

Gender: Male

Age: 26

MRN: 815506

Diagnosis: Cholangiocarcinoma

History and Physical:

Patient: Ive been feeling unwell for the past four months. I developed yellowing of my eyes, my stools became pale, and my urine turned dark. Along with that, I have been experiencing generalized itching.

Doctor: I see. How long have these symptoms been ongoing?

Patient: It started around four months ago, and things have gotten progressively worse since then. About a month ago, I had jaundice, and my bilirubin levels were very high around 54.5.

Doctor: It seems like your jaundice has been persistent. You mentioned that you underwent an ERCP during this time?

Patient: Yes, I did. Unfortunately, the procedure didnt go well. It was abandoned because they couldnt fix the issue. After that, I was admitted to the hospital for PTBD, which was performed at the Military Hospital. However, after the procedure, I had complications, including an upper GI bleed. I was then referred for angioplasty and embolization of the gastroduodenal artery.

Doctor: That sounds like a challenging few weeks. How long were you hospitalized?

Patient: I was hospitalized from July 18th to August 6th.

Doctor: Understood. Lets go over some of your other symptoms. Have you experienced any

hematemesis (vomiting blood), ascites (fluid buildup in the abdomen), or any episodes of hepatic encephalopathy (confusion due to liver failure)?

Patient: No, I havent had any vomiting blood, ascites, or confusion. The only thing Ive been dealing with is jaundice.

Doctor: Good to know. Have you had any significant weight loss recently?

Patient: Yes, Ive lost about 15 kilograms over the past four months.

Doctor: Thats quite significant. Have you had any blood transfusions due to this weight loss?

Patient: Yes, I had 5 pints of blood transfused because of my low hemoglobin levels.

Doctor: Were you experiencing any fevers or night sweats?

Patient: No, I havent had any fevers or night sweats.

Doctor: Alright, let's move on to your past medical and surgical history. Do you have any history of major health conditions or surgeries?

Patient: No, I havent had any significant medical issues or surgeries in the past.

Doctor: Thats helpful to know. Do you have any known allergies?

Patient: No, I dont have any allergies.

Doctor: What medications are you currently taking?

Patient: Im on the following medications: Cap Urso 250mg twice daily, Risek 40mg once daily, Motilium 10mg three times daily, Qalsan-D once daily, Ensure milk powder 6 tablespoons twice daily, and Beneprotein twice daily.

Doctor: Thank you for sharing that. Have you taken any other medications in the past?

Patient: Yes, I was on injections of Ceftriaxone 2gms once daily for seven days, Vitamin K once daily for three days, and Hepamerz syrup twice daily.

Doctor: Got it. Lets now talk about your social history. Do you have any cultural or spiritual needs that we should consider in your care?

Patient: No, I dont have any special cultural or spiritual needs.

Doctor: Alright. What about your financial situation? Are there any strains you are facing?

Patient: Yes, Ive been facing some financial difficulties. I was working as an executive at a telecom company in Islamabad, but I had to quit my job four months ago due to my health.

Doctor: I see. How about your family? Do you have any family history of diseases like diabetes, hypertension, cancer, tuberculosis, or asthma?

Patient: My father passed away in July 2020 due to pulmonary tuberculosis and liver disease, but the exact cause wasnt known.

Doctor: Im sorry to hear about your father. Lets talk about your psychological health. Have you been feeling depressed or had any suicidal thoughts recently?

Patient: No, I havent felt depressed, and I dont have any suicidal thoughts.

Doctor: Thats good to hear. Now, moving on to your physical health, do you have any issues with language, speech, vision, or mobility?

Patient: No, I dont have any impairments in those areas.

Doctor: Great. Now lets go over your physical exam findings. Your consciousness is intact, and you are well-oriented with a Glasgow Coma Scale of 15/15. On examination, your heart sounds are normal with no murmurs, your respiratory system shows normal vesicular breathing bilaterally, and your abdomen is soft, non-tender, and non-distended.

Patient: Thats correct.

Doctor: Moving on to the investigations, you had an ERCP on July 11th, and it showed a tight mid-CBD stricture. The procedure had to be abandoned due to complications. You then had a PTBD on July 13th, which showed severe stenosis at the distal CBD level and required an internal and external catheter placement.

