment VII measuring 5.8 x 5.3 x 5.1 cm, corresponding to a volume of 83 ml. There was no ascites, but mild right-sided pleural effusion was seen. Your recent CT scan from August 24, 2021, confirmed a collection in segment VII, now measuring 4.2 x 3.8 x 0.1



cm (about 18.3 ml). The drain tip was in place, and there was minimal pleural effusion.

Patient:

That sounds concerning. Should I be worried about the collection?

Doctor:

Not necessarily. Its a normal post-surgical finding, but well continue to monitor it closely. Your drain output is around 25 ml over the past few days, which is serosanguinous, indicating a good drainage process.

Patient:

So, whats the plan moving forward?

Doctor:

We will continue with your current medication, Rivaroxaban 10mg daily for the next 21 days. Regarding your drain, Ill assess whether its time to remove it after a follow-up USG. Id also like to monitor your liver function and perform some routine blood tests, including CBC, LFT, RFT, and INR, to keep track of your recovery. Additionally, Id like a CT scan of your liver using the HCC protocol for surveillance of any potential recurrence.

Patient:

Got it. Ill make sure to follow up on the tests.

Doctor:

Good. Lets also discuss the results of your histopathology. Your resected specimen showed well-differentiated (G1) solitary HCC, 1.5 cm in size, with internal necrosis (30% viable tumor). Importantly, there was no vascular, biliary, or perineural invasion, and all margins were free of

tumor. This is great news. Your surrounding liver tissue showed mild fibrosis (F1).

Patient:

That sounds promising.

Doctor:

Yes, its reassuring. Youre recovering well, but we need to be vigilant in monitoring for any signs of recurrence. Id like to follow up in a few months with another CT scan and blood work, including AFP, to keep an eye on things.

Patient:

Sounds like a good plan. Thank you, doctor.

Doctor:

Youre welcome! Keep taking care of yourself, and well see you soon for the follow-up.

Patient: "Doctor, I have been feeling a bit anxious about my health. Could we go over my latest tests?"

Doctor: "Of course. Let's take a look at your lab results and recent imaging. I'll guide you through everything."

Patient: "Thank you. Here's what I've got. My hemoglobin levels have been steady, around 14.43 g/dL in December 2021, and its now at 14.7 g/dL as of January 2024. Is that normal?"

Doctor: "Yes, your hemoglobin levels are stable and within the healthy range. Theyre a good indicator that your blood health is on track."

Patient: "Good to know. What about my total leukocyte count (TLC)? It was 7.86 in December 2021 and dropped to 6.0 in January 2024."

Doctor: "Your TLC has slightly decreased but is still within normal limits. Its not something to be concerned about at the moment."

Patient: "I also noticed that my platelet count has fluctuated. It was 197.8 in December 2021, dropped to 100 in December 2022, then improved to 180 in May 2023, and is now at 130 in January 2024. Is that something to worry about?"

Doctor: "Platelet count can vary, but the numbers are still within an acceptable range. Your count might reflect some minor fluctuations but not something we need to be overly concerned about for now."

Patient: "Okay, that's a relief. What about my bilirubin levels? My total bilirubin was 0.6 in December 2021, 0.43 in May 2022, 0.44 in December 2022, and 0.52 in January 2024."

Doctor: "Your total bilirubin is slightly elevated but remains well within normal levels. This is not alarming, but well keep an eye on it in future tests."

Patient: "My direct bilirubin was 0.23 in December 2021 and dropped to 0.12 in December 2022, now it's at 0.18. Is that a significant change?"

Doctor: "The direct bilirubin levels have been stable and slightly increased, but nothing to be overly concerned about. Its a minor fluctuation."

Patient: "My ALT/AST enzymes were 19/19 in December 2021, then 35/24 in May 2022, and 30/22 in April 2023, now 36/28 in January 2024. Should I be worried?"

Doctor: "Your liver enzymes are a bit elevated compared to the baseline, but they're still not at alarmingly high levels. We'll continue to monitor this, especially considering your liver condition."

Patient: "What about ALP? It was 87 in December 2021 and stayed stable around 80 in 2022 and 2023. It's now at 86 in January 2024."

Doctor: "ALP is stable, and it's good to see it hasn't changed much. This is within a normal range, which is promising."

Patient: "And how's my albumin level? It was 4.57 in December 2021, 4.5 in May 2022, 4.48 in December 2022, and is now 4.5 in January 2024."

Doctor: "Your albumin levels are stable, which is a positive sign that your liver is functioning well and you're not experiencing significant protein loss."

Patient: "How about my creatinine? It was 0.76 in May 2022, 0.84 in April 2023, and 0.83 in January 2024."

Doctor: "Your creatinine levels have remained steady and are within normal limits. This shows that your kidney function is also stable."

Patient: "My sodium was 139 in December 2021, 140 in May 2022, 140 in April 2023, and is now 138. Should I be concerned?"

Doctor: "Your sodium is slightly lower in January, but it's still within a normal range. There's no immediate concern here."

Patient: "What about my potassium? It was 4.3 in December 2021, 4.2 in May 2022, 3.9 in April 2023, and now 4.43 in January 2024."

Doctor: "Your potassium levels are a bit higher now, which is fine as long as it's within the reference range. It's important to monitor for any symptoms, but it looks good for now."

Patient: "My INR was 1.01 in December 2021, 0.95 in May 2022, 1.04 in April 2023, and 0.94 in January 2024. Is this okay?"

Doctor: "Your INR is stable and within the healthy range, so there's nothing to worry about here."

Patient: "How's my AFP? It was 4.64 in December 2021, 4.29 in May 2022, 4.7 in April 2023, and now it's 5.24 in January 2024."

Doctor: "Your AFP level has increased slightly, but it's still within the expected range for someone with your condition. We'll keep monitoring it."

Patient: "I also see my MELD-Na score. It was 7 in December 2021, 6 in May 2022, 7 in April 2023, and 8 in January 2024. Should I be concerned?"

Doctor: "The MELD-Na score has increased a bit, which reflects some changes in liver function. It's something we need to keep an eye on, but it's not an emergency at this point."

Patient: "What about the CT and MRI scans? I know you mentioned some issues."

Doctor: "Yes, your imaging showed that the small lesion in segment VIII of the liver could be a recurrence of HCC. The latest MRI from January 2024 confirms a 1.7 cm lesion, which is concerning. We'll need to proceed with further evaluations."

Patient: "Whats the next step then?"

Doctor: "Well discuss this with the multidisciplinary team. For now, we'll look at options like radiofrequency ablation (RFA) or surgical resection. We also need to refer you to interventional radiology for an evaluation."

Patient: "I understand. What should I do next?"

Doctor: "I recommend that we arrange for further imaging and review the situation with our team. We may proceed with RFA, and well also monitor your overall liver health. Well discuss the treatment options further based on those results."

Patient: "I see. Thank you for explaining everything to me, Doctor."

Doctor: "You're welcome. We'll stay on top of it and ensure you're getting the best care possible."