Patient: Yes, thats accurate. After the PTBD, I also had a transcatheter angiogram and embolization of the gastroduodenal artery due to an iatrogenic duodenal injury.

Doctor: Exactly. A CT scan was done on July 18th, which showed signs of liver infarctions, biloma formation, and splenic infarctions with super-added infection. There was also significant intrahepatic

cholestasis and moderate ascites. The most recent CT scan showed mild intrahepatic biliary dilatation and splenic infarction.

Patient: Yes, I recall those findings.

Doctor: Your lab results show elevated total bilirubin levels, which have decreased over time. Your recent bilirubin level was 1.0, and your albumin levels are gradually improving. Your liver enzymes are also fluctuating, but they're improving with time. You have a low BMI of 16.2, which we need to address.

Patient: I've noticed my albumin levels improving, but my weight is still low.

Doctor: Yes, nutritional rehabilitation is important for you to gain weight in preparation for possible surgery. Your ECOG score is currently 1, which means you are fairly well but still need to focus on your nutrition. We will be monitoring your weight closely.

Patient: Understood.

Doctor: Based on your diagnosis and history, we suspect that the mid-CBD stricture and the common hepatic duct stricture could be due to an autoimmune cause, possibly related to IgG4 disease. However, the data is not yet conclusive to start any specific treatment.

Patient: I understand. What are the next steps?

Doctor: The next step would be to proceed with nutritional rehabilitation. You need to increase your BMI to above 18.5 to prepare for surgery. We will also discuss your case in the MDT to determine whether surgery or steroid therapy is the best option. I'll refer you to Dr. Ahmad Karim, a

gastroenterologist, for his opinion on steroid therapy. We will also order systemic IgG4 levels to further investigate the autoimmune aspect.

Patient: Okay, I'll focus on improving my nutrition.

Doctor: Once your nutrition improves and your BMI reaches the target, we will reevaluate the situation. We will follow up after a month to assess the results of the steroid therapy trial and review the MDT decision. We will keep you updated on the next steps.

Patient:

I was doing fine about four months ago, but then I suddenly developed progressive jaundice. My bilirubin levels went up to 54.5, so I had an ERCP, but that didn't work. Afterward, I was admitted to Quad e Azam International Hospital for a Percutaneous Transhepatic Biliary Drainage (PTBD) procedure. That was done by Military Hospital, but after the procedure, I had a major complication an upper GI bleed, and I ended up vomiting blood. I was referred for a repeat PTBD and embolization of the gastroduodenal artery. I stayed in the hospital from July 18th to August 6th.

I also had hepatitis B and C screenings, and both came back negative.

Over the last few months, I've lost about 15 kg of weight, and I had to get 5 pints of blood transfused due to low hemoglobin levels.

Right now, I'm not taking any medication.

Doctor:

That sounds like quite a difficult period. Let me review the details.

You had an ERCP on July 11th, where a tight mid-common bile duct (CBD) stricture was identified, but the procedure had to be abandoned. Then, on July 13th, the PTBD was done, and the findings included a dilated left-sided duct and severe stenosis at the distal CBD level. Both external and

internal catheters were placed. Afterward, you had an angiogram and embolization of the gastroduodenal artery to manage the duodenal injury and hematoma.

On August 22nd, the case was discussed in a multi-disciplinary team (MDT) meeting, and they concluded that you have a benign CBD stricture, for which dilation through PTBD was done. Mild dilation of the ductal system was observed, and they recommended stenting and internalizing the PTBD.

Patient:

Yes, I remember all that. Then, on September 23rd, I had another ERCP at PKLI. The diagnosis afterward was common hepatic duct and bile duct stricture. During that procedure, they found a previously placed plastic pancreatic duct stent and a percutaneous drain. The cholangiogram revealed a hepatic duct stricture, and the cholangioscope showed some abnormal mucosa in the common bile duct, likely caused by inflammation from the previously placed stent. They took a forceps biopsy, and a single plastic biliary stent was placed in the left hepatic duct with good drainage.

I also had several imaging studies:

A CT scan from July 18th showed subcapsular areas in the liver and multifocal splenic infarctions, possibly from a previous infection.

Another CT scan on August 16th showed some biliary stents, mild intrahepatic biliary dilatation, and a hypodense area in the right lobe of the liver, which could be an evolving abscess. There was also some infection in my lower left lung.

I had a histopathology report from October 1st. The biopsy results indicated mild inflammation and

minimal fibrosis in the common hepatic duct and bile duct, with a predominantly lymphoplasmacytic infiltrate. They suspect IgG4-related disease and suggested correlating with serum IgG4 levels.

Doctor:

The biopsies suggest IgG4-related disease, which is characterized by fibrosis and inflammation in the bile ducts, among other tissues. It's good that you've had comprehensive imaging and lab tests. Your labs from earlier this year show significant fluctuations, particularly in bilirubin and liver enzymes. Your most recent lab results (as of October 10th) indicate that your bilirubin is down to 1.0, which is an improvement. Your albumin and platelet count are also within more normal ranges now. However, your liver enzymes (ALT and AST) remain elevated.

We will need to continue monitoring this closely, especially considering the IgG4-related disease suspicion.

Patient:

Yes, I saw that my bilirubin has improved, but the liver enzymes are still high. Whats the next step?

Doctor:

Based on your condition and the findings from your imaging, were planning to continue your treatment with corticosteroids. I'll prescribe prednisolone 30 mg once daily for the next four weeks, along with omeprazole 40 mg for gastric protection, and a calcium + vitamin D supplement. Additionally, Id recommend that we check your serum IgG4 levels to further assess the IgG4-related disease.

After four weeks, we will follow up with further imaging to assess the response and decide on the next steps. This may include a triphasic CT scan as discussed in the MDT meeting.



Patient:

Okay, I understand. Thank you.

Follow-up Virtual Clinic Visit on November 22, 2024

Doctor:

Hello, I see you've been dealing with the mid-distal CBD and common hepatic duct stricture for some time now. You've already had several procedures, including ERCP, PTBD, and an angiogram with embolization of the gastroduodenal artery.

We had another MDT discussion, and the consensus is to continue with your current medical treatment and proceed with further imaging, particularly a triphasic CT scan. This will give us a better idea of how things are progressing and help us plan the next steps.

Let's also continue monitoring your IgG4 levels and liver function closely. Please make sure to take the prescribed medications regularly and keep track of any new symptoms.

Patient:

Thank you, I will continue with the medications as you suggested. I will get the CT scan done and follow up as advised.

Lab Results Summary:

Hemoglobin (Hb): 9.4 (07/07/24) 8.7 (04/08/24)

WBC (White Blood Cells): 22.5 (07/07/24) 18.81 (04/08/24)

Platelets (PLTS): 593 (07/07/24) 638 (04/08/24)

Total Bilirubin: 54.5 (07/07/24) 1.7 (04/08/24) 1.82 (06/09/24) 1.0 (10/10/2024)

Direct Bilirubin: 37.1 (07/07/24) 1.4 (04/08/24) 1.59 (06/09/24) 0.7 (10/10/2024)

ALT/AST: 92/92 (07/07/24) 108/46 (04/08/24) 128/63 (06/09/24) 173/86 (10/10/2024)

Alkaline Phosphatase: 312 (07/07/24) 297 (04/08/24) 131 (06/09/24) 216 (10/10/2024)

Albumin: 2.1 (07/07/24) 3.8 (04/08/24) 4.12 (06/09/24) 4.6 (10/10/2024)

Creatinine: 0.6 (07/07/24) 0.64 (04/08/24)

Sodium (Na<sup>+</sup>): 127 (07/07/24) 136 (04/08/24)

Potassium (K<sup>+</sup>): 4.44 (07/07/24) 4.26 (04/08/24)

INR: 1.0 (07/07/24) 0.93 (04/08/24)

CA 19-9: 9.57 (10/10/2024)

Serum Ceruloplasmin: 59 (normal)

Immunology:

Anti Nuclear Antibodies: Homogeneous

Anti Mitochondrial Antibodies: Negative

Anti Smooth Muscle Antibodies: Negative

Serum Antiparietal Cells Antibodies: Negative

Autoimmune Liver Disease Profile: Negative

Hepatitis B & C Screening: Negative

BMI: 16.2 (07/07/24) 16.6 (04/08/24)

ECOG: 1 (consistent)

Blood Group: O+ve

Plan:

Continue current medications: Prednisolone, Omeprazole, Calcium + Vitamin D

Follow-up with triphasic CT scan

Refer to hepatology for further management